COMMON SUBJECT

NATION BUILDING & CIVIC PREPAREDNESS



EDITION 2025

JD/JW CADETS' HAND BOOK
NATIONAL CADET CORPS

National Cadet Corps

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सत्यमेव जयते

CONSTITUTION OF INDIA

PREAMBLE

WE, THE PEOPLE OF INDIA, HAVING
solemnly resolved to constitute India into
a sovereign socialist secular democratic republic
and to secure to all its citizens :

JUSTICE,
Social, Economic And Political; LIBERTY
of thought, expression, belief, faith and worship;

EQUALITY
of status and of opportunity; and to promote among them all

FRATERNITY
assuring the dignity of the individual and
the [unity and integrity of the nation];

IN OUR CONSTITUENT ASSEMBLY
this twenty-sixth day of november, 1949, do
HEREBY ADOPT, ENACT AND GIVE TO
OURSELVES THIS CONSTITUTION.



NATIONAL ANTHEM

Jana-Gana-Mana-Adhinayak Jaya He

Bharat-bhagya-vidhata

Punjab-Sindhu-Gujrat-Maratha

Dravid-Utkal-Banga

Vindhya-Himachal-Yamuna-Ganga-

uchchala-jaladhi-taranga

Tava Subha name jage,

tava subha asisa mage, gahe tava jaya-gatha.

Jana-gana-mangala-dayaka

jaya he Bharata-bhagya-vidhata

Jaya he, Jaya he, Jaya he, jaya jaya jaya jaya he.

FOREWORD



It gives me immense pleasure and pride to present the Revised NCC Précis of Common and Special Subjects, 2025 Edition, marking the culmination of a protracted effort mounted for the purpose for more than two years. This achievement has only been made possible through the collective and whole-hearted effort of all stakeholders, comprising the Directorates, the Board of Officers for revision and for printing, & my staff. Your contribution in bringing the project to fruition merits highest appreciation.

The revision was aimed at structuring and updating the syllabus to reflect contemporary thought & realities, as also equip cadets with skills to apply their NCC training in real-life situations. The challenge was to simultaneously keep the language simple for easy comprehension, avoiding too much jargon or pedantry. Endeavour was also to make the presentation interesting and the layout reader-friendly, enabling cadets to engage with each topic meaningfully even through self-study. I extend my sincere appreciation to the entire team for successfully achieving these objectives in their entirety.

This endeavour also aligns the NCC syllabus with tenets of *Vikasit Bharat* for the youth, familiarising NCC cadets with history, geo-strategy, and contemporary technological advances, while remaining rooted in our cultural heritage and ethos. I am sanguine that this vision will be carried forward by present and future generations of cadets, ensuring strong foundations for a robust nation, enabled and ready to achieve greater heights and our rightful place on the global stage.

GOD bless and JAI HIND

Director General,
National Cadet Corps

MASTER INDEX- NCC: NATION BUILDING AND CIVIC PREPAREDNESS (JD/JW)

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BORDER & COASTAL AREAS (03 PDS)						
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30	SSCD-VI	Road, Rail and Air Safety	-	01	T	448
		TOTAL PERIODS = 41				

SUMMARY			
	Theory	**Practical**	**Total**
1st Year	18	-	18
2nd Year	21	02	23
Total	39	02	**41**

NCC: BUILDING BLOCKS

1

CHAPTERWISE INDEX: NCC: BUILDING BLOCKS (JD/JW)

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NCC: BUILDING BLOCKS (JD/JW)

CHAPTER I : AIMS, OBJECTIVES, ORGANISATION, AND THE ROLE OF NCC IN NATION BUILDING

"We are responsible for what we are, and whatever we wish ourselves to be, we have the power to make ourselves."

Swami Vivekananda



Ready for Action

TEACHING INSTRUCTIONS

Period	:	**01 (One)**
Type	:	**Lecture**
Year	:	**JD/JW (First Year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Power Point Presentation, Charts**

Time-plan

- Part I: What NCC Means : 10 mins
- Part II: Aims and Objectives of NCC : 10 mins
- Part III: Organisation of NCC : 10 mins
- Part IV: Role of NCC in Nation Building : 05 mins
- Conclusion, Summary, and Practice : 05 mins



INTRODUCTION

1. The youth of today are the leaders of tomorrow. NCC aims to harness the youth towards service of the nation by inculcating the values of patriotism, character, social commitment, and discipline.

2. Further, NCC provides an opportunity to explore the diverse cultural treasures of the country. It aims to develop the qualities of discipline, leadership, character, and patriotism in order to make the cadets ideal citizens of the country.



Selfless Commitment

3. Selfless commitment to the nation and upholding the values of secularism, equality, and justice are essential qualities of a model citizen. A cadet will be guided to not only become a responsible citizen but also be given exposure to leadership duties. This apart, the cadets will also be encouraged to take a career in the Armed Forces.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I: What Does NCC Mean?

(b) Part II: Aims and Objectives of NCC.

(c) Part III: Organisation of the NCC.

(d) Part IV: Role of NCC in Nation Building.

LEARNING OBJECTIVES

- Cadets should be able to define the NCC and explain its primary purpose and significance.
- Cadets should be able to articulate the aims and objectives of NCC.
- Cadets should understand the various levels and organisations within the NCC.
- Cadets should be able to explain how NCC contributes to nation building.

PART I : WHAT NCC MEANS?

4. The primary aim of raising NCC was to groom the youth, nurturing them and directing their energy toward nation building by making them responsible citizens. Today, the NCC boasts a large enrolled strength of cadets, and it continues to grow through planned expansions. The NCC consists of two divisions/wings of all three services, i.e. Army , Navy & Air Force. The Senior Division/Senior Wing for boys/girls from colleges and the Junior Division/Junior Wing for boys/girls of schools.

DID YOU KNOW?

- During the First World War, University Corps was conceptualised.
- After independence, the present-day NCC formally came into existence on 15 July 1948. The Girls Division of the NCC came into existence in July 1949.
- The Air Wing was raised on 01 April 1950.
- Naval Wing was raised in July 1952.



Always Prepared

5. **NCC Cadet**. Being an NCC cadet is the embodiment of the spirit of courage, determination, and selfless service. The NCC training aims to instil leadership qualities, time management skills, and teamwork abilities in the cadets. The cadets acquire the ability to challenge themselves, develop self-assurance, and surmount obstacles.

6. **National Orientation of NCC**. India has a very rich culture encompassing linguistic, religious, ethnic, and geographical diversity. NCC plays a significant role in developing national orientation among the cadets. It brings together cadets from diverse backgrounds, fostering a collective identity. The cadets are encouraged to participate in community development, social services, and public awareness campaigns, thereby promoting values of selfless service.

7. **Developing a Sense of Pride**. NCC activities are unique in nature, which provides a distinct identity to the cadets. This apart, NCC provides a platform to showcase talents as well as participate in national events. This assists in developing a sense of pride among the cadets. It is important to highlight that the uniform of NCC cadets is a constant reminder of responsibilities, as it represents the values of discipline, integrity, and honour.

8. **Value of Humility**. The training at NCC emphasises humility. The values of NCC require the cadets to sacrifice individual interest towards the collective interest. NCC, through participation in national events, promoting community services, and selfless services, helps in upholding the qualities of humility among the cadets.

9. **Community Service**. Participation in various social service drives like blood donation, cleanliness campaigns and environment preservation, cadets learn to direct their efforts towards the society.

PART II : AIMS AND OBJECTIVES OF NCC

10. The aims of NCC are mainly three fold:-

(a) To develop the following qualities in the cadets:-

(i) Character

(ii) Comradeship

(iii) Discipline

(iv) Secular Outlook

(v) Spirit of Adventure

(vi) Ideals of selfless service among the youth of the country



Leadership of Tomorrow

(b) To create a human resource of Organised, Trained and Motivated youth, to provide leadership in all walks of life and always be available for the service of the nation.

(c) To provide a suitable environment to motivate the youth to take up a career in the Armed Forces.

11. The objectives of the NCC are:-

(a) To reach out to the maximum youth through various institutions.

(b) To make NCC as an important part of the society

(c) To teach positive thinking and attitude to the youth

(d) To become a source of National Integration by making NCC as one of the greatest and strongest united force of the nation irrespective of any caste, creed, religion or region.

(e) To mould the youth of the entire country into a united, secular and disciplined citizens of the nation.

(f) To provide an ideal platform for the youth to showcase their ability in nation building.

(g) To instil the spirit of secularism and united India by organizing National Integration Camps all over the country.

(h) To reach out to the youth of friendly foreign country through Youth Exchange Programmes.

PART III : ORGANISATION OF NCC

12. **Apex Structure**. The NCC is a voluntary youth organisation that functions under the Ministry of Defence. NCC Headquarters is located in New Delhi. It is headed by a Director General of Lieutenant General rank. The Director General is responsible for the functioning of the NCC across the country.

DID YOU KNOW?

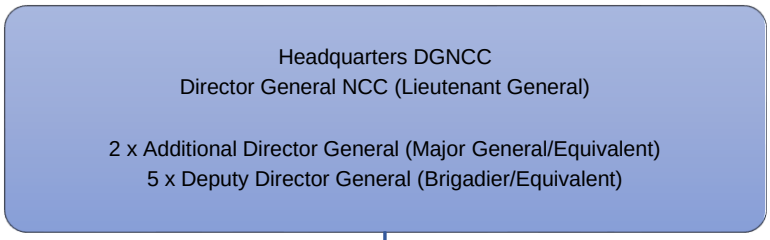
- The NCC Act, 1948, provides for the It also sets out the roles and responsibilities of the Director General of NCC, the Central Advisory
- Committee, and the State and Union Territory Governments in relation to the NCC
- Government to make rules for carrying out its provisions.



13. **Directorates and Groups**. NCC has 17 directorates that are located in the state capitals. An officer of the rank of Major General/Brigadier or equivalent, from the three services, leads each of the directorates. Depending on the size of the state and the growth of the NCC within it, directorates may have several Group Headquarters under their command. Directorates, through Groups, organise various NCC activities in the state. Each group is headed by an officer of the rank of Brigadier/Colonel or equivalent, known as the Group Commander.

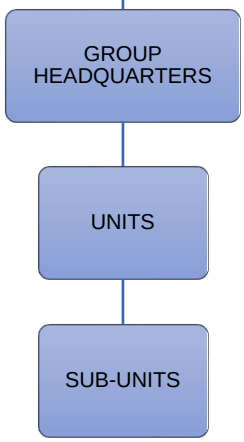
14. **Units** Each NCC Group Headquarters controls 5-7 NCC units/battalions, commanded by Colonel/Lieutenant Colonel or equivalent. Each battalion consists of companies that are commanded by the Associate NCC Officers (ANO) of the rank of Lieutenant, Captain or Major.

15. **Training Establishments**. There are two training academies, namely the Officers Training Academy, Kamptee, for men, and the Officers Training Academy, Gwalior, for women, where professors and teachers from colleges and schools are specially trained to impart training to the cadets as Associate NCC Officers (ANOs). The organisation and structure of NCC are as follows:-



NCC Directorates

1 Andhra Pradesh & Telangana
2 Bihar & Jharkhand
3 Delhi
4 Gujarat,Dadra & Nagar Haveli,Daman and Diu
5 Jammu & Kashmir and Ladakh
6 Karnataka & Goa
7 Kerala & Lakshdweep
8 Madhya Pradesh & Chhattisgarh
9 Maharashtra
10 North East Region (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura)
11 Odisha
12 Punjab, Haryana, Himachal Pradesh and Chandigarh
13 Rajasthan
14 Tamil Nadu, Puducherry, Andaman and Nicobar Islands
15 Uttarakhand
16 Uttar Pradesh
17 West Bengal & Sikkim



PART IV : ROLE OF NCC IN NATION BUILDING

16. NCC training aims to build character in the cadets by promoting the values of integrity, selfless service, and discipline. The training in NCC not only aids in the development of leadership qualities but also fosters a sense of adventure. The promotion of Unity in Diversity and a secular outlook are major objectives of NCC. Thus, NCC encourages its cadets to become model citizens of the country. NCC also plays a significant role in nation building by fostering discipline and patriotism among the youth of the country through its training curriculum and activities.

17. **Character Development**. The youth of the country have immense potential. Harnessing the youth's energy for both individual and nation building is essential. Character building is a crucial aspect that shapes the individual. The ethos and values of NCC promote the character development of the cadet. During the training, the cadets develop a sense of discipline, integrity, and eagerness to serve the nation in all capacities. The values imbibed in the cadets not only assist them in achieving their goals but also help the nation.

18. **Service Training**. Service subjects are an integral part of the NCC curriculum. Training in these subjects not only assists in developing leadership qualities but also adds to the confidence level. The core values of service training are discipline and teamwork. The cadet undergoes rigorous drill sessions and group exercises that help in imbibing these qualities.

19. **Unity in Diversity**. Cadets are required to attend training camps of NCC. These are structured training activities wherein the cadets are provided with a glimpse of regimental life. These camps are a melting pot wherein cadets from diverse backgrounds participate in common training. These events help in understanding the cultural and social aspects of diverse groups. It helps not only in promoting unity in diversity but also promoting secular values.

20. **Sense of Patriotism**. NCC plays a vital role in fostering a greater sense of patriotism among young cadets by instilling values of service and commitment to the nation. Through various activities, including drills, leadership development, and community service, NCC cadets gain a deeper understanding of their responsibilities as citizens. The organisation's emphasis on national integration, where cadets from diverse backgrounds come together, helps build a sense of unity and pride in the country. NCC instils a strong belief in the importance of national security and social welfare. inspiring cadets to contribute positively to the nation's progress and well-being, thus nurturing a lifelong spirit of patriotism.

21. **Peace and Security**. NCC emphasises the importance of national unity, respect for law and order, and non-violence. The NCC educates cadets about the significance of peace and conflict resolution and encourages them to become ambassadors of harmony in their communities. NCC's involvement in disaster management, social service activities, and community outreach programs further contributes to building a peaceful society. These efforts ensure that cadets grow up to be responsible citizens ready to contribute to the peaceful progress of the nation.

CONCLUSION

22. NCC is an invaluable organisation committed to the development of youth in India, aiming to shape them into responsible citizens, future leaders, and devoted members of society. With its motto of 'Unity and Discipline,' NCC focuses on imparting essential qualities such as leadership, character, discipline, patriotism, and a secular outlook. By offering a structured training and exposure to various fields, including military skills, social service, and adventure activities, NCC develops a sense of responsibility and commitment to the nation in the cadet. The overreaching goal is to prepare cadets not just for careers in the Armed Forces but for leadership roles in all spheres of life.

DID YOU KNOW?

NCC Flag.

- The flag's three colours symbolize the three branches of the Armed Forces; Red for the Army, Deep Blue for the Navy, and Light Blue for the Air Force. Surrounding the NCC crest in Gold is a wreath of 17 lotus flowers, which represent the 17 Directorates of the NCC. Additionally, the flag includes two dots, representing the Officer Training Academies located at Gwalior and Kamptee.



23. The NCC's role in promoting unity in diversity is fundamental to its mission. The cadets come from different linguistic, religious, and cultural backgrounds, and the program encourages them to work together toward common goals. Through participation in training camps and national events, cadets develop a deep sense of camaraderie, secularism, and respect for diversity, which helps in building a collective national identity.

NCC SONG

In 1956, the idea of creating an official song for the NCC was first considered. By 1963, the song 'Kadam Mila Ke Chal' was adopted as the official anthem of the NCC. However, in 1974, there was a growing sense that a new song was needed. Efforts to find a suitable replacement began but the process remained unresolved for some time. Around the same period, the Film Division was producing a documentary on the NCC titled 'A Cadet's Diary'. The director of the documentary was searching for a fitting song and came across 'Ham Sab Hindi Hain', a song that had first been performed at a Youth Festival in Chandigarh during 1968-69. The song quickly became popular and was frequently played at Republic Day Camps. In 1980, the word 'Hindi' in the song was replaced with 'Bhartiya'. Unfortunately, the original writer of the song has remained unidentified. The Lyrics of NCC song are as under:-

Hum Sab Bharatiya Hain, Hum Sab Bharatiya Hain
Apni Manzil Ek Hai,
Ha, Ha, Ha, Ek Hai,
Ho, Ho, Ho, Ek Hai.
Hum Sab Bharatiya Hain.

Kashmir Ki Dharti Rani Hai,
Sartaj Himalaya Hai,
Saadiyon Se Humne Isko Apne Khoon Se Pala Hai
Desh Ki Raksha Ki Khatir Hum Shamshir Utha Lenge,
Hum Shamshir Utha Lenge.

Bikhre Bikhre Taare Hain Hum Lekin Jhilmil Ek Hai,
Ha, Ha, Ha, Ek Hai
Hum Sab Bharatiya Hai.
Mandir Gurudwaare Bhi Hain Yahan
Aur Masjid Bhi Hai Yahan
Girija Ka Hai Ghariyaal Kahin
Mullah ki Kahin Hai Ajaan

Ek Hee Apna Ram Hain, Ek hi Allah Taala Hai,
Ek Hee Allah Taala Hain, Raang Birange Deepak Hain Hum,
lekin Jagmag Ek Hai, Ha Ha Ha Ek Hai, Ho Ho Ho Ek Hai.
Hum Sab Bharatiya Hain, Hum Sab Bharatiya Hain.

SUMMARY

- The National Cadet Corps (NCC) aims to foster responsible citizenship and nation-building by grooming boys and girls into disciplined and motivated individuals.
- With over 1.3 million cadets and expanding, the NCC encompasses both Senior and Junior Divisions for various age groups.
- The program instils leadership, teamwork, and time management skills while promoting humility, adventure, and community service.
- It plays a crucial role in nurturing national unity and diversity through its training, which includes social service, adventure activities, and military preparation.
- The NCC primarily aims to develop qualities of comradeship, discipline, a secular outlook, a spirit of adventure, and ideals of selfless service, as also:-
  - Create a human resource of organised, trained, and motivated youth.
  - Provide leadership in all walks of life who will serve the nation regardless of which career they choose.
  - Provide an environment conducive to motivating young Indians to choose the Armed Forces as a career.
- Organised under the Ministry of Defence, the NCC is structured into multiple directorates, group headquarters, and units to conduct NCC activities.
- NCC has two training establishments, one each at Kamptee and Gwalior.
- NCC is dedicated to shaping disciplined, selfless leaders who contribute to nation-building and uphold values of integrity and patriotism.
- NCC training helps in developing a greater sense of patriotism and maintaining peace and security.

ASSESSMENT EXERCISE

Multiple-Choice Questions

Q1. Which year saw the official launch of NCC?

(a) 1937

(b) 1945

(c) 1948

(d) 1950

Q2. Which of the following cater to boy school students?

(a) Junior Division

(b) Senior Division

(c) Junior Wing

(d) Senior Wing

Q3. NCC Flag has how many lotus flowers?

(a) Two

(b) Five

(c) Seventeen

(d) Twenty-seven

Q4. Which values does the NCC training promote?

(a) Academic excellence and financial success

(b) Sports

(c) Discipline, integrity, and selfless service

(d) Technological innovation and entrepreneurship

Q5. What is the primary aim of the NCC?

(a) To prepare cadets for military service

(b) To groom boys and girls for nation-building and responsible citizenship

(c) To promote sports among youth

(d) To offer academic training to students

Q6. Which of the following is NOT a division of the NCC?

(a) Senior Division

(b) Junior Wing

(c) Youth Wing

(d) Senior Wing

Q7. What key quality does NCC training aim to develop in cadets?

(a) Wealth generation

(b) Political influence

(c) Leadership and teamwork

(d) Academic excellence

Q8. Which of the following best describes the "National Orientation of NCC"?

(a) Promoting international diplomacy

(b) Encouraging nationalism and unity in diversity

(c) Teaching foreign languages

(d) Focusing on environmental preservation

Q9. What is the primary purpose of NCC adventure activities?

(a) To prepare cadets for military service

(b) To build the spirit of adventure and promote outdoor activities

(c) To provide a platform for international sports

(d) To teach technical skills

Q10. Which of the following is an objective of the NCC?

(a) To create a human resource of trained youth for leadership

(b) To provide free education to all cadets

(c) To organise community festivals

(d) To train cadets in specific career skills

Q11. What does the NCC uniform symbolise for the cadets?

(a) Academic achievement

(b) Political allegiance

(c) Responsibility, discipline, integrity, and honour

(d) Participation in global events

Q12. Which of the following activities does the NCC provide cadets the opportunity to participate in?

(a) International trade conferences

(b) Social service drives, like blood donation and cleanliness campaigns

(c) Academic debates

(d) Corporate leadership programs

Q13. What is the aim of NCC training in terms of community service?

(a) To teach social science subjects

(b) To promote national events

(c) To make constructive contributions toward society

(d) To encourage political participation

Q14. Who oversees the functioning of the NCC?

(a) The Prime Minister

(b) The Ministry of Defence

(c) The Ministry of Education

(d) The Ministry of Youth Affairs

Q15. What is the focus of the training in NCC service subjects?

(a) Physical fitness only

(b) Discipline, teamwork, and leadership

(c) Technical skills development

(d) Political awareness

Short Questions

Q1. Name the two training academies for NCC officers.

Q2. What is the role of the Defence Minister in relation to the NCC?

Q3. What is the ultimate goal of NCC training in terms of career choices for cadets?

Q4. What are three colours in NCC flag?

Long Questions

Q1. Discuss the significance of NCC in promoting unity and diversity among cadets and how it contributes to nation building.

Q2. Explain the organisational structure of the NCC and its various components.

Q3. Describe the training objectives of the NCC and how they aim to develop leadership, communication skills, and character in cadets.

Q4. Evaluate the role of the NCC in shaping future leaders and its influence on the armed forces recruitment and national service.

Q5. Write short note on NCC song.

NCC: BUILDING BLOCKS (JD/JW)

CHAPTER II: INCENTIVES TO NCC CADETS AND DUTIES & RESPONSIBILITIES OF NCC CADETS

"Be active! Take on responsibility! Work for the things you believe in. If you do not, you are surrendering your fate to others."

– APJ Abdul Kalam



Together We Move Forward

TEACHING INSTRUCTIONS:

Period	:	**01 (One)**
Type	:	**Lecture**
Year	:	**JD/JW (Second Year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Power Point Presentation**

Time-plan

- Part I: Benefits to NCC cadets by Central Government : 10 mins
- Part II: Incentives to NCC cadets by State Governments : 10 mins
- Part III: Duties and Responsibilities of NCC Cadets : 10 mins
- Conclusion, Summary and Practice : 10 mins



INTRODUCTION

1. After completing their training, NCC cadets develop into ideal citizens with strong leadership skills. In order to harness these attributes, central and state governments offer several incentives towards employment as well as entry to some educational institutes. The Armed Forces have also established modalities for preference to NCC cadets in various entry schemes. NCC cadets must fulfil specific proficiency standards in certificate examinations to be eligible for these benefits.



Never Give Up

2. NCC cadets are expected to adopt a moral code of conduct and ethical and moral standards. These are mentioned in the specific duties and responsibilities of the NCC cadets.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I: Benefits to NCC cadets by the Central Government.

(b) Part II: Incentives to NCC cadets by State Governments.

(c) Part III: Duties and Responsibilities of Cadets.

LEARNING OBJECTIVES

- Cadets should have an overview about benefits offered to NCC cadets for entry into Armed Forces, Central Armed Police Forces and other incentives offered by the Central Government.
- Cadets should have basic information regarding the incentives offered to NCC Cadets by State Government
- Cadets should have adequate understanding regarding role and responsibilities of the Cadets

PART I : BENEFITS TO NCC CADETS BY CENTRAL GOVERNMENT

3. **Armed Forces NCC Special Entry.** The training of NCC cadets includes service subjects . In addition, the aim of NCC is to motivate the cadets to join the Armed Forces. Towards that end, various incentives are given to NCC cadets. These are enumerated as under:-

(a) **Officer Entry.** Cadets who hold NCC 'C' certificates are eligible for entry as officers in all three services.

(b) ***Agniveer***. For recruitment as *Agniveer,* NCC cadets holding NCC certificates have been allotted additional marks while preparing the final merit list. All three services offer this benefit.

4. **Central Armed Police Forces**. In April 2020, the Ministry of Home Affairs announced that NCC cadets will receive additional marks for recruitment as sub-inspectors and constables in Central Armed Police Forces: -

5. **Financial Assistance/Scholarships.** The Cadet Welfare Society (CWS) provides financial aid and support to cadets in the event of an injury or to the next of kin (NOK) in the case of a fatality during NCC-related activities. The details of the financial assistance are as follows:-

	NCC Activities	Death Cases	Permanent Disability	Temporary Disability
(a)	High Risk	10,00,000/-	up to 5,00,000/-	up to 1,75,000/-
(b)	Other	7,50,000/-	up to 4,50,000/-	up to 1,75,000/-

6. The benefits provided by the CWS are:-

(a) CWS awards a scholarship of Rs 6000/- per cadet for 1000 NCC cadets every year to academically brilliant students.

(b) Grant of Best Cadet Award of Rs 4500/- and 2nd Best Cadet Award of Rs 3500/- at each group level.

(c) Conduct of sports and adventure activities.

DID YOU KNOW?

- One of the aims of NCC is to provide an environment conducive to motivating young Indians to choose the Armed Forces as a career.
- The benefits offered to the cadets for joining the Armed Forces provide a distinctive edge.

PART II : INCENTIVES BY STATE GOVERNMENTS

7. Every State/Union Territory offers benefits to cadets holding NCC certificates in various fields. These benefits are notified every year for entry into academic institutes and employment opportunities. Cadets can avail themselves of these benefits offered in the respective fields. For details refer to official state government websites.

8. **Academic Fields**. States offer benefits to NCC cadets for entry into academic institutions. These benefits are either in the form of additional marks for NCC certificates or earmarking certain seats for NCC cadets. Some states also provide benefits to NCC cadets in terms of fee concession. In general, several states have instituted benefits for NCC Cadets for entry into the following academic institutes:

(a) Polytechnics.

(b) State Universities.

(c) Engineering Colleges (limited seats in some states).

(d) Medical Colleges (limited seats in some states).

9. **Employment Opportunities**. Cadets in possession of NCC Certificates, especially 'B' and 'C' Certificates, are given incentives by several state governments. Most of the states have schemes to harness NCC cadets into state uniformed services like police, forest department, fire department, etc. Some states also provide benefits to the NCC cadets for entry into state civil services. These incentives range from providing additional marks/weightage in overall merit and earmarking certain seats for NCC cadets.

10. **Award by State Governments**. Several state governments have instituted awards for the NCC cadets. Some state governments also give cash awards to cadets who have excelled in NCC activities. These awards are for the following: -

(a) Attending prestigious camps like the Republic Day Parade Camp or *Thal/Vayu/Nau Sena* Camp.

(b) Cash incentives for excelling in NCC activities.

(c) Scholarships.

PART III : DUTIES AND RESPONSIBILITIES OF NCC CADETS

11. The NCC aims to be one of the most powerful unifying forces in our nation, bringing together youth from diverse regions and shaping them into unified, secular, and disciplined citizens. Any student who joins the NCC must understand their duties and responsibilities as a cadet and uphold the conduct expected of a trained youth leader in the country.

12. **The Cadet**. The term "Cadet" refers to a "trainee" and is typically used in a military context. Cadets are an essential part of the NCC and are categorised into two divisions: SD/SW (Senior Division/Senior Wing), which includes cadets from colleges and universities, and JD/JW (Junior Division/Junior Wing), which consists of school students. The following is a list of the main benefits of being an NCC cadet:

(a) Being part of the largest youth organisation in the world.

(b) Being shaped into a disciplined and motivated individual.

(c) Opportunity to participate in disaster relief activities.

(d) Chance to attend NCC camps.

(e) Wearing the uniform and adopting a lifestyle similar to military life.

(f) Opportunity to travel abroad as part of the Youth Exchange Program.

(g) Participation in social awareness campaigns.

(h) Preference for joining the armed forces and other uniformed services.

(j) Preference in higher education opportunities.

13. **Duties of Cadets**. Duties of NCC cadets during parades and camps are as follows:-

(a) Self-discipline.

(b) Punctuality during parade and roll call.

(c) Following the orders of higher ranks.

(d) Participate in camp activities with complete enthusiasm.

(e) Take proper haircuts and wear clean and correct patterns of uniform. Polishing of shoes, ironing of uniforms, and wearing of berets in the correct manner.

(f) Participate in the cultural activities organised by the NCC.

(g) Attend all NCC parades.

(h) Participate in the teamwork.

(j) Extend complete cooperation to the seniors.

(k) Pursue the adventure activities.

14. **Responsibilities of a Cadet**. An NCC cadet, by virtue of being an active member, carries additional responsibilities compared to his or her peers who are not part of the NCC. These responsibilities may not be explicitly stated, but they are inherent as a result of the cadet's training. In fulfilling these duties, the cadet aligns with the primary goals of the NCC, which include developing into a potential leader with strong character traits and becoming a responsible citizen. The cadet's responsibilities extend to his or her NCC unit, the organisation, the institution, society, and the nation. These include active involvement in social awareness campaigns, environmental issues, disaster relief, adventure and sports activities, and other nation-building efforts. The responsibility does not end with the completion of NCC training at the institution; it continues to be relevant throughout the cadet's life and future endeavours. Over time, the country will see former NCC cadets in leadership roles across various sectors, championing the noble values and objectives of the NCC.

15. **Cadets' Commandments**. Director General, NCC, has given out a list of 'Cadet Commandments' for all NCC cadets to follow in their lives. They are given below:-

(a) I will donate blood at least once every year.

(b) I will make only digital transactions wherever possible and motivate others for the same.

(c) I will plant a minimum of two trees in a year and care for the same.

(d) I will ensure garbage segregation in my house and within 100 m of my neighbourhood.

(e) I will undertake 100 hours of *shramdaan* for social service.

(f) I will help physically challenged persons to live their dreams.

(g) I will be a role model for gender sensitivity, secular outlook, and spirit of nationalism without any regional bias.

(h) I will rush to help any accident victim.

(i) I will always uphold the motto of NCC—'Unity and Discipline'. I will be equally disciplined when not under observation.

16. **Do's for NCC Cadets**.

(a) Lead by example through your actions and appearance.

(b) Strive to develop qualities that will shape you into a future leader.

(c) Be a source of positivity and encouragement for others.

(d) Maintain integrity in your behaviour both on and off the parade ground.

(e) Offer guidance and support to junior cadets as a mentor.

(f) Contribute your skills and volunteer for organised NCC events.

(g) Wear the uniform with honour and pride.

17. **Don'ts for NCC Cadets**.

(a) Don't engage in dishonesty, cheating, or manipulation, nor allow others to do so.

(b) Don't treat juniors unfairly or with disrespect.

(c) Don't skip parades or arrive late without a valid reason.

(d) Don't speak negatively about the organisation.

(e) Don't delay tasks or put things off.

(f) Don't accept or offer undue favours.

(g) Don't engage in discussions about politics or religion.

18. **Expectations from NCC Cadets**. Due to their commitment to discipline, leadership, and national service, NCC cadets face higher expectations than other children or citizens. As members of a prestigious organisation, cadets are expected to uphold moral integrity and responsibility and engage in community service. We expect cadets to set a positive example, uphold values of honesty and respect, and positively contribute to society. Their conduct, both on and off the parades, should reflect the standards of the NCC, making

them role models for others. They develop qualities aimed at preparing them for leadership roles, which demand a higher level of dedication, responsibility, and self-discipline compared to the general populace.

CONCLUSION

19. NCC serves as a transformative platform for youth, shaping them into disciplined, responsible, and patriotic citizens. Through rigorous training and a focus on leadership, teamwork, and selfless service, NCC instils qualities that prepare cadets to become future leaders in various sectors, including the Armed Forces, government services, and civil society. The numerous benefits offered by the central and state governments, such as preferences in employment and educational admissions, along with financial assistance, ensure that NCC cadets are well-supported in their professional and academic pursuits, further motivating them to excel.

20. Being an NCC cadet is about more than just personal growth; it is about embracing the responsibilities that come with being a citizen of a diverse and democratic nation. The values upheld by the NCC, discipline, respect, and unity, guide cadets to become responsible citizens in society. As they progress in their careers and life paths, the lessons learnt, and the ethical standards instilled during their time in the NCC will continue to guide them in their pursuit of excellence.



SUMMARY

- NCC cadets enjoy several benefits when it comes to joining the Armed Forces. Those holding an NCC 'C' certificate have the opportunity for officer entry in all three armed services (Army, Navy, and Air Force). Additionally, NCC cadets receive bonus marks for their recruitment as Agniveers
- NCC cadets holding NCC certificates get additional marks when applying for recruitment to the Central Armed Police Forces for positions like sub - inspectors and constables, allowing NCC cadets a competitive edge in the recruitment process.
- The Cadet Welfare Society (CWS) provides financial assistance to NCC cadets in case of injuries or fatalities that occur during NCC activities. CWS also offers scholarships to academically outstanding cadets.
- Various states and union territories offer benefits for NCC cadets for entry to academic institutions, allowing cadets access to courses in polytechnics, state universities, engineering colleges, and medical colleges.
- States offer employment opportunities to NCC cadets in state uniformed services like the police, forest department, and fire department, as well as civil services in some states.
- Several state governments have instituted awards for outstanding NCC cadets, particularly for those excelling in activities such as attending prestigious camps. Those who demonstrate exceptional skills and dedication in NCC activities also receive cash incentives and scholarships.
- Cadets are expected to fulfil several duties, including maintaining self- discipline and being punctual during parades. Regular attendance at parades and a cooperative attitude towards seniors are also essential duties.
- Being an NCC cadet comes with significant responsibilities. Cadets are expected to engage in nation-building efforts, rather than merely being students. This includes participating in social awareness campaigns, environmental efforts, and disaster relief. They are also expected to contribute to the community and uphold the core values of the NCC in their personal and professional lives.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What certificate is essential for availing benefits for entry as an officer in the three Armed Forces?

(a) 'A' Certificate (b) 'B' Certificate

(c) 'C' Certificate (d) Any of the above

Q2. Which of the following is an incentive offered to NCC cadets during recruitment as Agniveers?

(a) Free travel passes

(b) Additional marks in the final merit list

(c) Guaranteed job placement

(d) Increased salary benefits

Q3. What kind of financial support does the Cadet Welfare Society (CWS) offer in the event of an injury or fatality during NCC activities?

(a) Medical assistance only

(b) Travel reimbursements

(c) Compensation for death or disability

(d) Scholarships for higher education

Q4. Which of the following is NOT a benefit provided by CWS to NCC cadets?

(a) Rs 6000 scholarship for academically brilliant students

(b) Rs 4500 for Best Cadet Award

(c) Financial assistance for cadet families during injury or fatality

(d) Guaranteed job placement in the Armed Forces

Q5. What is one of the main benefits offered to NCC cadets by states for entry into academic institutions?

(a) Free accommodation

(b) Additional marks or earmarked seats for NCC cadets

(c) Guaranteed scholarships in foreign universities

(d) Automatic admission to all courses

Q6. How much financial assistance does the Cadet Welfare Society offer in the event of a fatality during high-risk NCC activities?

(a) Rs 4,50,000 (b) Rs 10,00,000

(c) Rs 1,75,000 (d) Rs 2,00,000

Q7. What kind of financial support is provided for temporary disabilities resulting from NCC activities?

(a) Up to Rs 1,75,000

(b) Up to Rs 5,00,000

(c) Rs 10,000 per month for medical expenses

(d) Full reimbursement for academic fees

Q8. Which of the following is NOT a sector where NCC cadets are provided employment opportunities by state governments?

(a) Police (b) Fire Department

(c) Forest Department (d) Private sector companies

Q9. What are the state government awards that NCC cadets may receive?

(a) Cash prizes for attending school

(b) Awards for excelling in NCC activities and prestigious camps

(c) Guaranteed scholarships for higher studies

(d) Discounts on public transport

Q10. Which of the following is NOT a duty of an NCC cadet during parades and camps?

(a) Wearing the uniform correctly

(b) Participating in cultural activities

(c) Leading the entire parade without instructions

(d) Attending parades regularly

Q11. What is the main trait that NCC cadets are expected to maintain during their training?

(a) Intellectual abilities

(b) Self-discipline

(c) Financial independence

(d) Physical endurance

Q12. Which of the following activities is NOT typically associated with NCC cadets?

(a) Attending disaster relief operations

(b) Participating in social awareness programs

(c) Managing business ventures

(d) Taking part in adventure activities

Q13. What is the primary aim of NCC's Cadet Commandments?

(a) To prepare cadets for military life only

(b) To uphold the values of unity and discipline in cadets' personal lives

(c) To encourage cadets to focus only on academics

(d) To avoid participating in social services

Q14. How many trees is an NCC cadet expected to plant each year as per the Cadet Commandments?

(a) One tree

(c) Three trees

(b) Two trees

(d) Four trees

Q15. What is the motto of NCC that all cadets must uphold?

(a) Unity and Loyalty (b) Unity and Discipline

(c) Discipline and Strength (d) Strength and Unity

Short Questions

Q1. What benefits do NCC cadets receive for holding a 'C' certificate in terms of Armed Forces entry?

Q2. What are the additional marks allotted to NCC cadets for a 'B' certificate in Navy recruitment?

Q3. Which financial aid does the Cadet Welfare Society provide in case of permanent disability during NCC activities?

Q4. What are the responsibilities of an NCC cadet towards his/her institution?

Q5. Which incentives are offered by state governments to NCC certificate holders in various departments?

Long Questions

Q1. Explain the various incentives offered to NCC cadets by the Central Government related to Armed Forces recruitment.

Q2. Describe the financial assistance and scholarships provided by the Cadet Welfare Society and the types of incidents covered.

Q3. Discuss the duties and responsibilities of NCC cadets during parades and camps and how these contribute to their development.

NCC: BUILDING BLOCKS (JD/JW)

CHAPTER III : TRAINING CURRICULUM OF NCC

“One individual may die for an idea but that idea will after his death incarnate itself in a thousand lives”



Overcome all Barriers

TEACHING INSTRUCTIONS:

Period	:	**01 (One)**
Type	:	**Lecture**
Year	:	**JD/JW (Second year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Class room, OHP, Board and Chalk/Markers**

Time-plan

- Part I: Training Overview : 15 mins
- Part II: Certificate Exams : 05 mins
- Part III: Social Service and Community Development : 05 mins
- Part IV: Competitions : 08 mins
- Part V: Minimum Attendance : 02 mins
- Conclusions, Summary, and Practice : 05 mins



INTRODUCTION

1. A structured training curriculum exists in the NCC with the overall objective of achieving the aims of NCC and also meeting the individual aspirations of the cadets. The training ranges from institutional training to attendance in camps. This apart, the cadets are encouraged to regularly participate in social activities to perform duties as model citizens. NCC also provides a platform for participation in various adventure activities.



Aiming for Excellence

2. NCC certificate exams are an indication of the level of proficiency achieved by the cadet during the NCC training. The cadet, on qualification of the certificates, is eligible to avail benefits offered by various governments and institutes.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Training Overview.

(b) Part II: NCC Certificate Exams.

(c) Part III : Social Service and Community Development.

(d) Part IV : Competitions.

(e) Part V : Minimum attendance

LEARNING OBJECTIVES

- Cadets should have knowledge of the NCC training curriculum and information on various camps.
- Cadets should have a clear understanding of the eligibility and conduct of the 'A','B' &'C' Certificate exam.
- Cadets should have basic knowledge of social service and community development in NCC.
- Apprise cadets regarding various competitions in NCC.
- Cadets should have information regarding minimum attendance for certificate exams.

PART I : TRAINING OVERVIEW

3. Training activities of NCC can be broadly divided as under:-

(a) **Institutional Training**. Training organised in schools and colleges as parades.

(b) **Camp Training**. Formal training organised as camps of 10-12 days duration.

(c) **Attachment Training**. Formal training organised by attachment with Army/Naval/Air Force units or with officer training academies like Indian Military Academy (IMA) and Officers Training Academy (OTA).

(d) **Naval Wing Activities**. Seamanship, navigation, communication and other associated naval subjects are taught to cadets. Swimming, scuba diving, and wind surfing are other interesting activities to which the cadets are exposed to.

(e) **Air Wing Activities**. Airmanship, aeromodelling, navigation, airframes, aero engines and microlite flying are taught to cadets.

(f) **Remount & Veterinary Activity**. This activity is primarily meant for horsemanship and riding.

4. **Institutional Training**. Training conducted in colleges and schools is called institutional training. It remains the primary means of training in the NCC. The aim of the training is to nurture core values, enhance awareness, and give exposure to basic military skills and knowledge. Emphasis is on practical training. Common subjects comprise about 70% of the periods, and specialised service subjects constitute 30%.

5. **Types of Camps**. Various types of camps conducted by NCC are enumerated in the succeeding paragraphs.

(a) **Annual Training Camps / Combined Annual Training Camps (ATCs / CATCs)**. These camps are conducted for SD, SW, JD, and JW cadets with a duration of 10 days. The aim is to familiarise cadets with a disciplined and structured regimented life. The training during the camp focuses on providing cadets with extensive exposure to range drill, firing and specialised training. The emphasis is placed on community living, discipline, character development, confidence building, and first aid skills.

DID YOU KNOW?

- Combined Annual Training Camp aims to provide a glimpse of regimental life to the cadets.
- It is organised for 400-600 cadets along with instructional staff.
- These camps are the stepping stone for the cadet to showcase the talent and subsequently get selected for Centrally Organised Camps.



Platform to Showcase Talent

(b) **Centrally Organised Camps (COC)**. These camps are planned at the HQ DGNCC. COCs have a duration of 12 days. The aim of these camps is to bring together cadets from different regions of the country, allowing them to experience

and learn about the diverse cultures of various states. This helps foster ‘Esprit de Corps’ and promotes Unity in Diversity, all within the context of national integration.

6. **Types of Attachments**. Various types of attachments conducted by NCC are enumerated in the succeeding paragraphs.

(a) **Military Attachment Camp**. These camps, of 12 days duration, are designed for Senior Division boys and Senior Wing girls. The objective of these camps is to immerse selected cadets in the Armed Forces environment, providing them with a taste of military training to build confidence and inspire them to consider joining the Armed Forces. Selected girl cadets are given exposure to the daily operations of military hospitals, offering insights into hygiene, sanitation, and patient management.

(b) **Attachment Training IMA/OTA**. These camps are conducted for a duration of 12 days for SD/SW cadets. A detailed training program is prepared with IMA/OTA. The aim of this training is 'to expose the cadets to the training imparted at IMA/OTA and to motivate them to join the Armed Forces as Commissioned Officers'.



Spirit of Competitions

7. **Types of Centrally Organised Camps**.

(a) **Leadership Camps**. These camps are organised on an all-India basis to develop leadership qualities in cadets and also provide SSB training to all wing cadets for induction into the Armed Forces.

(b) **Thal Sainik Camp**. The aim of this camp is to expose cadets to salient aspects of Army Wing training and generate a healthy competitive spirit by conducting Army Wing competitions. The competitions contribute towards the Prime Minister’s Banner awarded during the Republic Day Parade. It is being conducted in Delhi at the DGNCC Camp.

(c) **Nau Sainik Camp**. The aim of this camp is to give exposure to salient aspects of Naval Wing training and generate healthy competitive spirit by conducting Naval Wing competitions. The competitions contribute towards the Prime Minister’s Banner awarded during the Republic Day Parade.

(d) **Vayu Sainik Camp**. The aim of this camp is to give exposure to salient aspects of Air Wing training and generate healthy competitive spirit by conducting Air Wing competitions. The competitions contribute towards the Prime Minister’s Banner awarded during the Republic Day Parade.

(e) **Republic Day Camp (RDC)**. The NCC Republic Day Camp is the highlight of all NCC training activities, held annually at the Garrison Parade Grounds in Delhi from 28 December to 30 January. Selected NCC cadets from all Directorates participate in the camp, based on vacancies allocated by HQ DGNCC each year. Directorates compete in various events to determine the Champion Directorate, which is awarded the Prime Minister's Banner.

DID YOU KNOW?

- All India Thal/Nau/Vayu Sena Camps are annual events.
- Service-specific professional competitions are conducted during these camps.
- Cadets undergo a rigorous selection process within the Directorates for nomination to these prestigious camps.

(f) **Ek Bharat Shrestha Bharat Camp**. Ek Bharat Shrestha Bharat (EBSB) camp is an event aimed at promoting national integration and unity among cadets. The primary goal is to foster a sense of nationalism by providing cadets with the opportunity to interact with cadets from different states and cultures. The camp features a variety of activities such as presentations on the culture, traditions, and heritage of the participating states, folk dances and songs, and visits to local villages. EBSB camps are typically organised between paired states. The duration of the camp is 12 days for SD/SW and JD/JW.

(g) **SSB Screening Camp**. SSB screening camps for both SD boys and SW girls are conducted at Officers Training Academies and other centrally organised camps. The aim is to orient and prepare cadets for selection for induction into the armed forces.

(h) **Rock Climbing Camp**. Rock climbing camps are organised to introduce cadets to the fundamentals of rock climbing while fostering a spirit of adventure, leadership, teamwork, and camaraderie. These camps also aim to improve physical fitness by enhancing stamina and endurance among the cadets.

(j) **All India Treks**. These camps are conducted under the aegis of DGNCC. The treks are conducted by designated state directorates. The duration of these camps is 10 days. The aim of trekking camps is to cultivate a spirit of adventure, leadership, stamina, endurance, self-confidence, team spirit, and esprit de corps. Additionally, these camps focus on fostering environmental awareness, respecting local customs and culture, and promoting national integration.

DID YOU KNOW?

- Firing competitions are prestigious events and are organised every year.
- Cadets get a chance to compete for Best Cadet Competitions every year.
- Cadets can showcase their talents in cultural events. Several competitions are conducted during the Republic Day camp

PART II : NCC CERTIFICATE EXAMS

8. **Minimum Attendance**. The cadet must have attended a minimum of 75% of the total training periods laid down in the syllabus for the first and second years of Junior Division/Wing NCC (All Wings) to appear in certificate exams.

9. **Eligibility Conditions for Certificate Examinations.**

(a) **Certificate 'A'.** The cadet must have attended one annual training camp.

(b) **Certificate 'B'.** Not applicable for JD/JW cadets. For SD/ SW Cadets, Must have attended one ATC/ CATC in II nd year SD/ SW Cadets.

(c) **Certificate 'C'.** Not applicable for JD/JW cadets For SD / SW Cadets,, Must have attended one ATC/ CATC III rd Year SD/ SW Cadets.

10. **Examination Schedule**.

S. No.	Date	Exam Schedule	If Exam Rescheduled	Absentee Exam
(a)	All (less Ladakh & Tawang regions)	Jan-Mar	Jan-Mar	Apr
(b)	Ladakh & Tawang Regions	Feb	Feb	Mar

11. **Exam Conduct**.

S. No.	Item	Exam	Remarks
(a)	Exam Pattern	MCQ Objective Type Question to be answered on OMR Sheets	Bilingual (English & Hindi). No regional language
(b)	Duration of Written Exam	180 mins	
(c)	Written	350 (Common Subjects - 240 & Special Subjects - 110)	
(d)	Practical	150 (Common Subject - 110 & Special Subject - 40)	

PART III : SOCIAL SERVICE AND COMMUNITY DEVELOPMENT

12. **Social Service and Community Development**. Social service activities are designed to inspire and encourage cadets to voluntarily contribute to improving their physical and social environments and channelling their energies toward nation building. These activities include initiatives such as Swachh Bharat Abhiyan, tree plantation, anti-drug rallies, cancer awareness, disaster relief, blood donation, *Beti Bachao Beti Padhao*, AIDS awareness, care for the blind, traffic control, and other pertinent contemporary social issues. The objectives of social service are as follows:-

(a) To instill in cadets the value of hard work and encourage an interest in constructive activities that benefit the community.

(b) To set an example of selfless service and teamwork.

(c) To take the lead in organised efforts, aiming to make the most of the available time, energy, and resources of our people, directing them toward various fields of social and economic development.

PART IV : COMPETITIONS

13. **Conduct of Competitions**. NCC cadets have the opportunity to participate in several competitions conducted at various levels. These competitions provide an excellent opportunity for cadets to showcase their talents. Details are enumerated in succeeding paragraphs.

14. **Prime Minister's Banner**. Each year the Hon'ble Prime Minister awards a banner to the best directorate. This award is decided based on various competitions held throughout the year. The important competitions that contribute towards the banner where cadets participate are:

(a) **Republic Day Parade Camp**. Cadets representing respective directorates participate in competitions like Drill, Guard of Honour, Flag Area Display, Line Area and Cultural Competitions.

(b) **All India Thal/Vayu/Nau Sena Camps**. Cadets participate in competitions like obstacle training, map reading, tent pitching, judging distance and field signals, health and hygiene, and firing competitions for the Army. Naval cadets participate in Boat Pulling, Ship Modeling, Seamanship and Drill. Similarly, Air Cadets participate in Microlite flying, Aeromodelling, Drill and Firing.

15. **Inter Directorate Sports Shooting Competition**. It is an annual competition conducted to test marksmanship. Both JD/JW and SD/SW cadets can participate in the event. The top-performing cadets from this event earn the opportunity to represent the NCC at the Pre-National level during the prestigious All India GV Mavlankar Shooting Championship.

16. **Best Cadet Competition**. The competition is conducted along with RDC for SD/SW and JD/JW Cadet. It tests cadets in a variety of disciplines, including Drill, Firing, Written Tests, Interviews, Group Discussions, and Briefing.

17. **Sports**. Cadets get the opportunity to represent NCC in several sports fields, like:-

(a) NCC teams of boys and girls participate every year in the Subroto Cup Football Competition.

(b) NCC teams of boys and girls also participate in the yearly Jawahar Lal Nehru Hockey Competition.

(c) Equestrian events.

(d) Sailing Regatta.

18. **Miscellaneous**. Cadets get several opportunities to participate in competitions. These are conducted by units, groups, and directorates also during various camps like CATC and Centrally Organised Camps. The events range from Drill, Painting, Quizzes, Debates, to Cultural Events, etc.

PART V : MINIMUM ATTENDANCE

19. **Minimum Attendance**. As highlighted in paragraph 11 regarding eligibility for certificate exams, the cadet must have attended a minimum of 75% of total training periods laid down in the syllabus (All Wings) for appearing in certificate exams.

CONCLUSION

20. The structured training, divided into institutional, camp, and attachment activities, ensures that cadets receive exposure to various facets of military and social services. The camp-based training, with its focus on discipline, leadership, and community integration, plays a key role in moulding cadets into responsible, confident individuals.

21. The certification and examination process within the NCC is designed to validate and reward cadet achievements while ensuring that only those who have met specific criteria are recognised.

22. The NCC's emphasis on social service and community development is another vital aspect of its training. By involving cadets in initiatives like Swachh Bharat Abhiyan, anti-drug rallies, disaster relief, and environmental awareness programs, it instils in them a sense of responsibility and a deep commitment to nation-building. These activities offer cadets an opportunity to contribute meaningfully to society while enhancing their understanding of social issues.

SUMMARY

- The National Cadet Corps (NCC) emphasises rigorous and well- structured training as a key component of its operations.
- The training is categorised into institutional training, camp training, attachment training, and activities specific to the Naval and Air Wings, as well as Remount and Veterinary activities.
- **Training Categories.**
  - **Institutional Training.** This takes place within schools and colleges, focusing on nurturing core values, awareness, and basic military skills.
  - **Camp Training.** These are formal training sessions lasting 10- 12 days, designed to introduce cadets to regimented life and cover various drills and skills. Types include Annual Training Camps (ATCs), Centrally Organised Camps (COCs), and special camps like Leadership Camps, Thal Sainik Camps, and Republic Day Camps (RDC).
  - **Attachment Training.** This involves exposure to Armed Forces environments, including attachments with Army, Navy, and Air Force units and training academies like IMA/OTA.
  - **Naval and Air Wing Activities.** Naval cadets engage in seamanship, navigation, communication, and activities like swimming andscuba diving. Air Wing cadets focus on airmanship, aeromodelling, and microlite flying.

Certificate Examinations.

- **Certificate 'A'.** For Junior Division/Wing cadets with at least 75% attendance and one Annual Training Camp.
- **Certificate 'B'.** SD/ SW Cadets, und Year Min Attendance 75%, One ATC/ COC
- **Certificate 'C'.** SD/ SW Cadets, IIIrd Year Min Attendance 75%, One ATC/ COC
- NCC encourages cadets to engage in social service activities such as Swachh Bharat Abhiyan, tree plantation, anti-drug rallies, and disaster relief. These activities aim to foster a sense of selfless service, community involvement, and leadership.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary aim of NCC training?

(a) To develop military skills

(b) To prepare cadets for Armed Forces induction

(c) To develop leadership, discipline, and social awareness

(d) To teach cadets about different cultures

Q2. Which of the following is NOT a type of NCC training?

(a) Institutional Training (b) Camp Training

(c) Skill Development (d) Attachment Training

Q3. What type of training is conducted at schools and colleges?

(a) Institutional Training (b) Camp Training

(c) Attachment Training (d) All of the above

Q4. What is the duration of a typical NCC Annual Training Camp (ATC)?

(a) 7-10 days (b) 10 days

(c) 15 days (d) 30 days

Q5. Which NCC Certificate is awarded after completing training in Junior Division/Wing?

(a) 'A' Certificate (b) 'B' Certificate

(c) 'C' Certificate (d) All of the above

Q6. What is the duration of the NCC 'A' Certificate written examination?

(a) One Hour (b) Two Hours

(c) Three Hours (d) Four Hours

Q7. Which activity is included in the Air Wing NCC training?

(a) Horse Riding (b) Aeromodelling

(c) Seamanship (d) Tree Plantation

Q8. What is the aim of the Ek Bharat Shreshth Bharat Camp?

(a) To promote sports among cadets

(b) To foster national integration and unity in diversity

(c) To improve cadets' academic performance

(d) To train cadets for combat

Q9. Which type of camp is organised to expose cadets to military life and inspire them to join the Armed Forces

(a) Leadership Camp (b) Military Attachment Camp

(c) Nau Sainik Camp (d) Rock Climbing Camp

Q10. What is the minimum attendance requirement for cadets to be eligible for the Certificate 'A' exam?

(a) 75% (b) 70%

(c) 80% (d) 60%

Q11. Which of the following is NOT a type of centrally organised NCC camp?

(a) Nau Sainik Camp (b) Rock Climbing Camp

(c) Vayu Sainik Camp (d) Annual Training Camp

Q12. What is the maximum mark for the written exam in the Certificate 'A' Examination?

(a) 350 marks (b) 240 marks

(c) 150 marks (d) 110 marks

Q13. Which of the undermentioned statements is NOT true?

(a) All India Trekking Camps are Centrally Organised camps

(b) Republic Day Camp is conducted at Delhi.

(c) Ek Bharat Shrestha Bharat is an annual training camp.

(d) Combined Annual Training Camps are for a 10 day duration.

Q14. Which of the following is NOT a social service and community development activity?

(a) Beti Bachao Beti Padhao (b) Swachhata Abhiyan

(c) Awareness for drug abuse (d) Cultural activities

Q15. Which of the following is one of the objectives of NCC Social Service and Community Development activities?

(a) Skill development of cadets

(b) Encourage cadets to join the armed forces.

(c) To set an example of selfless service and teamwork.

(d) All of the above

Short Answer Questions

Q1. What are the eligibility conditions of the 'A' Certificate exam?

Q2. What is institutional training?

Q3. What is the duration of the Republic Day Camp (RDC)?

Q4. What is the aim of social service and community development activities in NCC?

Long Answer Questions

Q1. Describe the structure and objectives of the Annual Training Camp (ATC).

Q2. Explain the role and importance of the Republic Day Camp (RDC) in the NCC training program.

Q3. Highlight various Centrally Organised Camps (COCs) within the NCC.

NATIONAL INTEGRATION AND AWARENESS

2

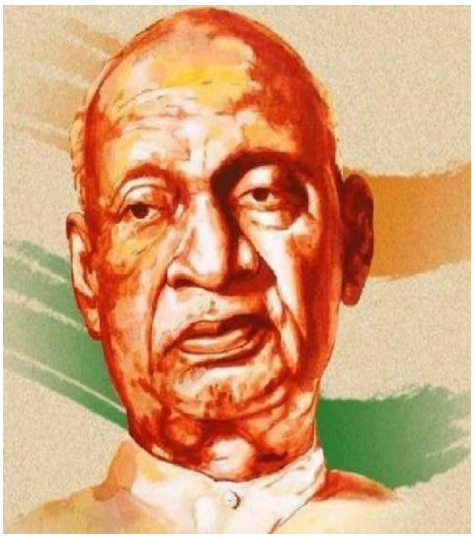
CHAPTERWISE INDEX: NATIONAL INTEGRATION AND AWARENESS (JD/JW)

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NATIONAL INTEGRATION AND AWARENESS (N-I) JD/JW

CHAPTER I: INTRODUCTION TO NATIONAL INTEGRATION. UNITY IN DIVERSITY. SLOGANS & IMAGES OF NATIONAL INTEGRATION

Say no to divisiveness,· National integration dispels prejudice and hatred National integration brings tolerance and love for all.



Togetherness leads to harmony, harmony leads to peace

NATIONAL UNITY DAY

31ST OCTOBER

TEACHING INSTRUCTIONS:

Period	:	**01 (One)**
Type	:	**Lecture**
Year	:	**JD/JW (First Year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Class room, OHP, Board and Chalk/Markers**

Time-plan

- Introduction : 03 Mins
- Part I: Introduction to National Integration : 10 mins
- Part II: Unity In Diversity : 08 mins
- Part III: Slogans & Images of National Integration : 15 mins
- Conclusion and Summary : 04 mins



INTRODUCTION

1. National Integration in India refers to the process of fostering unity and solidarity among the diverse cultural, linguistic, and religious groups within the country. Given India's vast diversity—over 1.4 billion people, hundreds of languages, and numerous religions—national integration is crucial for maintaining social harmony and political stability. National integration is essential for India to navigate its complexities and emerge as a cohesive nation.

2. This chapter provides a basic understanding of national integration, exploring its significance and the mechanisms through which it can be achieved. The cadets would be apprised about the basic understanding of the National Integration and Unity in Diversity. The cadets would also learn about the slogans given by important national leaders and images of national integration.



PREVIEW

The lecture will be conducted in following parts:-

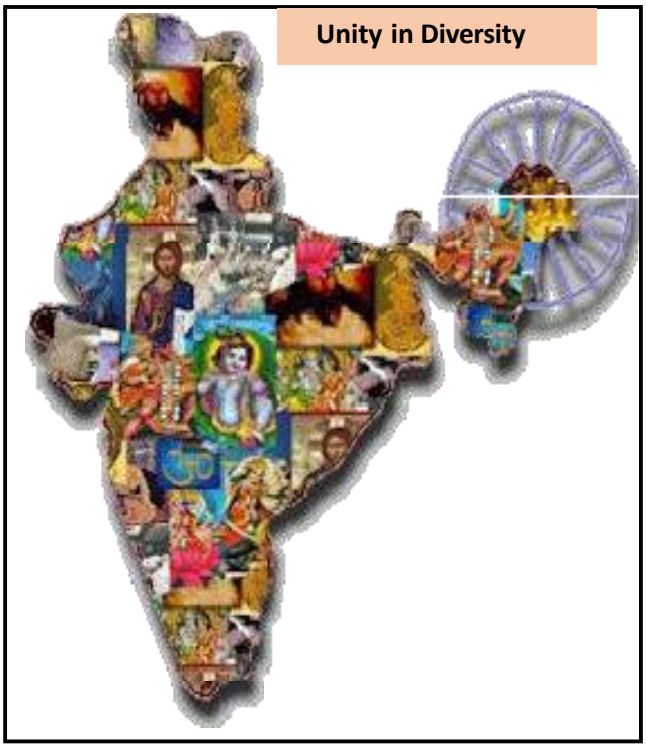
- Part I - What is National Integration
- Part II - Unity in Diversity
- Part III - Slogans and Images of National Integration

LEARNING OBJECTIVES

- Basic understanding of the concept of National Integration.
- Illustrate geographical, linguistic and religious diversities existing in the country.
- Study slogans given by important national leaders and popular images related to national integration.

PART I: INTRODUCTION TO NATIONAL INTEGRATION

3. **Introduction.** National Integration refers to the process of bringing together diverse groups within a nation, fostering a sense of unity and belonging, and promoting harmony among people of different regions, languages, religions, and ethnicities. In a country like India, with its vast cultural, religious, and linguistic diversity, national integration is crucial for maintaining social harmony and promoting a sense of collective identity.



4. **Key aspects of National Integration**

(a) **Unity in Diversity.** India as a country, is a beautiful mix of cultures, languages, and religions. National integration does not aim to erase these differences but to celebrate and unite them under a common national identity.

(b) **Social Cohesion.** National integration encourages individuals and communities to transcend regional, religious, and linguistic differences and to work towards collective goals. It helps promote a peaceful coexistence where all communities feel included and respected.

(c) **Shared Identity and Patriotism.** National integration fosters a shared sense of identity among citizens. This shared identity promotes love for the nation, contributing to national solidarity and collective well-being.

5. **Importance of National Integration in India.**

(a) **Social Harmony.** India is home to numerous religions, languages, and ethnic groups. National integration promotes understanding and tolerance, reducing the risk of conflicts and promoting peaceful coexistence.

(b) **Economic Development.** A unified nation is more stable, allowing for smoother governance and the implementation of policies aimed at development. National integration creates an environment where economic initiatives can be uniformly implemented, benefiting all sections of society.

(c) **National Security.** National integration helps safeguard the country from internal conflicts, separatist movements, and external threats. A united population is more resilient in the face of such challenges.

6. **Challenges to National Integration in India.**

(a) **Cultural and Linguistic Differences.** India's diversity, while a source of strength, can also pose challenges to integration if communities emphasize their differences over shared identity.

(b) **Regionalism.** Certain regions may feel alienated or less developed compared to others, leading to regional tensions.

(c) **Communalism.** Religious differences, if manipulated for political gain, can lead to division and violence.

(d) **Casteism.** The caste system can also fragment society and hinder social harmony.

Historical Context to National Integration

7. National integration in India has deep historical roots, especially during the freedom struggle and the independence movement.

(a) **British Colonial Rule and Division.** During British colonial rule, India was a fragmented society, divided along regional, linguistic, caste, and religious lines. The British practiced the policy of "Divide and Rule," fostering divisions to maintain control.

(b) **Indian National Congress and Unification Efforts.** Founded in 1885, the Indian National Congress (INC) played a crucial role in uniting people from different parts of India.

(c) **Cultural Nationalism.** Cultural leaders, reformers, and intellectuals like Swami Vivekananda, Rabindranath Tagore, and Bankim Chandra Chatterjee promoted the idea of a unified India. Tagore's concept of Vasudhaiva Kutumbakam (world is one family) and Bankim Chandra's Vande Mataram became symbols of national pride, transcending regional and religious barriers.

- India has over 2,000 distinct ethnic groups, more than 1,600 spoken languages, and a variety of religions.
- India is a secular country, meaning it has no official state religion.
- Sardar Vallabhbhai Patel, India's first Deputy Prime Minister and Minister of Home Affairs, integrated over 565 princely states into the newly formed Republic of India, earning him the title of the "Iron Man of India."

(d) **Unity in Diversity during the Freedom Movement.** The freedom movement embraced India's diversity and sought to unite people from different religious, linguistic, and cultural backgrounds. Movements such as the Non- Cooperation Movement, Civil Disobedience Movement, and Quit India Movement involved people from all category across different parts of India.

8. **Role of Famous Leaders in National Integration.**

(a) **Mahatma Gandhi.** Gandhi was the foremost leader of the Indian freedom struggle and one of the greatest proponents of national integration. He emphasized unity among Hindus, Muslims, Sikhs, and people of different castes and classes. His efforts for the upliftment of the "Harijans" (a term he used for the Dalits) were aimed at uniting all sections of society.

(b) **Sardar Vallabhbhai Patel.** Patel, known as the "Iron Man of India," played a pivotal role in integrating the princely states into the Indian Union post-independence. His diplomatic and strategic efforts ensured that over 500 princely states, including Hyderabad, Junagadh, and Kashmir, became part of India, thus strengthening national unity.

(c) **Netaji Subhas Chandra Bose.** Netaji founded the Indian National Army that reflected his vision of a united India, where people from various communities came together to fight against British rule. His slogan "Jai Hind" became a rallying cry for unity and patriotism.

The Heritage of India: Religions, Cultures, Festivals, and Important Days

9. **Religious Diversity of India.** India is the birthplace of several major religions, and it has also welcomed and integrated other religions over centuries, fostering a culture of tolerance and co-existence. Some of the prominent religions in India are Hinduism, Buddhism, Jainism, Sikhism, Islam, Christianity, Zoroastrianism and Judaism.

10. **Cultural Diversity of India.** India's culture is a mix of ancient traditions, folk arts, classical art forms, music, dance, and literature. Each region of India has its own distinct cultural heritage.

(a) **Languages.** India is a linguistic treasure, with 22 officially recognized languages and hundreds of dialects. Hindi and English are the two official languages at the national level, but all other regional languages are widely spoken in respective states.

(b) **Art and Architecture.** Indian art ranges from ancient cave paintings (Ajanta and Ellora) to Mughal architecture (Red Fort) and numerous ancient Hindu temples carved out of stones.

(c) **Classical Dance Forms.** India is home to various classical dance traditions, including Bharatanatyam (Tamil Nadu), Kathak (North India), Odissi (Odisha), Kathakali (Kerala), and Manipuri (Manipur). These dance forms often depict stories from religious texts or folklore.

(d) **Music.** Indian classical music includes the Hindustani and Carnatic traditions, each with its own unique system of ragas (melodic structures). Popular folk music and contemporary Bollywood music also form a significant part of India's musical landscape.

(e) **Cuisine.** Indian cuisine is incredibly varied, with each region having its own distinct Flavors and styles of cooking. From the spicy curries of South India to the tandoori dishes of the North, Indian food is a reflection of the country's diversity.

11. **Important Festivals in India.** India celebrates a wide range of festivals, many of which are linked to religious beliefs and traditions. These festivals showcase the country's cultural and spiritual diversity. Some of the important festivals are: Diwali, Hali, Navratri/Durga Puja, Makar Sankranti, Buddha Purnima, Mahavir Jayanti, Vaisakhi and Guru Nanak Jayanti, Eid-ul-Fitr, Eid-ul-Adha, Muharram, Christmas, Easter and Navroz - the Parsi New Year.

12. In addition to religious festivals, some cultural and harvest festivals such as Onam, Bihu and Pongal are also celebrated in all parts of the country.

13. **Important National Days in India.** In addition to religious and cultural festivals, India observes several important national days that are symbols of unity and patriotism:

(a) **Republic Day (26th January).** Marks the day in 1950 when the Constitution of India came into effect. It is celebrated with a grand parade in New Delhi and various cultural programs across the country.

(b) **Independence Day (15th August).** Celebrates India's independence from British colonial rule in 1947. The Prime Minister hoists the national flag at the Red Fort, and the day is marked by patriotic events across the country.

(c) **Gandhi Jayanti (2nd October).** Celebrates the birth anniversary of Mahatma Gandhi, the father of the nation. The day is also observed as the International Day of Non-Violence.

(d) **National Unity Day (31 October).** India celebrates National Unity Day, (Rashtriya Ekta Diwas) on October 31 to commemorates the birth anniversary of Sardar Vallabhbhai Patel, a key figure in India's struggle for independence and the first Deputy Prime Minister and Home Minister of India.

14. The various religions, cultures, and festivals reflect India's spirit of inclusiveness and its unity in diversity. From celebrating freedom to cherishing the values of coexistence, the festivals and important days celebrated in India are symbols of the nation's cultural richness and national integration.

PART II: UNITY IN DIVERSITY

15. India, with its vast land stretching from the snow-capped peaks of the Himalayas in the North, to the tropical beaches of the South, is a magnificent landscape of diverse cultures, languages, religions, and traditions. Despite these varied differences, India stands as a shining example of unity in diversity, embodying a unique sense of togetherness and collective identity.

Geographical, Linguistic, and Religious Diversities in India

16. **Geographical Diversity.** India's landscape varies dramatically, from the Himalayas in the north to the coastal plains in the south, from the deserts of Rajasthan to the rainforests of the Northeast. This geographical diversity facilitates different regions to foster distinct ways of life, food habits, festivals, and traditions, contributing to a vibrant cultural landscape.

17. **Linguistic Diversity.** India is home to 22 officially recognized languages, with hundreds of dialects spoken across the country. This linguistic diversity facilitates several advantages such as cultural richness and Unity in Diversity.

18. **Religious Diversity.** India is known for being the birthplace of several major religions, including Hinduism, Buddhism, Jainism, and Sikhism. It also has significant

populations of Muslims, Christians, and believers of other faiths. Religious diversity contributes to cultural pluralism, spiritual growth and social harmony.

19. **Benefits of Co-existence**

(a) **Strengthening Democracy.** India's diversity strengthens its democratic fabric by ensuring representation from different cultural, linguistic, and religious groups. This inclusiveness empowers marginalized voices and promotes equal participation.



(b) **Innovation and Creativity.** A multicultural society encourages the exchange of ideas and innovation. Diverse perspectives often lead to creative solutions in business, arts, and governance.

(c) **Economic Growth.** The coexistence of various communities often leads to vibrant trade, tourism, and international partnerships.

(d) Cultural diversity attracts global tourism and fosters international relations.

Cultural Diversity

20. **Regional Cultures.**

(a) India is divided into several regions, each with its distinctive cultural practices. Northern India, with its Hindi- speaking heartland, is known for its architecture, and festivals like Diwali and Holi. In contrast, South India has its Dravidian cultural roots, featuring languages Like Tamil, Telugu, Kannada, and Malayalam, classical dances such as Bharatanatyam and Kathakali, intricate temple architecture, and a cuisine rich in spices and coconut-based dishes.

DID YOU KNOW?

- India has 22 official languages recognized by the Constitution
- India is the birthplace of four major world religions: Hinduism, Buddhism, Jainism, and Sikhism.
- Major festivals like Diwali (Hindu), Eid (Muslim), Christmas (Christian), Baisakhi (Sikh), and Holi (Hindu) are celebrated

(b) Eastern India includes states like West Bengal, Odisha, and Assam, boasts a rich literary heritage, classical music forms, and the vibrant festivals of Durga Puja and Bihu. The Northeast, with its diverse ethnic groups, has unique tribal cultures, customs, and festivals like Hornbill in Nagaland and Sangai in Manipur.

(c) Western India, encompassing Gujarat, Maharashtra, and Rajasthan, is known for its folk dances like Garba and Ghoomar, vibrant textiles, and festivals like Navratri and Ganesh Chaturthi.



Benefits of Cultural Diversity

21. **Creativity and Innovation.** Cultural diversity fosters creativity and innovation by bringing together different perspectives, ideas, and experiences. For instance, Bollywood, India's film industry, is a beautiful mix of diverse influences, resulting in movies that explore various themes, traditions, and storytelling methods.

22. **Tolerance and Mutual Respect.** Cultural diversity promotes tolerance, empathy, and mutual respect among individuals. When people are exposed to various cultures, they learn to appreciate differences and develop an understanding of other perspectives.

23. **Economic Benefits.** Cultural diversity also contributes to economic growth. India's diverse cultural heritage attracts millions of tourists each year, who visit to experience its historical monuments, art forms, festivals, and cuisine. Tourism generates revenue, creates jobs, and promotes local crafts and traditions.

Indian Philosophy of Coexistence in Spite of Diversities

24. India, often described as a subcontinent due to its vastness and diversity, has long upheld a unique philosophy of coexistence. Despite its multifaceted differences in geography, language, religion, culture, and social structures, India has managed to sustain a relatively harmonious social fabric for millennia.

25. **The Roots of Coexistence in Indian Philosophy.** India's philosophical traditions have always emphasized the importance of living harmoniously. Indian philosophy always believed in coexistence described by "Vasudhaiva Kutumbakam," which means "The world is one family. "The essence of this philosophy can be seen in practices and beliefs across Hinduism, Buddhism, Jainism, Sikhism, and other faiths that originated in India.

The Role of Education in Promoting 'Unity in Diversity'

26. Education provides a platform for students to learn about the vast diversity thriving in India.

(a) **Inclusive Curriculum.** Literature classes that cover poetry and stories from multiple Indian languages expose students to the linguistic diversity of the country.

(b) **Geographical Diversity.** Geography lessons that cover the vast landscapes of India-the snow-capped Himalayas, the deserts of Rajasthan, the Western

Ghats, the fertile Gangetic plains, and the long coastline of the country, instil an appreciation for the natural beauty and diversity of the nation.

(d) **Moral Education and Civic Responsibility.** Lessons on civic responsibility and ethical behaviour should form an integral part of the curriculum. Students should be taught about the values enshrined in the Indian Constitution, such as secularism, democracy, equality and justice.

(e) **Religious Education and Interfaith Understanding**. In a country as religiously diverse as India, it is crucial to educate students about different religions in an unbiased and respectful manner.

27. India's unity in diversity is its biggest strength to embrace differences and foster a spirit of unity amongst them. This unique blend of diversity and unity is the essence of India, symbolizing not just the peaceful coexistence of its citizens but their interconnectedness as one nation.

PART III: SLOGANS AND IMAGES OF NATIONAL INTEGRATION IN INDIA

28. India's journey toward building a unified nation has been marked by inspiring slogans and powerful images that capture the spirit of national integration. In a country as diverse as India, slogans and images have served as symbols of the values and principles that hold the nation together.

Slogans by National Leaders and Freedom Fighters

29. **The Power of Slogans in Uniting a Diverse Nation**. Slogans are more than just words that inspire people to act collectively. During the Indian freedom struggle and even after independence, slogans played a crucial role in mobilizing people from different regions, languages, religions, and communities to bond together for a common cause of gaining independence from the British rule.

(a) **Swaraj is my Birthright, and I Shall Have It.** It is one of the earliest and most powerful slogans given by Bal Gangadhar Tilak, that galvanized common people to fight for self-rule. It underscored the idea that every Indian, regardless of background, deserved freedom and sovereignty.

(b) **Inquilab Zindabad.** Meaning "Long Live the Revolution," this slogan became the inspiring call for independence. Bhagat Singh and his fellow revolutionaries used it to ignite a sense of unity among Indians, across regional, linguistic, and religious differences.

(c) **Jai Hind**. Coined by Netaji Subhas Chandra Bose, "Jai Hind" means "Victory to India." This slogan became a unifying chant during the independence movement and has since become an integral part of Indian patriotic expression. It evokes a sense of pride, national unity, and collective spirit among Indians, regardless of their differences.

(d) **Vande Mataram**. Originally composed as a poem by Bankim Chandra Chattopadhyay, "Vande Mataram" ("I Bow to Thee, Mother") was adopted as a slogan and anthem of the freedom movement. It invoked the image of India as a motherland and inspired people across the country to rise together for its liberation.

(e) **Sarva Dharma Sambhava.** Meaning "Equal Respect for All Religions", this slogan given by Mahatma Gandhi encapsulates the philosophy of religious harmony and tolerance. The slogan emphasizes the need for mutual respect and understanding among various faiths.

(f) **Ek Bharat, Shreshtha Bharat.** "Ek Bharat, Shreshtha Bharat" (One India, Great India), introduced by Prime Minister Narendra Modi, reflects the modern vision of national unity and integration by promoting cultural exchange, inclusivity, and mutual respect across India's diverse regions, languages, and traditions. It encourages a collective effort toward building a strong and unified nation.

Popular Images of National Integration

30. Images have the power to express deep emotions and communicate complex ideas more effectively than words. These images are filled with cultural, historical, and social significance, representing the collective identity and harmony of the nation.



The Tricolour

(a) **The Tricolour {Tiranga)**. The Indian national flag, with its horizontal stripes of saffron, white, and green, symbolizes unity in diversity. Saffron represents courage and sacrifice, white stands for peace and truth, and green signifies faith and fertility. The image of citizens of different communities, regions, and religions standing together and saluting the national flag, embodies the spirit of unity in diversity.



Image of Mahatma Gandhi

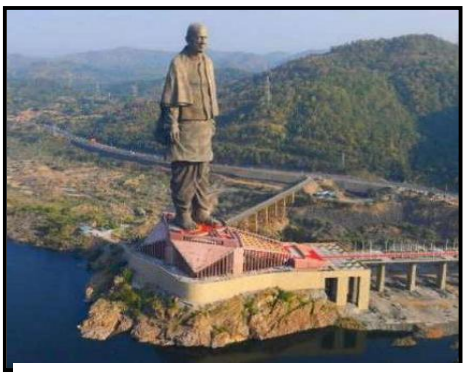
(b) **Image of Mahatma Gandhi**. Mahatma Gandhi's image is one of the most enduring symbols of national integration. His simple attire, round spectacles, walking stick, and serene demeanour have become iconic representations of India's struggle for freedom through non-violence. Gandhi's image is often used to uphold the values of tolerance, non- violence, and harmony.

(c) **Republic Day Parade.** Republic Day Parade in New Delhi, held annually on 26th January, is a striking visual display of national integration. Images of various states and Union Territories showcasing their unique cultural tableaux, military contingents from different regions, and cultural performances reflect India's diverse yet united identity.



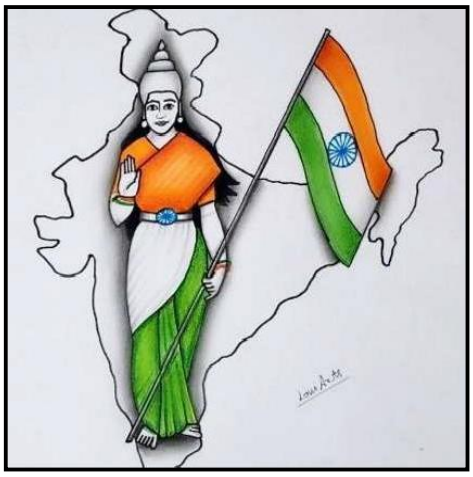
Republic Day Parade

(d) **The Statue of Unity.** The Statue of Unity in Gujarat, built in the honour of Sardar Vallabhbhai Patel, the "Iron Man of India," is a modern- day symbol of national integration. Sardar Patel played a crucial role in the unification of India's princely states post-independence. The image of this towering statue signifies strength, solidarity, and unity among India's diverse regions.



The Statue of Unity.

(e) **Bharat Mata Imagery.** The personification of India as Bharat Mata (Mother India) is a powerful symbol of national integration. Artistic depiction of Bharat Mata often shows her holding a map of India. This reinforces the idea of India as one motherland for all her diverse children.



Bharat Mata Imagery.

31. The slogans and images of national integration have been instrumental in uniting India's diverse population. From the days of the freedom struggle to the present, they have been used for expressing love for the nation and its pluralistic heritage. These symbols remind Indians that despite their differences, they share a collective identity and destiny.

CONCLUSION

32. India's journey to independence was marked by a series of resistance movements, reforms & revolutions. From the early struggles against British rule to the organized campaigns of the Indian National Congress and the armed resistance approaches of other leaders, the freedom movement was a testament to the resilience and diverse strategies of its leaders and participants.

33. India's geographical, linguistic, and religious diversity is one of its greatest strengths. While it poses challenges, its long history of co-existence illustrates the benefits of unity in

diversity. The co-existence of multiple cultures enriches national identity, strengthens democracy, and promotes innovation, making India a dynamic and resilient nation.

34. The power of slogans like "Jai Hind," and "Vande Mataram," combined with images such as the Tiranga, and the Indian map, continues to motivate people to work towards a more inclusive and harmonious society. They serve as daily reminders of India's founding ideals - equality, justice, freedom, and respect for diversity, encouraging every citizen to uphold these values for the progress of the nation.

SUMMARY

- National integration means a feeling of togetherness and unity amongst the people of a country, irrespective of their caste, religion and region.
- Key aspects of national integration include unity in diversity, social cohesion, and cultural harmony.
- National Integration is important for India as it helps to maintain social harmony, economic development and national security.
- Some important challenges to National Integration in India are cultural and linguistic differences, regionalism, communalism and casteism.
- Famous Leaders like Bal Gangadhar Tilak, Mahatma Gandhi, Sardar Vallabhbhai Patel, and Netaji Subhas Chandra Bose played important role to strengthen National Integration.
- Religious Diversity is represented by various religions such as Hinduism, Buddhism, Jainism, Sikhism, Islam, Christianity, Zoroastrianism and Judaism.
- Different languages, art and architecture, classical dance forms, music and cuisine represents Cultural Diversity of India.
- Various religious, cultural and harvest festivals are celebrated in India.
- Important National Days - Republic Day (26th January), Independence Day (15th August), Gandhi Jayanti (2nd October) and Teacher's Day (5th September).
- Benefits of Co-existence - Strengthening democracy, innovation and creativity, and economic growth.
- Cultural Diversity provides many benefits such as creativity and innovation, tolerance and mutual respect and economic benefits.
- Education plays a very important role in Promoting 'Unity in Diversity'.
- India's struggle for independence and its journey toward building a unified nation has been marked by inspiring slogans and powerful images that capture the spirit of national integration.
- In a country as diverse as India, slogans and images have served as symbols of the values and principles that hold the nation together.

ASSESSMENT EXERCISE

Multiple-Choice Questions

Q1. What is the primary aim of national integration in India?

(a) To promote regionalism

(b) To encourage linguistic differences

(c) To strengthen caste divisions

(d) To foster a sense of unity among diverse groups

Q2. Which of the following is a fador that can hinder national integration?

(a) Economic development (b) Religious intolerance

(c) Education (d) Cultural exchange

Q3. Which of the following plays a significant role in fostering unity among India's diverse population?

(a) The National Flag and Anthem (b) Regional disputes

(c) Caste-based segregation (d) Religious majoritarianism

Q4. Which leader is known as the 'Iron Man of India' for his role in unifying Indian princely states post independence?

(a) Subhas Chandra Bose (b) Bhagat Singh

(c) Sardar Vallabhbhai Patel (d) Jawaharlal Nehru

Q5. Who coined the famous slogan •Jai Hind,• which became a symbol of unity and national pride?

(a) Mahatma Gandhi (b) Subhas Chandra Bose

(c) Jawaharlal Nehru (d) Sardar Vallabhbhai Patel

Q6. Swaraj is my birthright and I shall have it" is a famous slogan by which Indian leader?

(a) Subhas Chandra Bose (b) Bhagat Singh

(c) Bal Gangadhar Tilak (d) Jawaharlal Nehru

Q7. Which of the following is primary goal of national integration in India?

(a) Creating a sense of unity among diverse cultures

(b) Promoting regional languages

(c) Encouraging the growth of regional political parties

(d) Supporting the preservation of caste-based communities

Q8. Which of the following is a national festival that promotes national integration in India?

(a) Diwali (b) Holi

(c) Independence Day (d) Eid

Q9. The Constitution of India promotes national integration by:

(a) Encouraging regionalism

(b) Guaranteeing equal rights for all citizens

(c) Allowing religious discrimination

(d) Promoting the dominance of one language

Q10. Which of the following is a major initiative taken by the Government of India to promote national integration?

(a) The Right to Education Act

(b) The National Rural Employment Guarantee Act

(c) The National Wildlife Protection Act

(d) The National Integration Week

Q11. The phrase "Unity in Diversity" in India highlights the idea of:

(a) Uniformity in culture

(b) Religious and cultural diversity coexisting peacefully

(c) Political unity under one government

(d) Regional dominance of one state over others

Q12. Which of the following images is most closely associated with India's national integration?

(a) The Ashoka Chakra

(b) The Red Fort

(c) The Qutub Minar

(d) The Gateway of India

Q13. The phrase "Satyamev Jayate" (Truth Alone Triumphs) is inscribed on which of the following symbols of national integration?

(a) The National Flag

(b) The National Anthem

(c) The Indian Constitution

(d) The National Emblem

Q14. The slogan "Jai Jawan Jai Kisan" was coined by which Indian leader to promote national unity?

(a) Jawaharlal Nehru

(b) Indira Gandhi

(c) Lal Bahadur Shastri

(d) Sardar Patel

Q15. Which of these slogans promotes the idea of cooperation and unity between different communities in India?

(a) Inquilab Zindabad

(b) Sarv Dharm Sambhav

(c) Mera Bharat Mahan

(d) Vande Mataram

Short Answer Questions

Q1. What does "Unity in Diversity" mean in the context of India?

Q2. Mention three major festivals celebrated across different cultures in India.

Q3. How did the image of Sardar Vallabhbhai Patel contribute to national integration after India's independence?

Q4. What role does education play in promoting national integration in India?

Long Answer Questions

Q1. Discuss the importance of national integration in a country like India, with its vast diversity in terms of language, religion, and culture.

Q2. Explain the significance of "Unity in Diversity" in India, citing examples from its culture, religion, and geography.

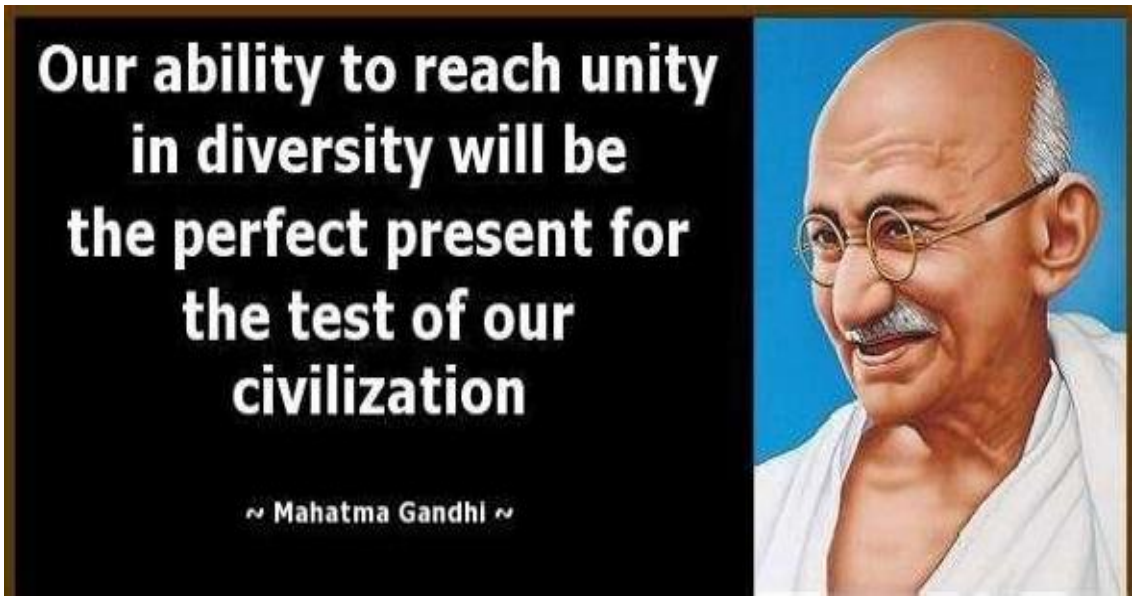
Q3. Explain the significance of regional languages in promoting cultural diversity in India.

Q4. Analyse the challenges India faces in maintaining "Unity in Diversity" in the contemporary era.

NATIONAL INTEGRATION AND AWARENESS (N-II) JD/JW

CHAPTER II: POSITIVES OF INDIAN DIVERSITY, FACTORS STRENGTHENING NATIONAL UNITY, ROLE OF NCC IN FOSTERING UNITY

Unity in diversity in India is living proof that despite different religions, cultures, and languages people of India live together with love and peace.



TEACHING INSTRUCTIONS:

Period	:	**01 (One)**
Type	:	**Lecture**
Year	:	**JD/JW (Second year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Class room, OHP, Board and Chalk/Markers**

Time-plan

- Introduction : 02 Mins
- Part I: Positives of Indian Diversity : 13 mins
- Part II: Factors Strengthening National Unity : 12 mins
- Part III: Role Of NCC in Fostering Unity : 10 mins
- Conclusion and Summary : 03 mins



INTRODUCTION

1. National integration and diversity are interconnected. For a country to achieve national integration, it must acknowledge and embrace its diversity, ensuring that people from different backgrounds feel included, respected, and united by a shared national identity. The key is to celebrate diversity while fostering a sense of belonging to a common nation. A balance between celebrating diversity and nurturing a shared national identity is key to fostering social harmony and collective growth. Through education, inclusive governance, and national programs, a sense of unity can be cultivated among the diverse communities, contributing to a stronger and more united nation.

2. This chapter provides a basic understanding of the positives of Indian diversity and the factors that can strengthen national unity. The cadets would also be apprised about the role of NCC in fostering unity and discipline among the youth of India.



PREVIEW

The lecture will be conducted in following parts:-

- Part I : Positive aspects of Indian Diversity.
- Part II : Factors that Strengthen National Unity.
- Part III : Role of NCC in fostering unity and discipline

LEARNING OBJECTIVES

- Analyse positive aspects of Indian Diversity and its impact on national unity.
- Study various factors that Strengthen National Unity.
- Study role of NCC in fostering unity and discipline among youth that leads to nation building.

PART I: POSITIVES OF INDIAN DIVERSITY

3. Indian diversity is one of its greatest strengths, manifesting in multiple forms, including geographical, cultural, religious, and ethnic diversity. Some of the key positives of this diversity are discussed below

4. **Geographical Diversity**

(a) **Rich Natural Heritage.** India's diverse geography, ranging from the Himalayas to coastal regions, deserts to rainforests, offers a wide range of climates and landscapes. This leads to rich biodiversity and natural resources.

(b) **Tourism Potential.** The variety of landscapes attracts tourists, boosting the tourism industry. Different regions offer unique experiences, from hill stations to desert safaris, beach holidays to jungle treks.

(c) **Agricultural Diversity.** Different climatic zones allow for a wide range of crops and agricultural practices, contributing to India's position as one of the largest producers of grains, fruits, and spices.

5. **Cultural Diversity.** India is home to thousands of languages, dialects, customs, festivals, and art forms. The cultural and religious diversity results in a wide range of festivals that are celebrated throughout the year, fostering unity and joy across communities.

(a) **Hindu Festivals**

- **Diwali.** The festival of lights, celebrated to mark the return of Lord Rama to Ayodhya after his victory over Ravana. It symbolizes the triumph of light over darkness.
- **Holi.** The festival of colours, marking the arrival of spring and symbolizing the victory of good over evil.
- **Navratri/Durga Puja.** A nine-day festival dedicated to the worship of Goddess Durga, also symbolizes the victory of good over evil, celebrated with dance, prayers, and cultural performances.
- **Makar Sankranti.** A harvest festival celebrated in different forms across India, known as Pongal in Tamil Nadu, Bihu in Assam and Uttarayan in Gujarat.
- **Ganesh Chaturthi.** A festival honouring Lord Ganesha, particularly celebrated in Maharashtra with great fervour.

(b) **Buddhist and Jain Festivals**

- **Buddha Purnima.** Celebrates the birth, enlightenment, and death (nirvana) of Gautama Buddha.

- **Mahavir Jayanti.** Celebrates the birth of Lord Mahavira, the 24th Tirthankara of Jainism.

(C) **Sikh Festivals**

- **Vaisakhi.** A harvest festival that also marks the founding of the Khalsa in 1699 by Guru Gobind Singh.

- **Guru Nanak Jayanti.** The birth anniversary of Guru Nanak, the founder of Sikhism, celebrated with processions and prayers.

(d) **Islamic Festivals**

- **Eid-ul-Fitr.** Celebrated at the end of the holy month of Ramadan, it is a time for feasting, charity, and prayers.

- **Eid-ul-Adha.** Also known as the "Festival of Sacrifice," commemorates the willingness of Ibrahim to sacrifice his son as an act of obedience to the God.

- **Muharram.** The Islamic New Year and a time of mourning for Shia Muslims in memory of the martyrdom of Imam Hussein.



(e) **Christian Festivals**

- **Christmas.** Celebrating the birth of Jesus Christ, it is observed by Christians across India, especially in states like Kerala and Goa.

- **Easter.** Celebrates the resurrection of Jesus Christ after his crucifixion.

(f) **Zoroastrian Festivals**

- **Navroz.** The Parsi New Year, celebrated with prayers and feasts.

6. **Religious Diversity.** India is a home to various major world religions. The coexistence of all these religions fosters a spirit of interfaith harmony, tolerance and mutual respect.

(a) **Hinduism.** Hinduism is a majority religion in India, with a history dating back over 5,000 years. Hinduism is rich with traditions, rituals, festivals, and a vast array of deities.

(b) **Buddhism.** Founded in India by Siddhartha Gautama (Buddha) in the 5th century BCE, Buddhism emphasizes non-violence, compassion, and spiritual enlightenment.

(c) **Jainism.** Also originated in India, Jainism advocates non-violence (ahimsa) and strict ethical living.

(d) **Sikhism.** Founded by Guru Nanak in the 15th century in Punjab, Sikhism promotes equality and service to humanity.

(e) **Islam.** Introduced to India in the 7th century by invaders mostly from central and west Asia. Islam became a significant influence in Indian culture, art, and architecture. Muslims make up the second-largest religious group in India.

(f) **Christianity.** Introduced to India as early as the 1st century CE by Saint Thomas and other missionaries mostly from Europe. Christianity in India has a long history, especially in regions like Kerala and Goa.

(g) **Zoroastrianism.** Parsis, followers of Zoroastrianism, migrated to India from Persia in the 8th century and have played a crucial role in the nation's cultural and economic development.

(h) **Judaism.** Jewish communities have existed in India since ancient times, with the Cochin Jews being one of the oldest Jewish communities in the world.

7. **Ethnic Diversity**



(a) **Cultural Fusion.** India's ethnic diversity, from the Indo-Aryans of the North to the Dravidians of the South, creates a rich landscape of traditions, cuisines, and ways of life.

(b) **Language and Literature.** India's ethnic diversity is also reflected in its linguistic diversity, with 22 official languages and hundreds of dialects. This has led to the flourishing of regional literature, music, and films, adding layers to India's intellectual and cultural heritage.

Benefits of Diversity

8. **Creativity and Innovation**

(a) **Diverse Perspectives.** Diversity encourages different perspectives and ideas. People from varied backgrounds approach problems in different ways, which fosters creativity and innovation.



Indian Tribal People

(b) **Cultural Influence on Art and Ideas.** The mix of traditions, languages, and practices gives rise to a rich cultural and intellectual environment. This can be seen in India's literature, cinema, music, and art, which often blend elements from different cultures.

(c) **Creative Problem-Solving.** Exposure to different experiences and worldviews enhances critical thinking and problem-solving, as diverse teams come up with more innovative and inclusive solutions to challenges.

9. **Resilience and Tolerance**

(a) **Social Resilience**. In a diverse society, communities are often better equipped to handle challenges. Different communities have different approaches to managing conflict or dealing with environmental challenges. Exposure to a variety of cultures and beliefs makes people more adaptable, resilient, and open to change.

(b) **Cultural Understanding and Mutual Respect**. Exposure to multiple cultures and traditions fosters empathy and understanding. People learn about each other's' customs and beliefs, leading to more peaceful coexistence.

10. **Economic Opportunities.**

(a) **Diverse Markets and Consumer Bases**. Diversity provides access to a broader range of consumer preferences. For example, India's diverse cuisine, fashion, and entertainment industries cater to a wide population, both locally and globally.

DID YOU KNOW?

- India has 22 official languages recognized by the Constitution
- India is the birthplace of four major world religions: Hinduism, Buddhism, Jainism, and Sikhism.
- Major festivals like Diwali (Hindu), Eid (Muslim), Christmas (Christian), Baisakhi (Sikh), and Holi (Hindu) are celebrated

(b) **Varied Skill Sets and Knowledge Systems**. Diverse population brings a broad spectrum of skills and experiences. This diversity enhances the labour market by providing talent across sectors ranging from technology and business to arts and agriculture.

11. India's diversity, spanning geography, culture, religion, and ethnicity, makes it a unique and vibrant nation. It fosters a sense of unity in diversity, contributes to social and economic progress, and enhances India's global standing as a multi-layered society.

PART II: FACTORS STRENGTHENING NATIONAL UNITY

12. National integration in India is significantly affected by several interrelated factors, such as regionalism and communalism. All these factors challenge the national unity and highlight the need for inclusive policies to promote collaboration among India's diverse population.

Socio-Economic Disparities and Impact on National Unity

13. **Economic Inequality.**

(a) Definition. Socio - Economic disparities refer to the unequal distribution of wealth and resources across different sections of society.

(b) **Impact on Integration**. Economic disparities can lead to feelings of alienation and resentment among marginalized groups, undermining a collective national identity. Disparities can intensify tensions between different *social classes and regions.*



Factors affecting National Unity

(c) **Examples**. The wealth gap between urban and rural areas, or among different states, lead to perceptions of neglect and foster regional discontent.

14. **Access to Education and Employment.**

(a) **Definition**. Disparities in access to quality education and job opportunities create barriers to social mobility.

(b) **Impact on Integration**. When certain communities feel excluded from educational and economic opportunities, it can lead to frustration and a sense of exclusion, weakening national bonds.

(c) **Examples**. The underrepresentation of certain communities in higher education and government service can lead to poverty and marginalization.

15. **Social Stratification.**

(a) **Definition.** Social stratification refers to the hierarchical arrangement of individuals based on factors like caste, class, and ethnicity etc.

(b) **Impact on Integration.** Caste-based divisions can lead to social fragmentation and conflict. Discrimination and inequality can result in a lack of trust and solidarity among communities.

(c) Examples. Caste-based violence and discrimination, such as atrocities against Dalits, highlight how social stratification can create barriers to national unity.



Unity is Strength

Factors that Strengthen National Unity.

16. **Common Vision and Goals.** A shared vIsIon and collective goals are essential for fostering national unity. When citizens align on common aspirations- such as economic development, social justice, and environmental sustainability - it cultivates a sense of belonging and purpose. Example: National campaigns and movements that emphasize unity, like the Swachh Bharat Abhiyan, shows how a unified goal can bring diverse groups together, enhancing cooperation and solidarity.

17 **Role of Education.** Education plays a pivotal role in promoting national unity by instilling values of tolerance, respect, and civic responsibility. An inclusive education system that teaches the importance of diversity and the country's rich cultural heritage can foster mutual understanding among students from different backgrounds.

18 **Government Policies.** Government policies aimed at inclusivity and equity are vital for strengthening national unity. Policies that promote equal representation, and resource distribution help bridge socio-economic divides.

19 **Role of Youth in Promoting a United India.** The youth play a crucial role in shaping the future of the nation and can be powerful advocates for national unity. Their energy, creativity, and commitment to social change can mobilize communities around issues of common interest. Through activism, cultural exchanges, and participation in national service programs, young people can build bridges across diverse groups, fostering a sense of collective identity.

20 **Overall Economic and Social Development of the Nation.** Economic growth and social development contribute significantly to national unity by improving living standards and reducing disparities. When citizens experience improved access to resources, employment, and healthcare, it fosters a sense of shared prosperity.

21. **Understanding and Respecting Different Cultures.** Promoting an understanding and respect for diverse cultures is essential for national unity in a multi- ethnic society like India. Encouraging cultural exchanges, celebrations of festivals from different communities, and awareness programs can enhance appreciation for diversity.

22. There are many factors that pose significant challenges to national integration in India. Addressing these factors requires inclusive policies, dialogue among communities, and concerted efforts to promote equality and mutual respect.

PART III: ROLE OF NCC IN FOSTERING UNITY

NCC's Contribution in Fostering Unity and Discipline Among Youth.



23. The National Cadet Corps (NCC) in India plays a crucial role in fostering unity and discipline among the youth in India. Established in 1948, the NCC is a youth development organization that instils qualities of leadership, discipline, and national pride. It brings together students from diverse backgrounds and regions, promoting national unity while developing character and civic responsibility.

24. **National Integration through Diversity.**

(a) **Unity in Diversity**. NCC cadets come from different states, cultures, and linguistic backgrounds, reflecting the diverse fabric of India. Through joint activities, camps, and training sessions, cadets learn to appreciate and respect each other's cultures, fostering a spirit of unity.

(b) **National Integration Camps**. These camps are organized at various locations across the country, where cadets from different regions interact and bond together. This helps break down regional, religious, and linguistic barriers, building a sense of national integration.

25. **Promotion of Discipline**

(a) **Military Training**. The NCC offers structured military training that includes physical fitness, drill, parades, weapon training, and marching. This instils a sense of discipline, punctuality, and order in the cadets, which extends to other areas of their lives.



NCC Training

(b) **Obedience and Responsibility**. Through NCC training, cadets learn the importance of following instructions, adhering to rules, and taking responsibility for their actions, which is crucial for personal discipline and success in life.

26. **Fostering Leadership**

(a) **Leadership Skills**. NCC cadets are often given opportunities to lead squads and manage tasks, helping them develop leadership skills. These experiences teach them decision -making, accountability, and how to inspire and lead a team.

(b) **Collaborative Spirit**. During NCC activities, cadets work in teams, participate in group tasks, and solve problems together. This fosters teamwork, camaraderie, and the ability to work harmoniously with people from different backgrounds, contributing to national unity.

27. **Patriotism and National Service**

(a) **National Pride**. One of the core objectives of the NCC is to nurture patriotism and a sense of duty toward the country. Through participation in Independence Day, Republic Day parades, and other national events, cadets develop a strong sense of pride in India and its values.

(b) **Service to Society**. NCC cadets actively engage in community service and social work, such as participating in Swachh Bharat Abhiyan, disaster relief operations, and blood donation drives. This sense of service builds a connection with the nation and reinforces a collective identity.

28. **Adventure and Character Building**

(a) **Adventure Activities**. NCC organizes adventure programs like mountaineering, trekking, and sailing expeditions, which ncourage cadets to step out of their comfort zones, face challenges, and build resilience.

(b) **Character and Discipline Development**. These challenging outdoor activities help build mental toughness, self-reliance, and discipline, which are vital traits for any individual aspiring to contribute positively to society.

DID YOU KNOW?

- NCC organizes interstate cultural exchange programs, wherein, cadets visit other parts of India, engage with local communities, and learn about the culture, history, and challenges of different regions.
- NCC cadets also participate in international youth exchange programs, where they interact with cadets from other countries fostering a global outlook among cadets.

29. **Civic Responsibility and Nation-Building**

(a) **Civic Engagement**. NCC emphasizes the role of cadets as responsible citizens. Through programs like tree plantation drives, cleanliness campaigns, and social awareness activities, cadets actively contribute to community development. This instils a sense of responsibility toward society and the nation.

(b) **Nation-Building**. By nurturing a generation of disciplined and motivated youth, NCC plays a key role in the process of nation-building. The organization helps in creating a generation of citizens who are committed to national development and social harmony.

CONCLUSION

30. The diversity present in India, brings significant benefits that extend beyond cultural richness. It fosters creativity, enhances resilience in times of crisis, promotes tolerance and mutual respect, and opens up economic opportunities by creating varied markets and skilled workforces. As a result, diversity contributes to the overall progress, innovation, and cohesion of a society.

31. Building a strong national identity that embraces diversity is essential for fostering unity and harmony in the country. The factors such as common vision, education, government policies, youth involvement, economic development, and cultural understanding, create an environment conducive to national unity. By fostering collaboration and empathy among diverse communities, India can continue to build a cohesive and strong nation.

32. The NCC, with its structured training and diverse activities, contributes significantly to fostering unity and discipline among Indian youth. It not only inculcates military values of discipline and leadership but also promotes a strong sense of national identity and integration. Through various initiatives, camps, and national service programs, NCC helps build a cohesive and disciplined generation of young citizens, vital for the progress and unity of India.

SUMMARY

- Indian diversity is one of its greatest strengths, manifesting in multiple forms, such as geographical, cultural, religious, and ethnic diversity.
- The diversity includes rich natural heritage, agricultural diversity, interfaith harmony, spiritual tourism, cultural enrichment, art, music, dance and festivals.
- Benefits of diversity: Benefits of diversity includes creativity and Innovation, cultural influence on art, creative problem-solving, social resilience, mutual respect, and also creates numerous economic opportunities for the people.
- Factors affecting National Integration: National integration in India is significantly affected by several interrelated factors, such as regionalism, communalism, linguistic conflicts, economic inequality, access to education and employment and social stratification.
- Factors that Strengthen National Unity: Important factors that strengthen national unity are common vision and goals, role of education, government policies, role of youth in promoting a united India, overall economic and social development of the Nation and understanding and respecting different cultures.
- NCC's Contribution in Fostering Unity and Discipline: National Cadet Corps (NCC) plays a crucial role in fostering unity and discipline among the country's youth through various programs such as National Integration camps, promotion of discipline, fostering leadership qualities, patriotismand national service, adventure activities and making cadets aware about civic responsibilities.

ASSESSMENT EXERCISE

Multiple-Choice Questions (MCQs)

Q1. Which of the following factors plays a aucial role in strengthening national unity?

(a) Fostering a sense of shared identity and pride in the nation

(b) Promoting regional languages over national languages

(c) Encouraging isolation among different cultural groups

(d) Focusing solely on economic development

Q2. Which of the following is a key benefit of India's cultural diversity?

(a) Decreased social interaction

(b) Limited economic growth

(c) Uniform cultural practices

(d) Strengthened national unity

Q3. The diversity of India contributes to which of the following?

(a) A unified culture that disregards regional differences

(b) A global presence in arts, music and literature

(c) The elimination of regional languages

(d) The loss of traditional practices and beliefs

Q4. How does India's federal structure contribute to national unity?

(a) By decentralizing power completely to states

(b) By preventing national-level decision-making

(c) By maintaining a balance between central and state authorities

(d) By creating conflicts between states

Q5. How does India's religious diversity benefit the nation?

(a) It creates social tension and conflict.

(b) It strengthens India's image as a land of tolerance and harmony.

(c) It hinders national progress.

(d) It leads to the dominance of one religion over others.

Q6. The role of the Indian Constitution in strengthening national unity is best described as:

(a) Ensuring equal rights and opportunities for all citizens

(b) Promoting the dominance of one religion

(c) Limiting the rights of minority communities

(d) Encouraging regionalism over national integration

Q7. How does India's cultural diversity positively impact its economy?

(a) It leads to economic disparity among regions.

(b) It creates a dynamic and diverse workforce, attracting global investment.

(c) It hinders the growth of industries.

(d) It promotes the dominance of one culture over others.

Q8. Which of the following is an example of a factor that strengthens national unity in a diverse country?

(a) Discriminating against minority groups

(b) Ignoring the cultures of different regions

(c) Celebrating national festivals and events that include all communities

(d) Encouraging competition between regions

Q9. How do effective communication and media contribute to national unity?

(a) By spreading misinformation about different regions

(b) By promoting diverse opinions without any regard for unity

(c) By facilitating understanding and awareness of national issues and common goals

(d) By focusing on regional differences instead of national concerns

Q10. What is the role of media in promoting national unity in India?

(a) Spreading misinformation

(b) Fostering regionalism

(c) Focusing solely on sensational news

(d) Highlighting diverse cultures and promoting dialogues for understanding

Q11. How does NCC contribute to fostering national unity among its cadets?

(a) By segregating cadets based on their regions

(b) By encouraging participation in regional disputes

(c) By promoting cultural exchange and teamwork through national-level camps

(d) By focusing only on military drills

Q12. Which of the following activities in the NCC aims to instil discipline in the youth?

(a) Organizing community parties

(b) Conducting regular drills, parades, and camps

(c) Encouraging only sports activities

(d) Promoting social media interactions

Q13. How does participation in NCC influence the leadership qualities of youth?

(a) By avoiding any leadership training

(b) By focusing only on physical fitness and not leadership

(c) By discouraging individual initiative

(d) By encouraging cadets to lead teams in various camps and community programs

Q14. Which of the following activities organized by the NCC helps in promoting unity and national integration?

(a) Organizing national integration camps where cadets from different states interact

(b) Conducting regional cultural festivals

(c) Focusing only on local community service projects

(d) Encouraging cadets to stay within their regional boundaries

Q15. In what way does the NCC help develop leadership qualities among the youth?

(a) By encouraging independence without teamwork

(b) By assigning cadets roles of responsibility and leadership during camps and activities

(c) By focusing solely on theoretical education

(d) By promoting passive participation

Short Answer Questions

Q1. Explain the role of education in promoting national unity in India.

Q2. How do NCC camps promote unity and cultural exchange among cadets from different regions?

Q3. How does participation in NCC activities encourage leadership and teamwork among cadets?

Long Answer Questions

Q1. Discuss examples of how different cultural traditions, languages, and religions coexist and strengthen the nation's identity.

Q2. How does linguistic diversity in India enrich its literary and cultural landscape?

Q3. How do NCC activities, such as national camps, joint training exercises, and cultural exchange programs, contribute to bridging regional, linguistic, and cultural divides?

Q4. How does NCC initiatives such as disaster relief, blood donation camps, and environmental campaigns help foster unity and nation building?

BORDER & COASTAL AREAS

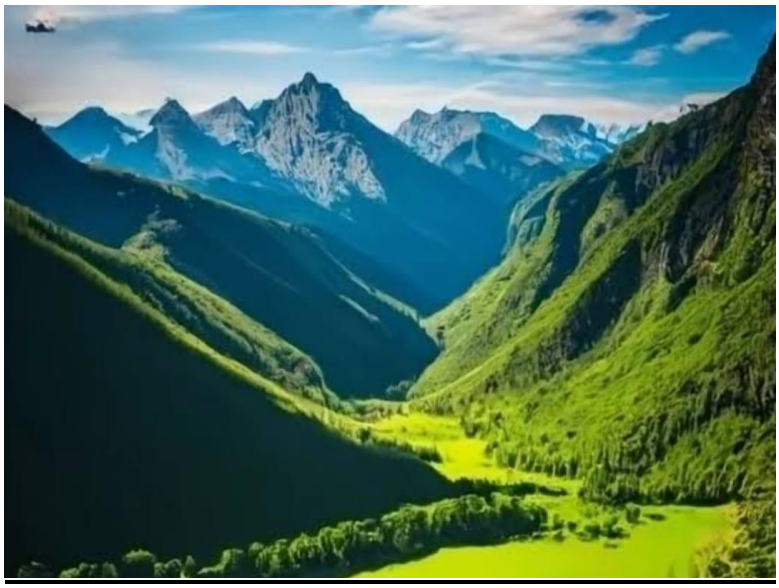
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CHAPTERWISE INDEX: BORDER & COASTAL AREAS (JD/JW)

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BCA – I (JD/JW)

CHAPTER I : HISTORY, TOPOGRAPHY & DEMOGRAPHY OF BORDER AND COASTAL AREAS



TEACHING INSTRUCTIONS

Period(s)	**:**	**01**
Type	**:**	**Lecture**
Year	**:**	**JD/JW (First Year)**
Training Aids	**:**	**Power Point Presentation, Map of India**

Time-plan:

- Introduction : 02 mins
- Part I: Borders of India. : 05 mins
- Part II: The historical processes that have shaping India's current borders. : 05 mins
- Part III: Topography of border areas : 05 mins
- Part IV: Diverse geographical features of India's borders. : 05 mins
- Part V: Population Density and Distribution. : 05 mins
- Part VI: Cultural, Religious and ethnic composition : 05 mins
- Conclusion : 04 mins
- Question answer session : 04 mins

INTRODUCTION

1. A nation's identity is often defined by its geographical boundaries as represented on a political map. Similarly, the individuals living within these boundaries are identified as its citizens. History reveals that these borders are not static; they have evolved significantly over time. India, a country with a diverse and extensive boundary, shares its borders with several nations, many of which have been marked by disputes, differences, and historical conflicts. This underscores the importance of understanding the history, geography, and topography of our borders, as well as the lives, cultures, and challenges faced by the people living in these border and coastal areas.

OVERVIEW

The subject will be covered in the following parts:-

(a) Part I: Borders of India

(b) Part II: Historical Processes Shaping India's Current Borders

(c) Part III: Topography of Border Areas

(d) Part IV: Diverse geographical features of India's borders.

(e) Part V: Population Density and Distribution

(f) Part VI: Cultural, Religious and ethnic composition

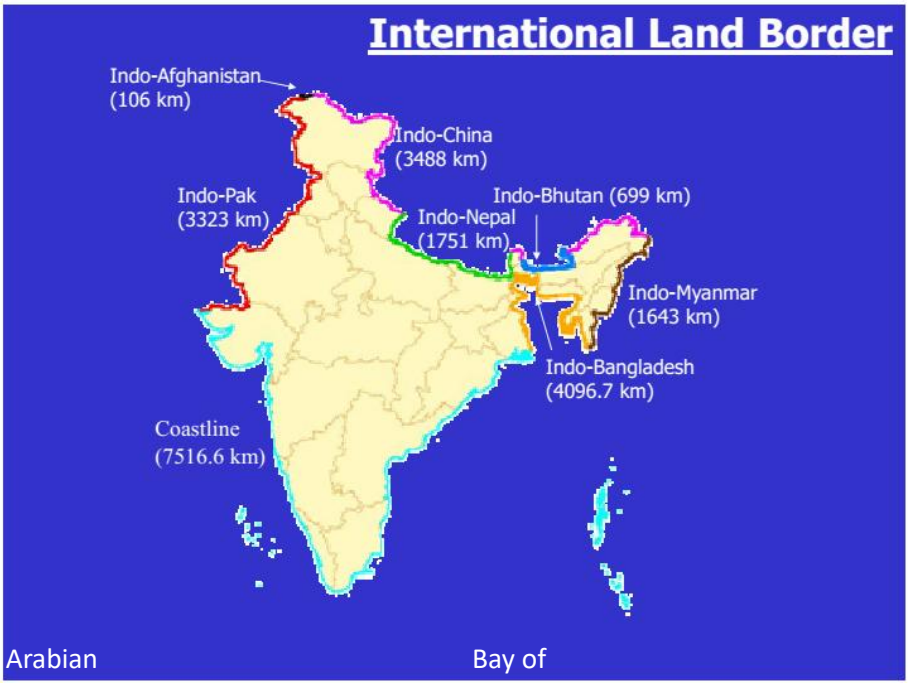
LEARNING OBJECTIVES

- Border states of India and neighbouring countries.
- Historical Perspective of the historical events that have shaped India's current borders
- Topography of the border areas
- The diverse geographical features of India's borders, including mountains, rivers, deserts and forests.
- Population Density and Distribution.
- Cultural, Religious and ethnic composition

PART I : BORDERS OF INDIA

Land Borders.

2. India shares its land borders with seven neighbouring countries. This includes Afghanistan, China, Bhutan, Nepal, Pakistan, Bangladesh, and Myanmar. As a peace-loving democratic country, India has always tried to maintain friendly foreign relations with its neighbours. India shares borders with the countries as below:-



(a) **Bangladesh.** 4096.70 kms running along West Bengal, Assam, Meghalaya, Tripura and Mizoram.

(b) **Pakistan**. 3323 kms running along Gujarat, Rajasthan, Punjab, Union Territory of Jammu & Kashmir and Union Territory of Ladakh.

(c) **China.** 3488 kms running along Arunachal Pradesh, Sikkim, Uttarakhand, Himachal Pradesh and Union Territory of Ladakh.

(d) **Nepal.** 1751 kms running along Uttarakhand, Uttar Pradesh, Bihar, West Bengal and Sikkim.

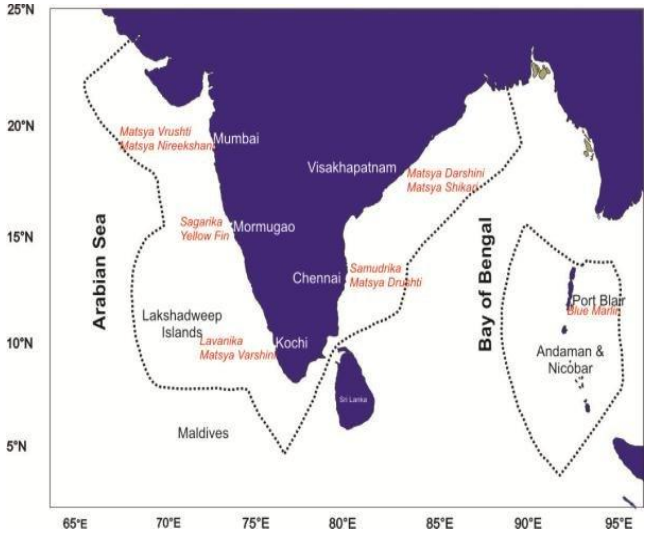
(e) **Bhutan**.699 kms running along Sikkim, West Bengal, Assam and Arunachal Pradesh.

(f) **Myanmar.** 1643 kms running along Arunachal Pradesh, Nagaland, Manipur and Mizoram.

(g) **Afghanistan**. 106 kms running along Union Territory of Ladakh

Maritime Borders

3. India's coastline spans over 7,516.5 km, including its island territories, making it the 15th longest in the world. India shares its maritime borders with seven countries: Bangladesh, Indonesia, Myanmar, Thailand, Sri Lanka, the Maldives, and Pakistan. This extensive coastline underscores India's strategic importance and the necessity to manage its marine resources and coastal



communities effectively. India's maritime boundaries include:

(a) 12-nautical-mile Territorial Zone

(b) 200-nautical-mile Exclusive Economic Zone (EEZ)

4. Protection of Maritime Borders and the Strategic Deployments for the same is of utmost importance for any country. India places significant emphasis on safeguarding its maritime borders, Territorial Maritime Zone, and Exclusive Economic Zone (EEZ). Ensuring open and secure International Sea Lanes of Communication (SLOC) is vital for trade and logistics. The Indian Navy along with Indian Coast Guard equipped with mission-ready ships, submarines and aircrafts, maintains a strong presence in these areas, particularly at key choke points in the Indian Ocean Region (IOR). These deployments are designed to address a wide spectrum of operations to ensure safety and sovereignty of our maritime borders. Apart from domination and protection of our IOR, some other operations that are carried out, includes anti-maritime terrorism/piracy operations and humanitarian aid and disaster relief (HADR) missions.

SOME INTERESTING FACTS

- The ocean covers 71% of the Earth's surface.
- The Barren Island, India's only active volcano lies in the Andaman Island group.
- The southernmost tip of India, **Indira Point** was submerged in 2004 Tsunami, is part of the Great Nicobar Islands Group.

Aerial Borders

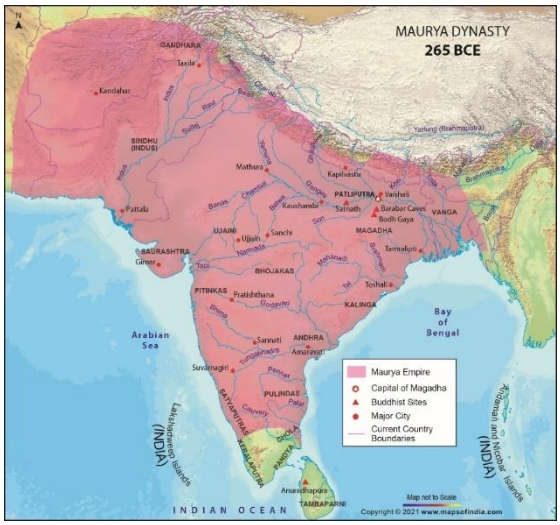
5. These cannot be physically demarcated. It is an imaginary line, generally contiguous and vertically above in space to a country's land and maritime borders and is commonly referred to as 'Air Space'. During peacetime passenger and cargo air flights of friendly countries with which the host country has an agreement are permitted to use each-other's airspace. However, use of air space by certain types of aircrafts like military aircrafts are not permitted unless and until special permission is taken. In such cases the use of air space by hostile country aircraft or military aircraft (without permission) is called an infringement and is termed as an 'Air violation'.

PART II : HISTORICAL PROCESSES SHAPING INDIA'S CURRENT BORDERS

6. Numerous historical events and processes have shaped India's current borders. Various dynasties ruled over vast areas of India in the past, some of these areas are now outside present political borders of the country. Later, decline of the Mughal Empire and subsequent colonization of India in pre-modern period by the European countries also played a significant role in the shaping of our present political boundaries.

7. These historical events and processes have shaped our perception of a country (Greater India/ *Vrihattar Bharat*). Some of the important periods having significant impact are as under:

(a) **Mauryan Empire (322–185 BCE).** The Mauryan Empire is considered the first empire of India. Its rulers unified much of the Indian subcontinent. The presence of Ashokan edicts in modern Afghanistan, Pakistan, Nepal and Bangladesh indicates the reach of Mauryan power in a wider and diverse landscape of South Asia. Ashoka's efforts for the propagation of *Dhamma* led to the strengthening of India's cultural ties with various countries of Asia.



(b) **The Kushan Empire.** Emerging from present-day Afghanistan, the Kushans expanded into the northwest of the Indian subcontinent during the mid-1st century CE. Under Emperor Kanishka, the empire encompassed Afghanistan and northern India, fostering trade along the Silk Road and maritime routes of the Indian Ocean. This era witnessed the flourishing of Gandhara and Mathura art, influenced by the cultural exchanges facilitated by long-distance trade.

(c) **The Chola Empire and Naval Expansion.** The Cholas were the first rulers to establish a formidable navy, which they used to expand their influence overseas. Vijayalaya Chola began the dynasty's rise by defeating the Pallavas and capturing Thanjavur. During the reign of Rajaraja Chola and his son Rajendra Chola I, the empire conquered territories across India and extended its reach to Sri Lanka, Java, Sumatra, and Malaya through naval expeditions, exemplifying their maritime prowess.

(d) **Early Islamic Invasions and Delhi Sultanate.** In 712 CE, Muhammad bin Qasim led the Arab conquest of Sindh, establishing the first Islamic foothold in the Indian subcontinent. However, subsequent Arab campaigns were repelled by Indian rulers, such as the Pratiharas and the Chalukyas, restricting Arab control to Sindh. Later, raids by Mahmud of Ghazni and Mohhammed Ghauri paved the way for the formation of Delhi Sultanate. The Delhi Sultanate, established in 1206 CE, resisted several Mongol invasions during the Khalji dynasty. Zafar Khan, a general under Alauddin Khalji, notably defeated Mongol forces near Jalandhar in 1297 CE. The Sultanate marked the beginning of centralized Muslim rule in northern India. Malik Kafur's campaigns in Indian peninsula increased the reach of the Delhi Sultanate. However soon the region witnessed the rise of Vijayanagar empire which exercised political controlled over Deccan and far South for substantial period.

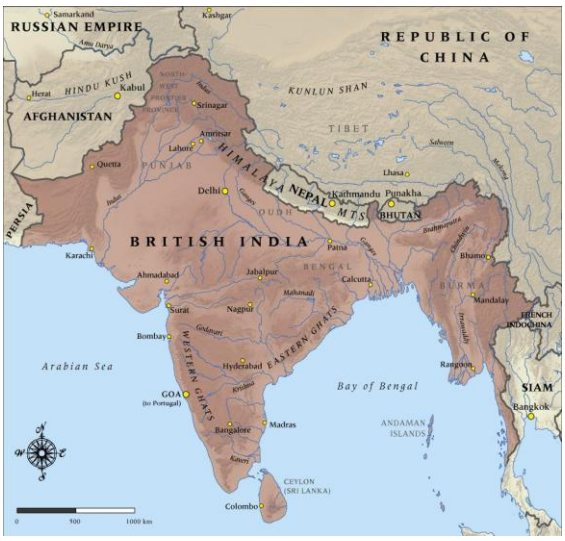
(e) **The Mughal Empire.** The Mughal Empire, founded by Babur in 1526 CE after defeating Ibrahim Lodi, introduced gunpowder artillery to South Asia. At its peak, the empire spanned over 4 million sq. km, stretching from Bengal to Kabul and Kashmir to the Kaveri basin. The Mughal era saw cultural and administrative advancements,

particularly under Akbar. The Mughal empire attained its maximum boundaries during the period of Aurangzeb. However, Auranzeb's death in 1707 was followed by the weakening of the Mughal control and the emergence of several successor states.

(f) **Maratha Empire.** The fragmentation of Mughal empire led to the emergence of various successor states. Many of them were overwhelmed by Marathas. Marathas reduced Mughal emperors to titular status and effectively controlled their administration. Maratha *sardars* presented stiff resistance to British East India Company's expansion commonly referred to as Anglo-Maratha wars. Maratha Empire is also known for its maritime dominance along the western coast of India, which ensured the protection of coastal trade routes and effectively countered European naval powers in the 18th century.

(g) **Sikh Empire.** Maharaja Ranjit Singh united various Sikh factions (*mis*ls). They were organized into a powerful state. At its prime in the mid-19th century, Sikh Empire extended from Gilgit and Tibet in the north to the deserts of Sindh in the South and from the Khyber Pass in the west to the Sutlej in the east. Anglo-Sikh wars brought an end to this empire marking the completion the conquest of India by East India Company.

(h) **Colonial Rule and Partition.** The weakening of Mughal control, facilitated in the colonization of Indian subcontinent by European powers, aided and abetted by their better seafaring and technological capabilities. The British officials exploited the prevailing political situation which was punctuated by small fragmented political entities or princely states, cunningly using the policy of 'divide and rule'. The British colonial period saw significant changes to India's borders. The Partition of Bengal in 1905 into East Bengal and West Bengal by British government created religious divisions for the first time that deepened thereafter. In 1947, the British Government conceded to the demand of Muslim League, led by Jinnah, and created Pakistan out of the entire Indian territories under British control, based on religious lines. Independent India inherited its borders from British period. At the time of the British withdrawal, 565 princely states were officially recognized in the Indian sub-continent, apart from thousands of Jamindari estates and Jagirs. Under the dynamic leadership of Sardar Vallabh Bhai Patel, the Iron Man of India, almost all princely states willingly agreed to sign the instrument of accession and joined Union of India. However, at the time of independence, some of the princely states which did not sign the instrument of



accession were the Nizams of Hyderabad, Nawab of Junagarh, and Maharaja of Jammu and Kashmir. Subsequently with the invasion *Kabayailis* led by Pakistan Army, Maharaja Hari Singh willingly signed the instrument of accession on October 26, 1947 to safeguard the life and property of the innocent subjects of his princely state.

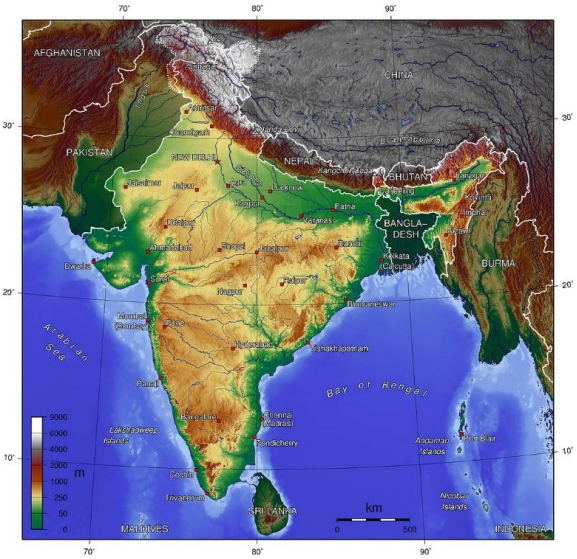
(i) **Post-Independence Territorial Adjustments.** The feeling of nationalism had lasting impact on the local populace of those princely states that had not acceded to India at the time of independence. These nationalistic sentiments led to the local movements which were later supported by the Indian Government. The follow up political and police action by the Indian Government resulted in the accession and integration of the princely states of Junagarh and Hyderabad. Subsequently, in 1961, Portuguese were forced to accede its territories – Goa, Daman, Diu, Dadra and Nagar Haveli to India. Pondicherry, Chandernagore, and other smaller French enclaves were integrated through referendums in 1970. Sikkim joined India through a similar process in 1975, it became the last state to merge with the Union of India.

HISTORICAL TRIVIA

- One of the earliest surviving representations of the Indian peninsula is in the "Tabula Peutingeriana", a 12th Century version of a Roman map from the 4th Century CE detailing circuits through Europe, the Far East, and South Asia.
- The British established the Survey of India. Major James Rennell was appointed as the first Surveyor General of India. The Survey of India traces its birth to the appointment of Major James Rennell as Surveyor General of Bengal, by Lord Robert Clive and his council, on the first of January 1767.
- The McMahon Line generally demarcates the northern borders of India with China. It was proposed by Sir Henry McMahon, the foreign secretary of British India at the 1914 Simla Convention.

PART III : TOPOGRAPHY OF BORDER AREAS

8. **Northern Borders.** The terrain of Jammu and Kashmir is highly diverse, encompassing mountains, valleys, rivers, plateaus, and glacial regions. The region is geographically divided into four distinct zones:



(a) **Kandi Belt and Shivalik Hills (Jammu Region)**: The southern Jammu region features mountainous terrain, including the Shivalik hills and fertile plains in the southwest. Important rivers in this area include the Chenab, Tawi, and Ravi.

(b) **Kashmir Valley and Pir Panjal Range**: Enclosed by the Pir Panjal range to the west and south, the valley lies to the leeward of the Himalayas, which form its northeastern boundary. The Jhelum River is the primary waterway traversing the Kashmir Valley.

(c) **Tibetan Tract (Ladakh and Kargil)**: Characterised by high-altitude plateaus and arid conditions, this region is distinct in its topography and climate.

(d) **Valleys**: Significant valleys include the Kashmir Valley, Tawi Valley, Chenab Valley, Poonch Valley, Sind Valley, and Lidder Valley.

9. The region's climate varies with altitude and geographical location. The southern and southwestern areas experience a subtropical climate with hot summers, cool winters, and monsoon rains. In contrast, the Kashmir Valley and high-altitude regions experience cold winters with sub-zero temperatures and snowfall, while summers are generally pleasant. Precipitation in the valley is largely influenced by Western Disturbances during the spring.

10. **North Eastern Borders.** Northeast India (consist predominantly hilly, with valleys and plains interspersed between its varied terrain. The region’s elevation ranges from sea level to peaks as high as 7,000 meters above sea level.

(a) **Topography**. The topography of Northeast India includes plains and valleys, which include the Brahmaputra, Barak and Imphal valleys, along with flatlands in Meghalaya and Tripura. The surrounding hill ranges include the Garo, Khasi-Jaintia, Dimasa, Karbi, Naga, Arunachal, and Bhutan hills. Also, the rainforests in the region support rich biodiversity and unique ecosystems.

(b) **River Systems**. The region is dominated by the Brahmaputra and Barak river systems and their tributaries. It has high rainfall, averaging over 10,000 mm annually, which contributes to frequent floods and high seismic activity.



(c) **Climate**. States like Arunachal Pradesh and Sikkim have a cold climate with snowy winters and mild summers. The remaining states experience hot, humid summers, severe monsoons, and mild winters.

(d) **Strategic and Ecological Importance.** The Northeast is India’s gateway to Southeast Asia and serves as a land bridge to Myanmar, positioning it at the forefront of India’s Act East Policy. The region is rich in natural resources in terms of Hydropower Potential, Biodiversity and Ecological aspects. The hydropower potential is estimated at 50,000 MW, offering a significant energy resource. Part of the Indo-Burma Biodiversity Hotspot, it boasts one of the highest avian and plant diversities in the Indian subcontinent. The region has ecological significance as it is home to all

bear species found in India and several endemic species, supported by its unique ecosystems and rainforests. With abundant natural resources, ecological significance, and strategic location, the Northeast plays a crucial role in India's environmental, economic, and geopolitical landscape.

PART IV : DIVERSE GEOGRAPHICAL FEATURES OF INDIA'S BORDERS

11. **Desert Terrain/ Riverine Terrain/ Plains.** The international border of India and Pakistan is a mix of all type of terrain. It partially has dessert, riverine, plains and mountainous terrain. Each type of terrain pose a different type of threat and requires different means of surveillance. Thus, forces designated to guard these have to prepare for various type of challenges and warfare as per terrain. Desserts are vast and open. There is lack of roads and vehicles cannot move on loose sand. Similarly the plains of Punjab and Jammu region have a number of rivers and *nallahs* where movement of troops guarding the borders is difficult. These terrain impose a challenge of effectively patrolling the border areas and increase the risk of illegal activities across the border.

12. **Mountainous Terrain.** Mountainous terrain as the name suggest has mountains of varying heights, which in case of India range from 9,000 ft to about 20,000 ft. The terrain in mountains is rugged and inhospitable and weather is inclement. It poses a challenge for construction, development of means of transportation and communication. Difficulty in holding ground, surveillance, logistics and requirement of special clothing and equipment further aggravates the complexity. India shares mountainous border with Pakistan, China, Nepal, Bhutan, and Myanmar.

13. **Snow Clad and Glaciated Terrain.** Snow clad mountains are areas in Greater Himalayas which experiences snowfall and has snow cover for several months in the year. Such mountains are found in UT of J&K, Ladakh and state of Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh. The Siachen Glacier is located in the Eastern Karakoram range of the Himalayas and has permanent snow cover throughout the year. The Siachen Glacier is located in the UT of Ladakh. It is also known as the highest battlefield in the world.



14. **Jungle Terrain.** Such a terrain has serious challenges in construction of means of transportation and communication, and as a result, the border area remains sparely populated with limited economic development. Absence of roads, communication links and other border-guarding infrastructure also adversely affect border management as the hamper the easy and rapid movement of the border guarding management as they hamper the easy and rapid movement of the border guarding forces along the border. Such terrain denies the advantage of aerial surveillance. Densely forested areas are difficult to inhabit for the state and have an overall decreased police and military presence.

15. **Geography of Coastal India.** Coastal geography is the study of the constantly changing region between the ocean and the land, incorporating both the physical geography (i.e. coastal geomorphology, geology and oceanography) and the human geography (sociology and history) of the coast. It includes understanding coastal weathering processes, particularly wave action, sediment movement and weather, and the ways in which humans interact with the coast. India has a coastline of 7516.6 km which touches Nine Indian states and Two Union Territories.

DO YOU KNOW

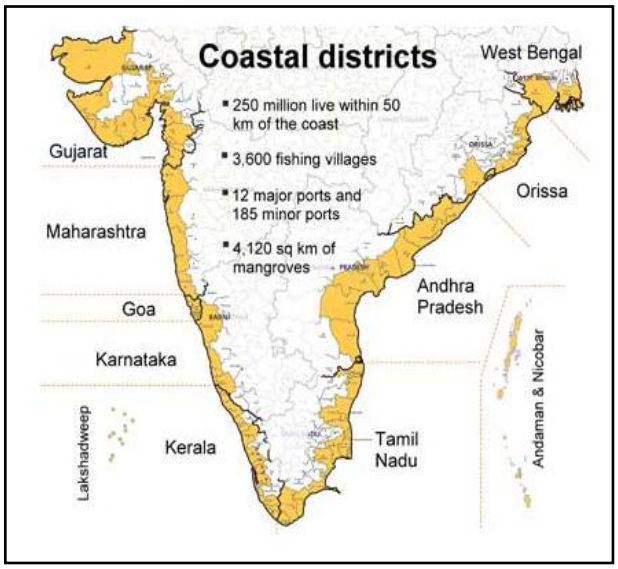
- Indian Ocean covers 20% of the Earth surface.
- 40% of the world's offshore Crude Oil comes from Indian Ocean-mainly from SE Asian & Persian Gulf Oilfields.
- Kolkata is the only Inland Riverine Port in India.

16. India has a coastline of 7516.6 km in which 5422.6 km of mainland coastline and 1197 km of Indian islands. Indian coastline touches nine states namely Gujarat, Maharashtra, Goa, Karnataka, Kerla, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal and two union territories – Daman and Diu and Pondicherry. The two island territories of India are Andaman and Nicobar Islands in Bay of Bengal and Lakshadweep Islands in the Arabian Sea.

PART V : POPULATION DENSITY AND DISTRIBUTION

17. Population Distribution and Density in Border and Coastal Areas of India are uneven due to various factors, eg terrain, accessibility, infrastructure development, availability of resources, etc. Certain data is given below to understand the distribution of the population.

(a) **Jammu and Kashmir**. As per the 2011 Census, the total Population of J&K is 12.27 million out of which Scheduled Castes (SCs) are 7.54% (primarily in the Jammu region) and Scheduled Tribes (STs) are 10.39% (mainly Gujjars, Bakarwals, and Gaddis). The religious composition includes Muslims, who are in the majority, Hindus (Minority), who are predominantly in the Jammu region and the Small communities of Sikhs and Christians. The overall Population Density is 124 persons per sq. km, with the highest in Srinagar (2,860 persons per sq. km) and the lowest in Leh (3 persons per sq. km).



(b) **Northeast Region**. The Northeast exhibits a mix of hilly terrain and valleys, resulting in dispersed populations. The Challenges in this region are remoteness, lack of infrastructure and economic development.

(c) **Coastal India**. Population and Density in coastal areas showcase higher population concentrations driven by favourable geography and economic opportunities, contrasting sharply with the sparsely populated and challenging terrain of India's land borders of hilly/mountainous areas.

(d) **Western Coastal Areas**: On the **western coast**, Gujarat has nine coastal districts with a population of 60.38 million and a density of 308 persons per sq. km. Maharashtra has a Coastal Population of 28.62 million (25% of the state's total) and 7,141 persons per sq. km (Mumbai Suburban: 20,925 persons per sq. km). The Coastal Population of Karnataka is 4.7 million with a density of 250 persons per sq. km. It's coastal districts are Uttara Kannada, Udupi and Dakshina Kannada. Goa has a population of 1.46 million and density of 394 persons per sq. km.

(e) **Southern Coastal Areas**: In the **Southern coast**, Kerala has coastal population of 25.4 million with density of 1,111 persons per sq. km (Thiruvananthapuram: 1,509 persons per sq. km). In Tamil Nadu, the coastal population is 33.37 million with the density at 2,655 persons per sq. km (Chennai: 26,903 persons per sq. km). This state is vulnerable to tropical cyclones, tsunamis, and coastal erosion. Andhra Pradesh has a coastal population of 34.2 million and density of 368 persons per sq. km.

(f) **Eastern Coastal Areas**: In Eastern Coast, Odisha has coastal population of 11.6 million and density of 531 persons per sq. km. This state is also vulnerable to cyclones, storm surges, and tsunamis. Lastly, The state of West Bengal has coastal population of 23.33 million and density of 1,449 persons per sq. km. It has macro-tidal environment with tidal ranges of 5–6 m.

(g) **Islands**: Apart from above mentioned states, the Island territories of Lakshadweep and Andaman & Nicobar has population of 64,429 and 343,000 respectively. The density Lakshadweep is 2,013 persons per sq. km and of Andaman & Nicobar Island is 55 persons per sq. km.

18. It is clearly understood from the above information that coastal areas have higher population densities due to better livelihoods, infrastructure, and amenities in comparison to land border areas (Jammu & Kashmir and Northeast) which are characterized by remoteness, limited development, and connectivity challenges.

PART VI : CULTURAL, RELIGIOUS AND ETHNIC COMPOSITION

19. India's borders, both land and coastal, present a unique diversity in terms of physical terrain, ethnicity, and cultural composition. The responsibility for securing these borders has traditionally rested with the armed forces and border security agencies. However, the role of local populations in ensuring security has gained recognition, leading to the evolution of border guarding into comprehensive border management. The key aspects of border areas are:-

(a) **Geographical Diversity**. India's borders span glaciated regions, deserts, forests, and riverine terrains. Several areas are inaccessible, un-demarcated, or porous, posing challenges for surveillance and security.

(b) **Role of Border Populations**. The border populace acts as the first line of defence and provides critical support in securing the frontiers. Their inclusion in border management like village defence committees is essential.

(c) **Frontline States**. Except for a few states like Madhya Pradesh, Chhattisgarh, Jharkhand, Delhi, and Haryana, most Indian states have international borders or coastlines. These states are considered frontline areas requiring specialised attention for border management.

20. There are a few challenges in Border Management in relation to ethnic and socio-economic issues. These are:-

(a) **Physical Challenges**. Difficult terrain such as glaciated regions (e.g., Siachen), dense forests, and deserts. Lack of infrastructure and accessibility in remote areas.

(b) **Cultural and Ethnic Challenges**. Border regions often have unique cultural, ethnic, and religious configurations that differ from the mainland. Some communities share affinities with populations across the border, complicating loyalty and identity issues.

(c) **Socio-Economic Issues**. Harsh living conditions, inadequate public amenities, and economic stagnation. Limited access to education, healthcare, and basic infrastructure.

(d) **Security Threats**. Cross-border shelling, insurgency, and religious fundamentalism foster alienation among border communities. Vulnerability to criminal activities, such as smuggling and human trafficking.

(e) **Governance and Perception**. Thinly spread administration and neglect by state and central authorities. A visible disconnect between the border population and security forces often leads to hostility and distrust.

21. Some important measures to address the challenges in border and coastal areas are:-

(a) **Government Initiatives**: To address the harsh living conditions and lack of amenities in border areas, multiple initiatives have been taken by both the Central and the State Governments. The main focus of areas are to strengthen infrastructure & public services to reduce a feeling of alienation and provide opportunities for the socio-economic upliftment of these areas. All central and state agencies are equally committed and involved in countering any external efforts to subvert or radicalise border populations.

(b) **Role of Security Forces**: All security forces deployed along the borders are tasked with maintaining territorial integrity and ensuring the safety of border communities. Hence, the security forces not only provide a security cover in that area but are also involved in infrastructure development projects and socio-economic activities to ameliorate the hardship of the local populace living in these areas.

(c) **Efforts to Improve Border Management**: The integration of border populations into the management framework of border areas is of utmost importance. Development of

economic infrastructure and generation of employment opportunities by programme like ***Vibrant Village*** are being executed for favourable results. In addition, enhanced coordination between local civil administration and the security forces has resulted in the improvement of socio-economic conditions of the resident population.

CONCLUSION

22. Border and coastal security are important for a country's national security, economic growth and sovereignty. Borders are the first line of defence for a country and are important for preventing security threats from hostile neighbours. Coastal areas and ports are important for economic growth, and coastal security helps ensure their safety. Borders and coastlines are important for protecting a country's sovereignty. Borders and coastlines are often used for illegal activities like smuggling, human trafficking, and drug trafficking. Coastal areas are vulnerable to natural disasters like cyclones and tsunamis, and coastal security helps ensure timely evacuation and disaster management. In India, various agencies, including the PMF/CAPFs and the Army, secure the land frontiers, while the Indian Navy and the Indian Coast Guard (ICG) are responsible for maritime security, including coastal security. Other agencies that assist with maritime security include the Coastal and Marine Police, as well as other central and State agencies.

SUMMARY

- The study of the historical perspective behind events precipitating India's current borders; especially in case of J&K, Northern Borders & North East is merited to draw lessons especially from security point of view and negate recurrence.
- Acquaintance with our borders; especially the Line of Control (LC) and Line of Actual Control (LAC) is must, to understand the correct perspective behind our perennial border issues with western and northern adversaries.
- The study of the topography of our border areas; especially in J&K and the North East gives us an insight in the typically complicated logistics and operational constraints faced by the border guarding forces. The diverse geographical features of India's borders, including mountains, rivers, deserts and forests evidently displays the versatility and acumen of the armed forces deployed to guard these.
- The population density and distribution also merits attention, as their integration in the mainstream through comprehensive development of these backward areas will further facilitate the effective security management.
- The study of the cultural, religious and ethnic composition of the populace in border areas will allow training of the personnel of the border guarding forces primarily to negate occurrence of strife/ clashes with locals, facilitate cordial relations and amalgamation by respecting local customs and traditions.
- The study of political boundaries; and consequent ongoing border disputes (India-China, India-Pakistan), the Impact of these disputes on regional and national security gives us an insight in to the security and foreign policy issues currently faced by the nation- be it terrorism, international cooperation, trade etc.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Which of the following states does not have a coastline with the Bay of Bengal?

(a) Tamil Nadu
(b) Odisha
(c) Telangana
(d) Puducherry

Q2. Which of the following states has a coastline?

(a) Jammu & Kashmir
(b) Punjab
(c) Himachal
(d) Maharashtra

3. Which of the following was the first Indian Empire to establish a formidable Navy?

(a) Kushana Empire
(b) Mauryan Empire
(c) Chola Empire
(d) Maratha Empire

Q4. Which of the states does not have a land border with Bangladesh?

(a) West Bengal
(b) Manipur
(c) Meghalaya
(d) Assam

5. Which are the Indian islands in the Arabian Sea?

(a) Lakshdweep islands
(b) Andaman and Nicobar Islands
(c) Paradip Island
(d) None of the above

Q6. Which of the following states/ union territories do not have a land border with China?

(a) Sikkim
(b) Ladakh
(c) Arunachal Pradesh
(d) Nagaland

Q7. Which of the following states/ union territories do not have a land border with Pakistan?

(a) Haryana

(b) Gujarat
(c) Rajasthan
(d) Punjab

Q8. Which of the following states does not have a coastline with the Arabian Sea?

(a) Karnataka
(b) Odisha
(c) Kerala
(d) Maharashtra

Q9. Palk Strait is located between Tamil Nadu and _____?

(a) Bangladesh
(b) Andaman
(c) Lakshwadeep
(d) Sri Lanka

Q10. _____ River is known as Yarlung Tsangpo in Tibet & Dihang in Arunachal Pradesh.

(a) Brahmaputra
(b) Indus
(c) Beas
(d) Ganga

Q11. Ross Island in Andaman & Nicobar Islands has been renamed as _____.

(a) Indira Gandhi
(b) Veer Savarkar
(c) Netaji Subhash Chandra Bose
(d) Sardar Patel

13. What are the Border Management challenges in relation to ethnic and socio-economic issues?

(a) Physical challenge peninsula
(b) Cultural and Ethnic Challenges
(c) Security challenges
(d) All of the above

Q13. Siachen Glacier is located in the Eastern _____ range in Ladakh.

(a) Pangong
(b) Greater Himalayas
(c) Karakoram
(d) Zanskar

Q14. _____is the capital of union territory of Andaman & Nicobar Islands.

(a) Sri Vijaya Puram
(b) Havlock

(c) Port Blair

(d) Radhanagar

Short Answer Questions.

Q1. Summarise the territories added to the Union of India.

Q2. Describe the topography of India's North Western borders.

Q3. Why are the population densities in Coastal areas higher?

Q4. Discuss the demographic profile of Jammu & Kashmir and Ladakh region.

Q5. What are the major economic activities in India's coastal regions?

Long Answer Questions.

Q1. Discuss the differences between the geographical features of India's North-Eastern and and North Western borders.

Q2. Discuss the challenges faced by the people settled in India's coastal regions?

Q3. Describe the challenges in Border Management in relation to ethnic and socio-economic issues.

Q4. Give a summary of the historical events since 18th century that has shaped India's present borders.

Map Exercise

Q1. In the adjoining map of India, mark the following:-

(a) State of Tripura; and its capital.

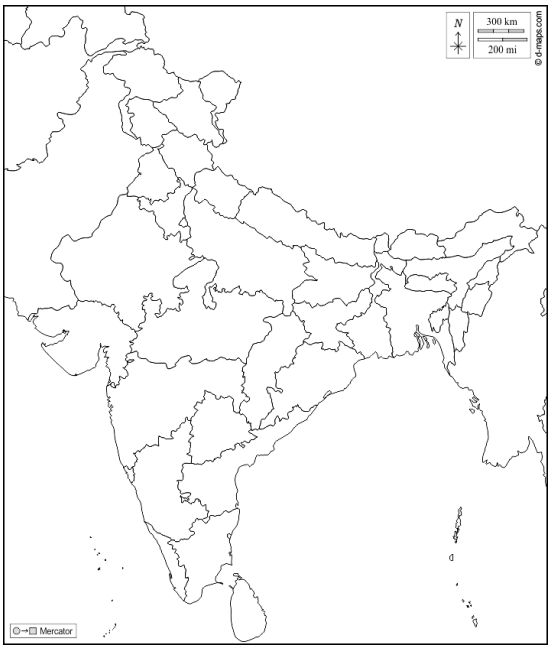
(b) Lakshadweep Islands.

(c) Thar Desert.

(d) Konkan, Malabar and the Coromandal Coasts.

(e) The areas inhabited by Bengali Population.

Q2. Also, mark the areas where major Industrial Centres are concentrated.



BCA – II (JD/JW)

CHAPTER II: SECURITY SET-UP IN BORDER/ COASTAL AREAS

"Men love their country, not because it is great, but because it is their own."



TEACHING INSTRUCTIONS

Period(s)	**:**	**02**
Type	**:**	**Lecture**
Year	**:**	**JD/JW (Second Year)**
Training Aids	**:**	**Power Point Presentation, Map of India**

Time-plan:

- Introduction 02 mins
- Part I: Security Set Up and Management of Land Borders 22 mins
- Part II: Security Set Up and Management of Maritime Borders 18 mins
- Part III: Security Setup and Management of Indian Air Space 10 mins
- Part IV: Role of NCC Cadets in Border Areas 22 mins
- Conclusion 03 mins
- Question answer session 03 mins

INTRODUCTION

1. A nation's identity is often defined by its geographical boundaries as represented on a political map. Similarly, the individuals living within these boundaries are identified as its citizens. History reveals that these borders are not static; they have evolved significantly over time. India, a country with a diverse and extensive boundary, shares its borders with several nations, many of which have been marked by disputes, differences, and historical conflicts. This underscores the importance of understanding the history, geography, and topography of our borders, as well as the lives, cultures, and challenges faced by the people living in these border and coastal areas.

OVERVIEW	LEARNING OBJECTIVES
The subject will be covered in the following parts:- (a) Part-I Security Set Up and Management of Land Borders (b) Part-II Security Set Up and Management of Maritime Borders (c) Part- III Security Set Up and Management of Indian Air Space (d) Part-IV Role of NCC Cadets in Border Areas	➢ Security Set Up and Management of Land Borders ➢ Security Set Up and Management of Maritime Borders ➢ Security Setup and Management of Indian Air Space ➢ Role of NCC Cadets in Border Areas

PART I : SECURITY SET UP AND MANAGEMENT OF LAND AREAS

2. **Different Types of Borders**. Given the difference in the status of the IB, LC, AGPL, LAC etc there is a slight difference in the management of these lines.

(a) **IB**. International Border (IB) is the line that neighbouring countries and the rest of the world recognises. These are well demarcated and mutually acceptable boundary between two countries. The most common way of demarcation is to place Border Pillars which are generally numbered and placed at regular intervals.

(b) **LC**. The term Line of Control (LC or LoC) refers to the military control line between the Indian and Pakistan occupied parts of the former princely state of Jammu and Kashmir (PoK). It is a line which at international level does not constitute a legally recognized international boundary. Originally known as the Cease-fire Line (an outcome of the first Indo-Pak War in 1947-48), it was re-designated as the "Line of Control" following the Shimla Agreement signed on 2 Jul 1972 after the Pak forces surrendered to Indian forces on 16 Dec 1971 marking the end of second Indo-Pak War. The part of the former princely state that is under Indian control is now known as the UT of Jammu and Kashmir and UT of Ladakh. The Pakistan-controlled part is

divided into Pakistan Occupied Kashmir and Gilgit- Baltistan. The LoC is approximately 740 Kms long.

(c) **AGPL**. The Actual Ground Position Line (AGPL) is the line that divides current positions of Indian and Pakistani troops in the Siachen Glacier region. The line extends from the northernmost point of the LC (Line of Control) i.e. Point NJ 9842 running northwards to Indira Col. AGPL is approximately 110 kilometres long. Siachen Glacier is known as the highest battle field of the world. world.

(d) **LAC**. Mac Mohan Line was a broad line drawn on a map India ratified in the Shimla Agreement (Oct 1913 to Jul 1914) by the independent State of Tibet and Great Britain to demarcated boundary between Tibet and NE Region. Post annexation of Tibet by China, the Chinese government started reneging on the Mac Mohan Line and her stand has remained ambiguous ever since, thus creating many areas of disagreement and disputes. After years of negotiations India and China have adopted a new term called Line of Actual Control (LAC) which is now a broad demarcation line that separates Indian territory from Chinese controlled territory of Tibet. There has been a military conflict in 1962 between the two countries and later some border skirmishes due to the unresolved boundary issue. These include Sino-Indian War of 1962, the Cho La incident in 1967, the 1987 Sino-Indian skirmish, the 2017 Doklam stand-off along Sino- Bhutan Border and the 2020 Galwan Valley incident. The LAC is approximately 3488 kilometres long.

Management of Land Borders

3. A 'Group of Ministers' was formed in Apr 2000 to analyse the issues leading to the Kargil conflict and address the need for effective border management. As a result, the Department of Border Management was established in January 2004. This department was created to focus on managing land borders and coastlines, strengthening border security and guarding territorial integrity, developing border infrastructure such as roads, fencing, and floodlighting, and implementing the Border Area Development Programme (BADP). To enhance border security and infrastructure, several initiatives have been undertaken by the Department of Border Management, including:

(a) **Border Infrastructure Development.** Expeditious construction of fencing, floodlighting, and roads along the Indo-Pakistan and Indo-Bangladesh borders. Development of Integrated Check Posts (ICPs) at strategic locations along international borders and construction of strategic roads along the India-China, Indo-Nepal, and Indo-Bhutan borders.

(b) **Border Guarding Forces.** In line with the "**One Border, One Border Guarding Force**" policy, specific forces were assigned to secure different borders. The Border Security Force (BSF) guards the borders with Bangladesh and Pakistan. (only International Borders). The Indo-Tibetan Border Police (ITBP) secure the border with China. The Sashastra Seema Bal (SSB) protects the borders with Nepal and Bhutan. The Assam Rifles (AR) manages the border with Myanmar.

(c) **Military Deployment.** In critical areas where the IB does not exist (areas having LoC, LAC or AGPL), CAPF, namely BSF and ITBP are deployed alongside

the Indian Army in border management role. In these areas the Indian Army has the primary responsibility of guarding of the border areas and providing requisite security infrastructure.

(d) **Other Agencies.** Customs, Local police, Intelligence Bureau, civil administration and various youth organizations such as NCC, Scouts, NSS etc also play important role in the border management at local level.

4. **Physical Means of Securing Borders**. Various means of securing the Borders are:-

(a) **BOPs**. To house border guarding personnel, to send regular patrols and to interact with the nearby villages, border out posts (BOP) have been set up all along the borders. Presently, the India-Pakistan border has 609 BOPs, Indo-Nepal border 436 BOPs, Indo-Bhutan border 127 BOPs and the Bangladesh border 802 BOPs. Ideal inter BOP distance is recommended to be 2.5 km.

(b) **COBs**. Along the Indo-Myanmar Border, Assam Rifles are deployed in Company Operating Bases (COB) and not as per the BOP system. The companies are deployed on all routes of ingress/egress and are responsible to check infiltration, smuggling of arms, ammunition, drugs, fake currency notes, etc.

(c) **Integrated Check Posts (ICP)**. As part of efforts to improve the infrastructure at border checkpoints, India is developing Integrated Check- Posts (ICPs). An ICP is likely to house all regulatory agencies, such as immigration, customs and border security. It will be a post along two international borders which will facilitate cross border trade and movement of people more efficiently and smoothly.

(d) **Flag Meetings**. A flag meeting is basically a meeting that is held at the border or on the Line of Control or LAC by commanders on both sides, to resolve local issues. A flag meeting could be held at the local or higher level depending upon the issue under consideration. These meetings are held at regular pre-arranged intervals; however, a special flag meeting is also organised when required.

(e) **Surveillance**. Foot/ Vehicle Mounted Patrols are done by the security forces on a 24X7 basis for surveillance of the borders aided by electro-optical surveillance devices to ensure its safety and security. In crucial areas, physical barriers like Border fence having been erected for additional security.

Anti-Infiltration Obstacle System (Border Fencing)

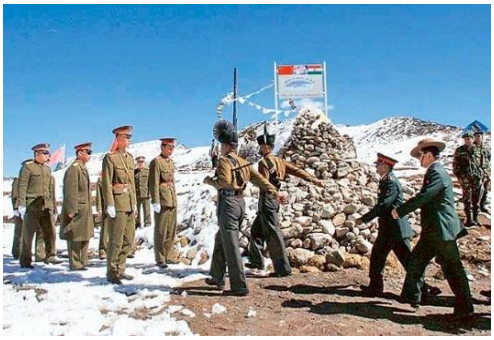
5. The Anti-Infiltration Obstacle System (AIOS) is an advanced electrified fencing system designed by the Indian Army to safeguard the Line of Control (LoC) as well as preselected areas of IB on Western as well as Eastern borders. It incorporates floodlights, surveillance devices, and other specialised equipment to deter illegal activities such as infiltration, cross-border terrorism, smuggling of arms, ammunition, contraband, narcotics, and counterfeit Indian currency as well as human trafficking. The barrier consists of double-layered fencing combined with razor-edged concertina wires, standing at a height of 8 to 12 feet. This electrified structure is connected to a network of motion detectors, thermal imaging cameras, floodlights, and alarm systems, which provide ‘rapid alert signals’ to security forces. These signals enable swift action to intercept and neutralize infiltrators attempting to breach the boundary.

6. The AIOS is continually upgraded with modern "smart" technologies, including the Border Surveillance System (BOSS), laser fencing, and short-range surveillance equipment. Currently, the AIOS is being replaced by a "Smart Fence," which features enhanced surveillance capabilities, advanced sensors, and improved resilience to withstand heavy snowfall in higher altitudes. Additional measures such as drones, night vision devices, ground-based short-range radars, and ground sensors have been integrated to further bolster surveillance and ensure near-total prevention of breaches.



Borders without AIOS (Border Fencing)

7. India shares unfenced borders with China, Nepal and Bhutan, each presenting unique challenges and historical contexts.



(a) **China.** In the absence of a mutually agreed to and well defined IB or LAC, no Border fencing on the LAC has been constructed as of date to ensure that the regional sensitivities are not disturbed. Concerted efforts by all stakeholders have been there to arrive at a mutually agreed arrangement at the earliest.



(b) **Nepal.** The India-Nepal border spans approximately 1,751 kilometres, traversing five Indian states: Uttarakhand, Uttar Pradesh, Bihar, West Bengal, and Sikkim. Uttar Pradesh shares the longest segment at 651 kilometres, while West Bengal has the shortest at 96 kilometres. This boundary, originally established under the 1816 Sugauli Treaty between Nepal and the British Raj, was recognised as an international border following India's independence. India and Nepal maintain close ties rooted in shared cultural, religious, and linguistic heritage. Communities residing near the Indo-Nepal border often share historical and familial connections. Whilst some results in the form of Confidence Building Measure have been achieved, however owing to complexity of the issues and regional dynamic the matter is yet to get resolved. The border features eight major crossing points, managed by Indian Integrated Check Posts (ICPs), which facilitate cargo movement, customs processing, and immigration for third-country nationals. Key ICP locations include Banbasa (Uttarakhand), Raxaul, Bhitthamore, and Jogbani (Bihar), Sonauli, Rupaidiha, and Taulihawa (Uttar Pradesh), and Panitanki (West Bengal).

(c) **Bhutan.** The 699-kilometre-long India-Bhutan border runs through four Indian states: Sikkim (32 km), West Bengal (183 km), Assam (267 km), and Arunachal

Pradesh (217 km). Following India's independence in 1947, a 1949 treaty recognised Bhutan's sovereignty. This arrangement was revised between 1973 and 1984 during a series of negotiations to resolve minor border disputes, particularly in Arunachal Pradesh and the Sarbhang-Geylegphug region. A final demarcation treaty was signed in 2006. In 2007, a new Treaty of Friendship and Cooperation was enacted, which today guides our relations with Bhutan.

Role of Indian Army

8. The Indian Army, one of the largest standing armies in the world, plays a pivotal role in maintaining the sovereignty and security of India. This is especially evident in its operations along the nation's borders, which stretch across varied terrains and challenging climates. With neighbours like Pakistan, China, Nepal, Bhutan, Myanmar, and Bangladesh, India faces a complex security environment. The Indian Army's responsibilities in these regions go beyond traditional warfare, encompassing a wide array of tasks to ensure stability and peace:

(a) **Defending Sovereignty and Preventing Infiltration.** One of the primary roles of the Indian Army in border areas is to defend the country's territorial integrity. India shares disputed borders, such as the Line of Control (LoC) with Pakistan and the Line of Actual Control (LAC) with China. These regions are often prone to ceasefire violations, cross-border shelling, and incursions. To counter these threats, the Indian Army maintains a high state of alertness, deploying troops and advanced surveillance systems. The use of technologies like drones, thermal imaging, and radar systems enhances the army's ability to detect and prevent infiltration by hostile forces and terrorists, especially in inaccessible areas. For instance, in Jammu and Kashmir, the army's operations are crucial in thwarting terrorist activities.



(b) **Counterinsurgency and Anti-Terrorism Operations.** Border areas like Jammu and Kashmir and parts of the northeastern states such as Nagaland, Manipur, and Assam have witnessed insurgency and terrorism. The Indian Army plays a dual role here: combating insurgents while also fostering a sense of security among local populations. Specialised units like the Rashtriya Rifles and Assam Rifles are instrumental in these operations. The army's counterinsurgency strategies involve intelligence gathering, targeted strikes, and coordination with local law enforcement agencies. These measures not only neutralise threats but also prevent the spread of extremist ideologies in sensitive regions.



(c) **Building Infrastructure in Remote Areas.** The Indian Army significantly contributes to the development of border areas by constructing and maintaining infrastructure. Roads, bridges, and airstrips built by the Border Roads Organisation (BRO), a subsidiary of the Indian Army, facilitate the movement of troops and supplies. These projects also boost local economies and improve connectivity for

remote communities. Such infrastructure projects are essential not only for military logistics but also for fostering the development and integration of border areas with the rest of the country.

(d) **Humanitarian Assistance and Disaster Relief (HADR).** In border areas prone to natural disasters, such as earthquakes, floods, and avalanches, the Indian Army often serves as the first responder. Its expertise in logistics, engineering, and medical aid ensures timely relief and rescue operations. Moreover, the army conducts regular medical camps, distributes essential supplies, and supports local communities during harsh winters and other adversities. Such efforts build trust and strengthen the bond between the army and local populations.

(e) **Maintaining Peace and Stability.** In regions affected by ethnic tensions and cross-border influences, the Indian Army's presence is a stabilising factor. Patrols, surveillance, and intelligence-sharing with local authorities deter criminal activities, including smuggling, trafficking, and illegal migration. The army's efforts help maintain law and order in areas where civilian governance faces challenges.

(f) **Enhancing International Relations.** Through joint military exercises and border personnel meetings, the Indian Army fosters better relations with neighbouring countries. These initiatives promote confidence-building measures and reduce the risk of conflicts. For example, regular interactions with the Chinese People's Liberation Army (PLA) at designated border points aim to prevent misunderstandings along the LAC.

PART II : SECURITY SET UP AND MANAGEMENT OF MARITIME BORDERS

9. **Coastal Security Organisation**. The coastal security organisation of the country was revamped in year 2009, post Mumbai terror attack. Various initiatives were put in place by Government of India (GoI), both at central and state level to ensure a vibrant coastal security organisation in order to ensure full proof security setup, A national committee on strengthening maritime and coastal security (NCSMCS) headed by cabinet secretary was created at GoI level. Similarly, an APEX committee on coastal security at state levels was formulated, controlled by FOC-in-Csof all Naval commands also known as C-in-C Coastal Defence (towards coastal security) with chief secretary of all states.

10. **Various Stake Holders in Coastal Security**. The sphere of activities in the maritime environment is vast and the following agencies are the stake holders in Coastal security of country: -

(a) Indian Navy.

(b) Coast Guard.

(c) State Marine Police.

(d) Customs.

(e) Fishers.

(f) Port authorities.

(g) Central and state Government departments.





11. India's maritime borders are safeguarded by the Indian Navy and the Indian Coast Guard. These forces have significantly enhanced their capabilities to address irregular and asymmetric challenges. Coordination has been strengthened through multi-agency exercises such as **Sagar Kavach**, which has improved inter-agency collaboration. A notable achievement has been the substantial strengthening of the Indian Coast Guard's assets in recent years. These developments have bolstered the country's ability to secure its maritime borders and address emerging security challenges effectively.

12. The Indian Navy and the Indian Coast Guard (ICG) are tasked with safeguarding India's maritime interests and maintaining security, safety, and sustainability in coastal regions. The key responsibilities includes:

(a) **Maritime Security.** Protecting India's maritime resources, such as offshore oil fields, fishing zones, and mineral deposits. Enforcing maritime laws against illegal activities, including poaching, smuggling, and narcotics trafficking

(b) **Search and Rescue (SAR).** Assisting mariners and fishermen in distress to ensure the safety of life and property at sea. Coordinating SAR missions and collaborating with state governments for effective operations.

(c) **Marine Environment Protection.** Preserving the marine ecosystem and protecting endangered species. Ensuring the sustainability of the fragile coastal environment

(d) **International Cooperation.** Partnering with other nations to promote maritime safety and security. Patrolling Sea Lines of Communication (SLOCs) and conducting port visits to foster international collaboration.

(e) **Scientific Data Collection.** Gathering marine scientific data for research and analysis.

(f) **Boarding Operations.** Inspecting vessels for compliance with maritime regulations and detecting illegal activities.

(g) **Support to the Navy.** Assisting the Indian Navy during conflicts and war-like situations.

(h) **Community Interaction.** Organising Community Interaction Programmes (CIPs) to educate fishermen on safety protocols and the maintenance of boats and fishing equipment.

Role of Indian Navy In Border/ Coastal Area Management

13. The Indian Navy plays a vital role in safeguarding India’s maritime interests along its extensive coastline, which spans over 7,500 kilometres and includes the Andaman and Nicobar Islands and the Lakshadweep Islands. As a key component of India’s armed forces, the Navy ensures the protection of the nation’s coastal areas, economic zones, and sea-lanes. Its responsibilities are not confined to conventional defence; they also encompass a variety of tasks crucial for national security and development.

(a) **Coastal Defence and Security.** The primary role of the Indian Navy in coastal areas is to protect the country from maritime threats. This includes safeguarding against potential attacks from hostile forces, piracy, and smuggling activities. To bolster coastal security, the Indian Coast Guard, Marine Police and other agencies works in tandem with the Indian Navy. It conducts regular patrolling and surveillance using advanced ships, submarines, and aircraft. The Navy's Information Management and Analysis Centre (IMAC) play a critical role in monitoring maritime activities. This centre consolidates data from coastal radar networks, ships, and other sources to maintain real-time awareness of India's coastal waters, ensuring swift responses to any suspicious activity

(b) **Protection of Economic Assets.** India's coastline is dotted with vital economic infrastructure, including ports, shipyards, and offshore oil rigs. The Indian Navy ensures the security of these assets, which are crucial for trade and energy supply. It also protects the country's Exclusive Economic Zone (EEZ), which is rich in marine resources and extends up to 200 nautical miles from the coast. Naval patrols and operations deter illegal fishing, poaching, and exploitation of undersea resources.

(c) **Humanitarian Assistance and Disaster Relief (HADR).** The Indian Navy's role in coastal areas extends to providing humanitarian assistance and disaster relief during emergencies. Coastal regions are often prone to cyclones, tsunamis, and floods. The Navy's quick response capabilities, equipped with ships, helicopters, and medical teams, have saved countless lives and provided critical aid in disaster-stricken areas. For example, during the 2004 Indian Ocean tsunami and Cyclone Tauktae in 2021, the Navy played a pivotal role in rescue and relief operations.

(d) **Environmental Protection and Maritime Conservation.** The Navy is also involved in safeguarding the maritime environment. It supports efforts to prevent marine pollution and assists in operations to clean up oil spills and other ecological hazards. Through initiatives like the 'Green Navy' program, the Indian Navy promotes sustainable practices and aims to minimise its environmental footprint.



(e) **Collaboration and Capacity Building.** The Indian Navy collaborates with regional and international partners to ensure maritime security in coastal areas. Joint exercises, capacity-building programs, and sharing of technology strengthen coastal defence capabilities. These efforts not only protect India's interests but also contribute to stability in the Indian Ocean region.

14. **Role of other Agencies towards Coastal Security.** The role of various agencies involved in coastal security is enunciated below: -

(a) **Coastal Marine Police.** The State marine police is also called coastal security group (CSG) headed by ADGP rank officer from police. ICG provides necessary training and administrative and supportive to marine police on regular basis. Marine police maintains a vigil on the beaches, fishing hamlets and in inland waters along the coast of India.

(b) **Regional Coastal Security Ops Centre (RCSOC).** RCSOC are set up at Ops centres of Regional Headquarters of ICG. All inputs related to coastal security operations are analysed at these centres for coordination amongst all agencies involved in coastal security within territorial waters.

(c) **Joint operations Centre (JOC)**. Joint Operation Centres (JOC) are set up at Headquarters of all Naval Commands. The JOC is jointly manned and operated by Navy and Coast Guard. It mainly co-ordinates coastal security network with all stake holders.

15. **Operational Philosophy.** The Maritime agencies ensure security of maritime assets in Indian EEZ with special focus to ODAs (Offshore Development Assets) and maritime boundary areas with our maritime neighbours. The vulnerable areas & points which include ODA, IMBL (international Maritime Boarder Line), industrial hubs, tourist centres, atomic installations, Defence setup, creek areas and island territories are considered critical areas to guard, demanding concentration of efforts of the security agencies.

16. **Tiered Security Mechanism-Zones of Responsibility**. For coastal security purpose, following a three-tiered security mechanism for coastal surveillance:-

(a) **Base line up to 12 NM**. To be patrolled by Coastal Marine Police, Customs, CISF and other security agencies available for coastal security.

(b) **Base line up to 200 NM.** To be patrolled by Indian Coast Guard including the area for Coastal Marine Police, Customs and CISF.

(c) **Beyond 200 NM.** To be patrolled by Indian Navy.

PART III : SECURITY SET UP AND MANAGEMENT OF INDIAN AIR SPACE

17. India's aerial sovereignty means controlling and protecting the airspace above its land and territorial waters. This is done to keep the country safe, manage air traffic, and ensure no unauthorized aircraft enter the airspace. Airspace is like an invisible zone above India where planes, drones, and other flying objects travel. Every country makes rules to make sure this space is used safely and securely and their aerial sovereignty is not compromised. India must protect its airspace to:

(a) Keep the country safe from enemy aircraft or drones

(b) Prevent airplane accidents

(c) Make sure only approved flights enter Indian airspace

18. India must protect its airspace to:

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19. India's aerial space security management involves a comprehensive network of civilian and military agencies, including the DGCA for civil aviation, AAI for air traffic control, and the IAF for air defence. The Indian Air Space is divided into Six Air Défense Identification Zones (ADIZs) to monitor and control air traffic. It is supported by the Integrated Air Command and Control System (IACCS) which is a networked air defence which is governed by strict regulations for all aircraft operating within Indian airspace.

20. Several important agencies work together to manage and protect India's airspace:

(a) **Indian Air Force (IAF).**

- Guards the skies using radars, satellites, and fighter jets
- Watches for suspicious aircraft and takes action if needed
- Operates a special system called **IACCS** to track and respond to threats

(b) **Airports Authority of India (AAI).**

- Controls air traffic — like sky traffic police
- Guides planes safely during take-off, flight, and landing using **Air Traffic Control (ATC)**

(c) **Directorate General of Civil Aviation (DGCA).**

- Makes safety rules for airlines and pilots
- Gives flying licenses and checks if rules are followed.

(d) **Bureau of Civil Aviation Security (BCAS).**

- Sets airport and airline security rules
- Protects air travel from threats like terrorism

(e) **Ministry of Civil Aviation.**

- Oversees AAI, DGCA, and BCAS.

(f) **National Security Guard.** It is an elite organization manned by Army and CAPF and has a primary task of carrying out anti hijacking operations.

21. 25. India has created **six Air defence Identification Zones (ADIZs)**. Any aircraft entering these zones must follow strict rules and identify itself. If it doesn't, the IAF can send aircraft to investigate or intercept. Also, as discussed earlier India uses the **Integrated Air Command and Control System (IACCS)**, a network of radars and computers that tracks all aircraft and helps in identifying aircrafts and facilitate earliest and effective response by IAF. With growing numbers of airplanes, drones, and flying machines in the sky, managing airspace is getting harder. Therefore, there is a need of continuous improvement its technology, assets and infrastructure as well as well trained staff to make sure that our skies remain safe.

PART IV : ROLE OF NCC CADETS IN BORDER AREAS



22. The National Cadet Corps (NCC), with its extensive presence across the country, can play a pivotal and constructive role in border management. An expansion of the NCC in border and coastal regions could significantly enhance the availability of trained and disciplined youth who are motivated to pursue careers in the Armed Forces or police services.

23. In border areas, the Indian Army, in collaboration with the Border Guarding Forces such as BSF, ITBP, and Assam Rifles, can train NCC cadets. Similarly, in coastal regions, the Indian Navy and Indian Coast Guard,

alongside the Coastal or Marine Police, can take responsibility for training cadets. In locations where Indian Air Force (IAF) airbases are nearby, the IAF can also provide training in coordination with local police forces. These trained cadets can serve as an additional resource for handling natural or man-made disasters in border and coastal regions. Cadets can be integrated into these efforts in various capacities, as outlined below:-

(a) **<u>Human Surveillance: The Eyes and Ears of Security Agencies</u>.** NCC cadets can help address security and intelligence gaps in border areas. Acting as local intelligence sources and interpreters, cadets can provide crucial assistance to Border Guarding Forces, whose personnel often come from diverse regions and may lack familiarity with local dynamics. Frequent rotations within security units and inadequate documentation of intelligence trends can hinder effective surveillance. NCC cadets, being organised, trained, and familiar with the local environment, can significantly improve intelligence gathering and corroboration efforts. Key roles of NCC cadet includes, reporting suspicious activities or individuals, identifying anti-national elements (ANEs), their movements, hideouts, and frequented locations, assisting in tracking rumours and identifying underground or overground workers and their networks, acting as interpreters, guides, and translators for security forces, supporting local area familiarization efforts for security personnel and identifying influential individuals, community leaders, and victims of terrorism or insurgency.



(b) **<u>Humanitarian Assistance During Natural or Man-Made Disasters</u>.** The National Cadet Corps (NCC) plays a vital role in providing humanitarian assistance during natural and man-made disasters in India. With their training in disaster management, first aid, and teamwork, NCC cadets have consistently demonstrated commitment and courage in aiding affected communities. Their readiness to respond during crises exemplifies the spirit of selfless service and civic responsibility. During natural disasters such as floods, cyclones, earthquakes, and landslides, NCC cadets actively assist in rescue and relief operations. They help in evacuating people from affected areas, distributing food, water, and essential supplies, and setting up temporary shelters for displaced individuals. For instance, during floods in states like Assam and Kerala, NCC cadets worked alongside disaster response teams, ensuring timely assistance to stranded communities and vulnerable populations. Their ability to navigate challenging terrains and maintain discipline under pressure makes them an invaluable resource in such situations. In the aftermath of man-made disasters, such as industrial accidents or fires, NCC cadets extend their support by aiding medical



teams, managing crowd control, and providing psychological comfort to victims. Their training in first aid often proves critical in stabilising the injured until professional medical help arrives. Additionally, NCC units are frequently involved in organising blood donation drives and health camps to meet the immediate needs of disaster-stricken areas. Beyond direct relief efforts, NCC cadets contribute to disaster preparedness and awareness campaigns. They educate communities on safety measures, evacuation procedures, and environmental conservation to mitigate the impact of future disasters. Mock drills and training sessions conducted by NCC units in schools and localities enhance community resilience and readiness. The involvement of NCC cadets in disaster response reflects their dedication to nation-building and social responsibility. However, to further enhance their effectiveness, regular updates in disaster management training, access to modern equipment, and stronger coordination with state and national disaster response agencies are essential. Through their unwavering service, NCC cadets continue to embody the motto of "Unity and Discipline," making a significant difference during times of crisis.

(c) **Promoting Good Governance and Civic Responsibility.** The National Cadet Corps plays a pivotal role in shaping responsible citizens who actively contribute to good governance and civic responsibility. By instilling discipline, leadership qualities, and a sense o f duty, NCC prepares cadets to participate meaningfully in the democratic and administrative processes of the nation_n. NCC cadets act as role models in their com munities, spreading awareness about civic duties such as voting, respecting laws, and maintaining public order. Their active participation in campaigns like voter registration drives, cleanliness initiatives under the Swachh Bharat Abhiyan, and anti-corruption programs inspires others to uphold democratic values and ethical conduct. Cadets also educate citizens about their rights and responsibilities, fostering a culture of accountability and transparency. As ambassadors of good governance, NCC cadets often assist local authorities in implementing developmental schemes and addressing grievances. Their training in leadership and teamwork enables them to mediate between the administration and communities, ensuring the smooth execution of government policies. During public events and social programs, cadets contribute by managing crowds, organising activities, and promoting awareness about health, education, and environmental conservation. Additionally, NCC cadets embody the principles of inclusivity and social justice. Through activities like helping underprivileged children, supporting elderly citizens, and conducting drives to promote gender equality, they address societal challenges and advocate for equitable development. Their involvement in disaster relief operations further demonstrates their commitment to community welfare and collective well-being. NCC's structured programs, which emphasise discipline and moral values, prepare cadets to combat societal issues such as corruption, communalism, and environmental degradation. By practising and promoting ethical leadership, they contribute to building a just and progressive society. The role of NCC cadets in promoting good governance and civic responsibility extends beyond their years of active enrolment. The values and skills



they acquire continue to guide their actions as citizens, making them agents of positive change. Strengthening NCC's outreach and integrating its activities with national governance initiatives can further enhance its impact, ensuring that cadets remain instrumental in fostering a culture of good governance and active citizenship in India.



(d) **<u>Community Awareness Initiatives in Underdeveloped Areas</u>.** NCC cadets play a significant role in bridging the gap between underdeveloped communities and developmental opportunities through their active involvement in community awareness initiatives. Trained in discipline, leadership, and social service, NCC cadets work as catalysts of change, spreading knowledge and empowering underprivileged sections of society to address challenges and improve their quality of life. In underdeveloped areas, where access to basic services like healthcare, education, and sanitation is limited, NCC cadets organise awareness campaigns to educate the population about critical issues. They conduct health camps, promote hygiene practices, and disseminate information about government welfare schemes. By addressing topics such as immunisation, family planning, and nutritional needs, they contribute to improving public health outcomes. Education is another key focus area. NCC cadets often engage with children in rural and tribal communities, conducting literacy drives, distributing educational materials, and motivating families to prioritise schooling. They organise workshops and seminars on career guidance, skill development, and digital literacy, equipping youth with the tools needed for self-reliance and employability. Environmental conservation forms an integral part of their community initiatives. Cadets led tree-planting drives, clean-up campaigns, and workshops on waste management and water conservation. Their efforts not only raise awareness but also encourage sustainable practices that benefit the entire community. NCC cadets also address social issues such as gender inequality, substance abuse, and discrimination. Through street plays, rallies, and interactive sessions, they challenge harmful norms and promote values of inclusivity and equality. Their ability to connect with people and communicate in local dialects helps them build trust and influence behaviour effectively. Furthermore, NCC cadets collaborate with local authorities and NGOs to strengthen the impact of their initiatives. They serve as a link between communities and administrative agencies, ensuring that developmental programs reach the grassroots level. By empowering underprivileged populations with knowledge and resources, NCC cadets help create self-reliant communities and contribute to national development. Enhancing their training and providing them with additional resources can amplify their impact, enabling them to drive transformative change in underdeveloped areas.



(e) **Fostering Social Harmony.** NCC cadets play a critical role in fostering social harmony by promoting unity, inclusivity, and mutual respect among diverse communities. As a microcosm of India's diversity, the NCC brings together cadets from various cultural, religious, linguistic, and socio-economic backgrounds, instilling in them a deep appreciation for unity in diversity. Through their training and activities, NCC cadets become ambassadors of peace and cohesion, contributing significantly to the nation's social fabric. One of the key ways NCC cadets foster social harmony is through awareness campaigns that address divisive issues such as communalism, caste-based discrimination, and gender inequality. Through street plays, discussions, and cultural programs, they spread messages of equality, tolerance, and brotherhood. Their ability to connect with local communities helps them effectively counter stereotypes and prejudices. NCC cadets also organise and participate in events that celebrate India's cultural diversity, such as parades, festivals, and exchange programs. These initiatives create platforms for people from different backgrounds to interact and appreciate each other's traditions, building bridges of understanding and reducing mistrust. The Republic Day Camp and other national integration camps are prime examples of how NCC fosters intercultural dialogue and camaraderie among youth from across the country. In areas affected by social unrest or communal tensions, NCC cadets act as agents of peace. They assist local authorities in maintaining order, spreading awareness, and mediating conflicts. Their presence, marked by discipline and impartiality, often inspires confidence in communities and encourages dialogue over discord. Furthermore, NCC cadets engage in service-oriented activities that bring communities together for a common cause. Be it blood donation drives, environmental conservation projects, or disaster relief efforts, these activities transcend barriers and emphasise collective responsibility, fostering a spirit of cooperation and mutual support. By instilling values of unity, respect, and social responsibility, NCC cadets contribute significantly to creating a harmonious and inclusive society. Strengthening their training in conflict resolution, interfaith dialogue, and community engagement can further enhance their ability to foster social harmony and promote a cohesive national identity.

CONCLUSION

24. India, with its diverse geography and strategic location, shares borders with several nations, each presenting unique challenges and opportunities. Border security is of paramount importance to safeguard the sovereignty, integrity, and stability of the nation. Effective border security ensures national safety, deters infiltration, and protects against potential threats, including terrorism, smuggling, and illegal migration. India's borders span vast terrains, from the icy heights of the Himalayas to the deserts of Rajasthan and the dense forests of the Northeast. The diversity of these landscapes makes surveillance and defence challenging but critical. A well-secured border prevents unauthorised access and serves as the first line of defence against adversarial forces. It ensures peace and stability in border regions, fostering development and reducing the risk of local unrest. Border security is also essential for economic reasons. Illegal cross-border trade and smuggling can destabilise local economies and undermine national revenue. By curbing such activities, border management contributes to the country's financial health. Additionally, well-guarded borders enhance India's global standing by projecting strength and resilience, essential in maintaining diplomatic relations and regional stability. With over 90% of India's trade relying on sea routes and 80% of its hydrocarbon needs being sea-borne, ensuring the security of maritime trade is crucial. It can be concluded that robust border security

is not just a military necessity but a comprehensive approach to ensure national prosperity, safety and peace. The National Cadet Corps serves as a transformative force in border and coastal management, leveraging its trained, disciplined, and motivated cadets to address challenges ranging from security and surveillance to disaster relief and social harmony. Their integration into these efforts not only enhances the capacity of security and administrative agencies but also instils a sense of civic duty and patriotism in the youth. The NCC's contribution in fostering social cohesion, promoting good governance, and strengthening national integrity underscores its vital role in building a secure and united India.

SUMMARY

- Various Indian security forces have been made responsible for effective border management of the vast land, air and maritime borders of India.
- These security forces not only guard the border but are equally instrumental in the socio-economic upliftment and infrastructural development of these areas
- The Department of Border Management in conjunction with the central and state agencies conducts various programmes to address the needs of the resident populace.
- To stymie terrorist infiltration from across the border, Anti-Infiltration Obstacle System (Border Fencing) was introduced; and proved very effective. But due to topographical compulsions, some gaps did exist. These were Borders sans AIOS (Fencing); and had to be plugged employing various innovative techniques by the concerned border guarding forces. Any fence/ boundary can only serve its purpose if it is kept under effective surveillance. This necessitated incorporation of various state of art surveillance devices in the system.
- Role of National Cadet Corps (NCC) in Border and Coastal Management includes, Human Surveillance, Disaster Management ie support humanitarian assistance and disaster relief operations, including evacuation and aid distribution, Promoting Governance and Civic Responsibility, Community Awareness Initiatives ie disseminate information about government programs and foster better community engagement and Fostering Social Harmony by encouraging mutual respect, inclusivity, and patriotism in diverse communities.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. BOSS is the acronym for?

(a) Blue Surveillance System

(b) Board Surveillance System

(c) Border Surveillance System

(d) Broadband Surveillance System

Q2. The oldest of the paramilitary forces is?

(a) Assam Rifles

(b) ITBP

(c) CRPF

(d) BSF

Q3. The _____ is responsible for protecting our maritime Borders.

(a) Indian Coast Guard

(b) CISF

(c) ITBP

(d) BRO.

Q4. AAI is the acronym for?

(a) Air Authority of India

(b) Airports Authority of India.

(c) Administration Authority of India

(d) None of the above.

Q5. The _____ refers to the military control line between India and Pakistan.

(a) LC

(b) LoC

(c) Both LC and LoC

(d) None of the above

Q6. AGPL stands for?

(a) Actual Ground Position Line

(b) Active Greater Protection Line

(c) Actual Greater Position Line

(d) None of the above

Q7. The ITBP guards our borders with _____?

(a) Myanmar

(b) Bangladesh

(c) Pakistan

(d) China

Q8. What is the length of LC or LoC?

(a) 700 km.

(b) 778 km.

(c) 740 km.

(d) 800 km.

Q9. _____ is the equipment which has been used by security forces for surveillance of inaccessible areas.

(a) Flying Border Outposts

(b) Drone

(c) AIOS

(d) Laser walls

Q10. Indian Borders which are not fenced include borders with _____, _____ and_____.

(a) Nepal, Bhutan, Myanmar

(b) Nepal, Bhutan, Bangladesh

(c) Bhutan, Myanmar, Bangladesh

(d) Bangladesh, Nepal, Myanmar

Q11. Which is the special security force created to guard against hijack of our aircrafts.

(a) IAF

(b) BSF.

(c) NSG

(d) ITBP.

Q12. What is the full form of AIOS?

(a) Armed Inter Obstacle System

(b) Anti-Infiltration Obstacle System

(c) Anti-Immigration Online System

(d) All India Observation System

Q13. Civic duties in which NCC cadets can contribute are

(a) Voting

(b) Respecting laws

(c) Maintaining public order

(d) All of the above

Q14. NCC cadets can perform the role of ears and _____ of security agencies.

(a) Guide

(b) Eyes and Ears

(c) Instructor

(d) Workhands

Q15. NCC cadets can spread _____ within the community, especially in underdeveloped areas.

(a) Awareness

(b) Education

(c) Medical treatment

(d) Vocational training

Q16. _____ assistance can be given by NCC cadets during natural/ manmade disasters.

(a) Knowledge

(b) Guidance

(c) Humanitarian

(d) Financial

Short Answer Questions.

Q1. Discuss the Anti-Infiltration Obstacle System (AIOS) designed by the Indian Army.

Q2. Describe the role of technology in the surveillance of India's borders.

Q3. Describe the key responsibilities of the Indian Coast Guard (ICG).

Q4. Define concept of 'One Border, Once Force' in the management of India's borders.

Long Answer Questions.

Q1. There are a few stretches of the border where the Indian Army is deployed in a border guarding role. Why?

Q2. Where are the eight major border crossings that the Indian Integrated Check Posts (ICP) use for processing cargo, customs and immigration entry for citizens of third countries on the Indo-Nepal border?

Q 3. Discuss the role of NCC cadets as the 'Eyes and Ears of Security Agencies' in border areas.

Map Exercise

Q1. In the adjoining map of India, mark the borders guarded by:-

(a) BSF

(b) SSB.

(c) Assam Rifles.

(d) ITBP.

(e) Indian Coast Guards.

Q2. Mark the areas where Indian Army is deployed in providing security to our borders.

Q3. Mark the location of the headquarters of the following.

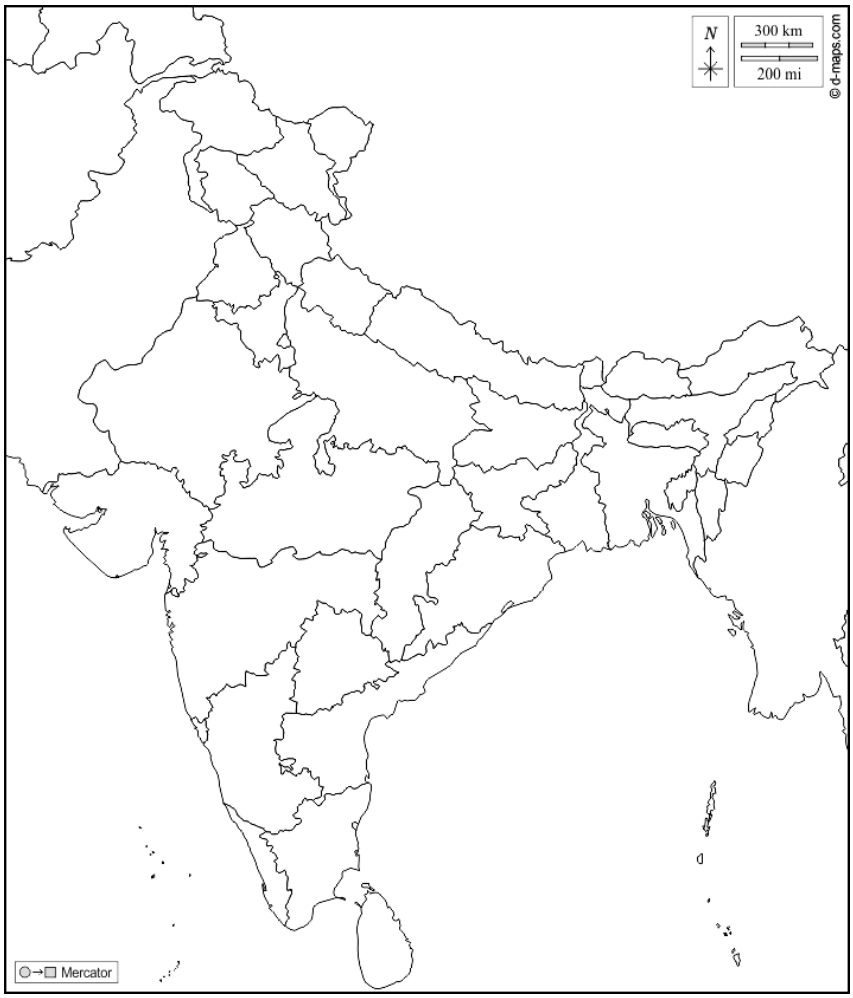
(a) Indian Army.

(b) Indian Navy

(c) Indian Coastguards

(d) BSF

(e) Assam Rifles



DISASTER MANAGEMENT

4

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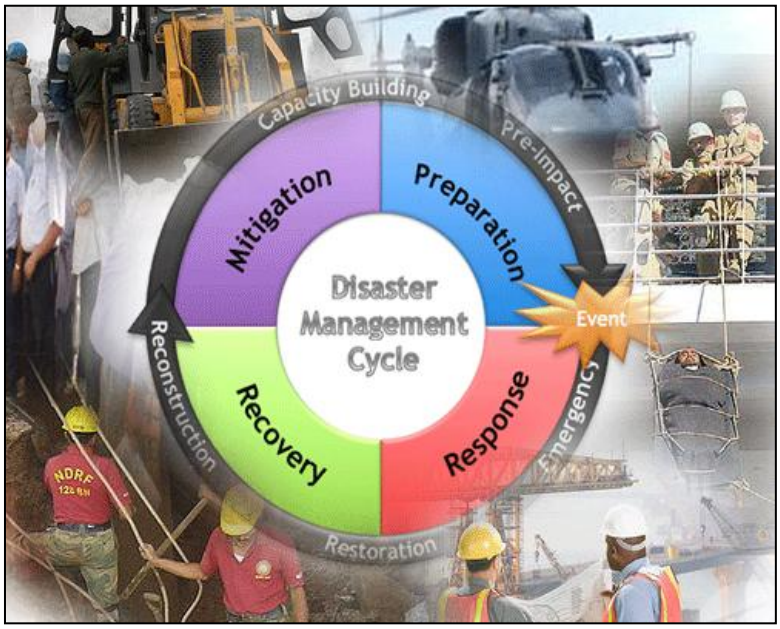
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DM I (JD/JW)

CHAPTER I : TYPES OF DISASTER, RELIEF AGENCIES AND ROLE OF NCC CADETS

We cannot eliminate disasters, but through our efforts, we can reduce the risk. Preparedness is the key to mitigating the damage caused by natural disasters

Shri Narendra Modi



TEACHING INSTRUCTIONS

Period	:	**Two.**
Type	:	**Lecture (Theory)**
Year	:	**JD/ JW (First Year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Power Point Presentation**

Time-plan

- Types of Disaster : 20 Mins
- Relief Agencies : 20 Mins
- Essential Services and their Maintenance : 15 Mins
- Role of NCC in Maintenance of Essential Services : 20 Mins
- Civil Defence Organisation : 05 Mins



INTRODUCTION

1. Disaster management is the systematic process of planning, organizing, coordinating, and implementing measures to prepare for, respond to, and recover from disasters. Disasters, whether natural (such as earthquakes, floods, and cyclones) or man-made (like industrial accidents, conflicts, and fires), can have devastating effects on human lives, property, and the environment. The primary goal of disaster management is to minimize the impact of disasters by reducing vulnerabilities, enhancing preparedness, and ensuring a swift and effective response. It involves various stages, including mitigation, preparedness, response, and recovery, and requires the collaboration of governments, communities, non- governmental organizations (NGOs), and individuals. Effective disaster management relies on understanding risks, building resilience, and using technology and resources efficiently. It not only saves lives but also fosters sustainable development by ensuring that communities are better equipped to handle future disasters.

INTRESTING FACTS

- *Cyclones & Tsunamis have caused the most damage across the globe*
- *Global warming has raised concerns of flooding/ cloud bursts*
- *Odisha was the first state in India to establish Disaster Management Authority (1999), also called disaster capital of India*
- *Indian Armed Forces are the first responders of any disaster*

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I: Types of Disasters

(b) Part II: Relief Agencies

(c) Part III: Essential Services and their Maintenance

(d) Part IV : Role of NCC Cadets in Maintaining Essential Services

(e) Part V : Civil Defence Organisation

LEARNING OBJECTIVES

- Provide a meaningful understanding of Disaster.
- Understand types/ characteristics of disasters and reduction/ mitigation of disasters
- Identify critical components in disaster management services.
- Identify role of various agencies and mutual support by NCC in disaster management.

PART I : TYPES OF DISASTERS

2. **Definition of Disaster**. The term disaster is commonly used to denote any adverse event ‘natural or man-made’ which brings about a lot of misery to a region and it becomes difficult to cope with the situation through local resources. According to WHO “A Disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life, deterioration of health and health services on a scale, sufficient to warrant an extraordinary response from outside the affected community or area”.

Classification of Disasters

3. **Natural Disasters**. These are of the following types:-

(a) **Meteorological Disasters**

(i) **Tropical Cyclones (Hurricanes/Typhoons)**: Intense storms characterized by strong winds and heavy rain.

(ii) **Tornadoes**: Rapidly rotating columns of air extending from a thunderstorm to the ground.

(iii) **Blizzards**: Severe snowstorms with high winds and low visibility

(iv) **Severe Storms**: Thunderstorms, hailstorms, and other extreme weather events.



Natural Disasters

(v) **Heatwaves**. Prolonged periods of excessive heat.

(vi) **Cold Waves**. Extended periods of extreme cold.

(b) **Hydrological Disasters**.

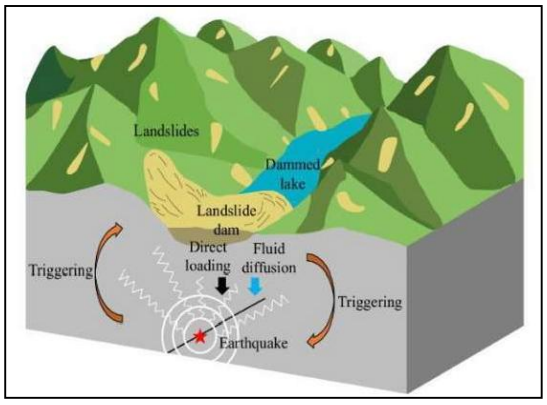
(i) **Floods**. Overflow of water onto normally dry land.

(ii) **Flash Floods**. Rapid flooding caused by heavy rainfall or dam breaks.

(iii) **Droughts**. Extended periods of insufficient rainfall leading to water shortages

(c) Geological Disasters.

(i) **Earthquakes**. Sudden shaking of the ground caused by movements of the Earth's tectonic plates.



(ii) **Volcanic Eruptions**. Explosive eruptions or lava flows from a volcano.

(iii) **Landslides**. Movement of rock, earth, or debris down a slope.

(iv) **Tsunamis**. Large ocean waves caused by underwater earthquakes, volcanic eruptions, or landslides.

(v) **Sinkholes**. Collapse of the ground due to underground voids.

(d) **Biological Disasters**.

(i) **Pandemics**. Widespread outbreaks of infectious diseases (COVID, Swine Flu), epidemics (Plague, Cholera).

(ii) **Locust Swarms**. Large swarms of locusts that devastate crops and vegetation.

(e) **Climatological Disasters.**

(i) **Wildfires**. Uncontrolled fires in forests, grasslands, or other vegetation.

(ii) **Glacial Lake Outburst Floods (GLOFs)**. Floods caused by the sudden release of water from a glacial lake.

4. **Man- Made Disasters**. These can be classified as under:-

(a) **Accidents**.

(i) Road, rail, air, sea accidents or building collapse.

(ii) Fire. In buildings, coal fields or oil or gas fields and oil or gas store depots.

(b) **Industrial and Chemical Disasters**

(i) **Chemical Spills or Leaks**. Release of hazardous substances from factories, pipelines, or storage facilities.

(ii) **Explosions**. Industrial plant explosions due to equipment failure, chemical reactions, or improper handling.

(iii) **Toxic Gas Releases**. Accidental emissions of dangerous gases, such as chlorine or ammonia. example Bhopal Gas tragedy.

(iv) **Fires**. Large-scale fires in factories, refineries, or storage facilities.

(c) **Social Disasters**.

(i) **Terrorists Activities**. Serial Blasts / explosions in public transport or markets, sabotage.

(ii) **Armed Conflicts**. Internal/ External (conventional, nuclear).

(iii) **Contamination/Poisoning**. Incidents of mass food poisoning, water contamination, illicit-liquor poisoning and epidemics.

(d) **Environmental**. Pollution of air, water, noise, soil degradation, loss of biodiversity, global warming, sea level rise, toxic wastes, forest fires/ deforestation.



(e) **Nuclear and Radiological Disasters.**

(i) **Nuclear Power Plant Accidents**: Catastrophic failures in nuclear facilities leading to radiation leaks (e.g., Chernobyl, Fukushima).

(ii) **Radiological Contamination**: Improper handling or disposal of radioactive materials.

(iii) **Nuclear Weapon Accidents**: Accidental detonations or release of nuclear materials from weapons.

PART II : RELIEF AGENCIES

5. There are multiple agencies involved in disaster management at National and State level as also NGOs who get involved in the management and relief.

6. **National Disaster Management Authority (NDMA)**. On 23 December 2005, the Government of India took a defining step by enacting the Disaster Management Act of India, which envisaged the creation of the National Disaster Management Authority (NDMA), headed by the Prime Minister. The organization of NDMA is as under:-

(a) **National Level.** At the national level, the NDMA will be the apex body for disaster management, and will be headed by the Prime Minister. It will be responsible for laying down policies, plans and guidelines for Disaster Management and coordinating their enforcement.

(b) **National Executive Committee (NEC).** The NEC is the executive committee of the NDMA, and is mandated to assist the NDMA in the discharge of its functions and also ensure compliance of the directions issued by the Central Government. The NEC is to coordinate the response in the event of any threatening disaster situation or disaster. The NEC is responsible to prepare the National Plan for Disaster Management based on the National Policy on Disaster Management. The NEC will monitor the implementation of guidelines issued by NDMA.

7. **State Disaster Management Authority (SDMA).**

(a) At the State level, the SDMA, will be headed by the Chief Minister, who will lay down policies and plans for Disaster Management in the State.

(b) It will, approve the State Plan in accordance with the guidelines laid down by the NDMA, coordinate the implementation of the State Plan, recommend provision of funds for mitigation and preparedness measures and review the developmental plans of the different Departments of the State to ensure the integration of prevention, preparedness and mitigation measures.

(c) The State Government shall constitute a State Executive Committee (SEC) to assist the SDMA in the performance of its functions. The SEC will be headed by the Chief Secretary to the State Government and will coordinate and monitor the implementation of the National Policy, the National Plan and the State Plan.

8. **District Disaster Management Authority (DDMA).** The DDMA will be headed by the District Collector or Deputy Commissioner or District Magistrate as the case may be, with the elected representative of the local authority as the Co-Chairperson. The DDMA will act as the planning, coordinating and implementing body for DM at the District level and take all necessary measures for the purposes of DM in accordance with the guidelines laid down by the NDMA and SDMA.

9. **Local Authorities.** For the purpose of this Policy, local authorities would include Panchayati Raj Institutions (PRI), Municipalities, District and Cantonment Boards, and Town Planning Authorities which control and manage civic services. These bodies will ensure capacity building of their officers and employees for managing disasters, carry out relief, rehabilitation and reconstruction activities in the affected areas.

10. **National Disaster Response Force (NDRF)**. For the purpose of specialized response to a threatening disaster situation or disasters/ emergencies both natural and man-made, the Act has mandated the constitution of a National Disaster Response Force (NDRF). The general superintendence, direction and control of this force shall be vested in and exercised by the NDMA and the command and supervision of the Force shall vest in an officer to be appointed by the Central Government as the Director General of Civil Defense and Director General National Disaster Response Force.

(a) Presently, the NDRF comprises sixteen battalions and there may be further expansion in future. These battalions are positioned at different locations across India.

(b) NDRF units to maintain close liaison with the designated State Governments and will be available to them in the event of any serious threatening disaster situation.

(c) While the handling of natural disasters rests with all the NDRF battalions, **four battalions** will also be equipped and trained to respond to situations arising out of Chemical, Biological, Radiological and Nuclear (CBRN) emergencies.

(d) The NDRF units will also impart basic training to all the stakeholders identified by the State Governments in their respective locations.

11. **Non Government Organisations (NGOs).** NGOs are organizations registered under various Indian laws. NGOs help people in need by giving them the training they need to be prepared for disasters. This includes things like assessing risks, making emergency plans, running search and rescue, giving first aid, and organizing evacuation. Till recently, the work of NGOs in the field of OM has been mostly sporadic, reactive, and responsive and driven by local level compulsions in the geographic areas where they are implementing development projects. Certain functions are enumerated below:-

(a) Emergency Relief Operations.

(b) Search and Rescue Operations.

(c) Medical Care.

(d) Psychosocial Counselling.

(e) Logistics Management.

(f) Coordination and Information Sharing.

(g) Rehabilitation and Reconstruction.

(h) Disaster Preparedness and Risk Mitigation.

(j) Capacity Building.

12. **Civil Defence Organisations (CDO)**. Civil Defence is largest community and a volunteer-based emergency response organization organized by Government. It was functioning in the country as well as in the State during World War periods. Civil Defence supports the frontline emergency services, e.g. in dealing with severe weather or searching for missing people. It also carry out community support activities, e.g. providing first aid cover at both local and national events. Certain roles are enlisted below:-

(a) Casualty Service.

(b) Rescue Service.

(c) Auxiliary Fire Service

(d) Monitoring Service.

(e) Welfare Service.

(f) Communications.

13. **Indian Armed Forces.** The Armed Forces (Army, Navy and Air Force) play a significant role in disaster management in India, responding to disasters as the first line of defense. They are called upon to assist the civil administration when the situation is beyond their capacity. The armed forces are well-equipped to handle a variety of disasters, including natural and manmade ones. Their roles include:

(a) **Search and Rescue**. The armed forces perform search and rescue operations in disaster areas.

(b) **Providing Aid**. They provide essential needs like food, clothing, and shelter. They also provide medical aid and set up emergency hospitals.

(c) **Restoring Services**. The armed forces restore essential services like electricity, water, and telephone lines.

(d) **Repairing Infrastructure**. They repair roads and bridges for smooth communications restoration.

(e) **Training**. They train disaster management managers and trainers in areas like CBRN aspects, heli-insertion, and high-altitude rescue.

(f) **Airlift and Heli-lift.** The armed forces are experts in airlift and heli-lift, which are used to move assistance to neighbouring countries.

14. The **armed forces** are often called upon to respond to disasters because of their professional response, training, and equipment. They also have dual-use equipment that can be used to support troops in combat zones and to help the public during disasters. The role has been significant in latest flood relief operations and also assistance in international arena viz, Nepal, Turkey, etc. Their expertise in the field of search and rescue is unmatched. The armed forces can also bring in equipment for repairing damaged roads or building makeshift bridges. The Armed Forces are the first responders to calls of disaster management.

PART III : ESSENTIAL SERVICES AND THEIR MAINTENANCE

15. Essential services can be categorized as under:-

(a) Postal, telegraph or telephone services.

(b) Transport Services like rail, road, air and sea.

(c) Running of air / sea ports.

(d) Provision of water, electricity and sanitation services.

(e) Medical services and essential supplies.

(f) Production and supply of essential commodities.

(g) Running of government mint and security press.

16. **Type of Maintenance Required for Essential Services.** These services are maintained by government at all costs. At district level, each district is required to prepare in advance, contingency plans to tackle the likely disturbances in continuity of these services.

17. **Medical.**

(a) Running of medical facilities and hospitals.

(b) Providing nursing services and first aid.

(c) Immunization of the population in relief camps.

(d) Rescue of trapped persons and casualty evacuation.

(e) Disposal of dead bodies and carcasses.

18. **Communication.**

(a) Maintenance and provision of uninterrupted telecommunication through telephone services /telefax, mobile phones, VHF transmitters etc.

(b) Dissemination of information, monitoring media coverage and quelling of rumours.

19. **Transport.**

(a) Maintenance of rail/road communications with special attention to:-

(i) Repairing damaged rail/ road network as it directly relates to the delivering of relief supplies by vehicles.

(ii) Creating diversions for bypassing damaged sections of the roads.

(b) Extent of containers that can be moved inland.

(c) Availability of maintenance facilities and spare parts.

(d) Measures for security of cargo in transit.

20. **Infrastructure.**

(a) Infrastructure of roads and bridges, communications, water and electricity supply, sewerage and essential buildings such as schools/ colleges and health centres may be required to be rebuilt/repaired.

(b) Housing and rehabilitation.

(c) For economic rehabilitation, funding and various new opportunities are to be created, in addition to getting the destroyed stocks replenished, for restoration of livelihood.

21. **Miscellaneous.**

(a) Provision of Military, Para Military and Police assistance.

(b) Speedy establishment of Control Room and deployment of human and material resources in a short time.

PART IV : ROLE OF NCC CADETS IN MAINTAINING ESSENTIAL SERVICES

22. Being qualified in First Aid, Basic Home Nursing, Signals and having developed leadership traits and learnt about Social Services, Civil Defence and Disaster Management, the cadets of NCC could assist in maintaining the following essential services and important tasks in any and every part of the country in following ways:-



Assistance by NCC Cadets

(a) As operators in Telephone Exchange.

(b) As nurses in hospitals or as links between doctors, nurses, patients and hospital technicians.

(c) Assist in establishment and running of First Aid Centers.

(d) Assist civil defence wardens in carrying out their duties.

(e) Carry out neighbourhood campaigns by motivating people to create self-assistance groups.

(f) Counteract gossip and rumours to restore the morale of the people.

(g) Assist the civil authorities whenever feasible and to the best of ability. Some of the areas where cadets can help are:-

(i) Search for and rescue trapped people.

(ii) Salvage destroyed structures and property.

(iii) Distribution of relief material to the affected population for their temporary sustenance.

(iv) Coordinate the flow of relief material from out-side and ensure maximum coverage of territory in provision of relief stores, food and water, avoiding wastage and duplication of work in the same area.

(v) Repair and restore essential services to enable rescue and relief work and for normalization of activities.

23. **Employment of NCC Cadets During Natural Disasters**. For employment of NCC cadets during Natural Disasters, proper SOPs will have to be made in consultation with the DDMA, under the guidelines issued by HQ DG NCC / the State NCC Dtes. The detailed modalities on employment and quantum of cadets to be employed etc. will have to be worked out with the local police authorities. Responsibilities of local traffic police and where cadets can be employed during disaster management stage are as under:-

(a) **Immediate Action.** On receipt of the information about any Disaster taking place, SP/Dy SP concerned shall rush to the spot immediately, with his quick reaction team equipped with adequate communication equipment, rescue material, protective gear, warning signs and contact numbers; assess the situation and inform the SSP about the situation SSP should arrange for additional force from local resources. Some NCC cadets can form part of the group which goes for the immediate action.

(b) **Initial Law and Order.** Local traffic police shall rush to the spot with ropes, search lights and other items for maintaining law and order. NCC Cadets can be incorporated with the local police personnel.

(c) **Cordoning.** The entire affected area shall be cordoned off and no collection of crowds be allowed there. NCC Cadets can be used to cordon off affected areas.

(d) **Casualty Management.** The Traffic Police plays an important role in traffic control and guidance in the chain of evacuation of casualties as injured persons shall be evacuated to the nearby hospital by the PCR vans, ambulances and other modes of conveyance. NCC Cadets can accompany the casualty or be employed as point's man or liaison officer at hospitals.

(e) **Traffic Flow.** No traffic shall be allowed to pass through the affected areas and necessary diversion shall be made accordingly. Diversion points can be manned by NCC cadets in co-ordination with traffic police.

(f) **Emergency Vehicle.** The local traffic police shall ensure clear passage for emergency vehicles until traffic arrangements are made. NCC Cadets can be employed to check and ensure that only emergency vehicles are permitted for right of way.

(g) **Rescue Services.** Help shall be provided to the rescue services and volunteers in all possible manner. This will include guiding the fire tenders, ambulances etc. to the place of incident through a clear route. NCC Cadets can be co-opted with rescue services and volunteers to guide and escorting duties.

(h) **Adequate Reserve.** Adequate force be kept at the scene of occurrence for traffic control. NCC Cadets can form part of the reserve forces to aid traffic police.

(j) **Maintain Records of Incidents.** The entire scene of incident must be video graphed as early as possible with a view to reconstruct the scene of occurrence, during the course of investigation. NCC Cadets can be employed to video graph and carryout tasks in maintaining of records of incidents.

24. **Creation of Groups.** The following groups of NCC cadets need to be created for providing assistance:-

(a) **Traffic Control Group**. This group provides assistance to traffic police.

(b) **Relief Group.** This group provides assistance to collect and distribute relief materiel such as food supply, cloth, kerosene, diesel, utensils etc. and coordinate all the relief requirement of the other action groups.

(c) **Shelter Management Group**. This group will be employed for establishment or looking after shelters and safe houses providing the evacuees' food, water and medication requirements.

(d) **Evacuation and Rescue Groups**. The members of this group have to be physically strong (both JD and JW), and should be trained in basic evacuation and rescue method. The members of this group should coordinate with state government to get facilities for rescue and evacuation in terms of rescue training, rescue infrastructure and equipment.

(e) **First Aid Medical Groups.** There should be equal number of JD and JW cadets in this group. Those with some knowledge of nursing will be preferable. The members will have to go through intensive training and drills for first aid medical assistance.

(e) **Sanitation Groups.** This group can consist of JD and JW cadets, who will look after the sanitation responsibilities both at the shelter as well as outdoors.

PART V : CIVIL DEFENCE ORGANISATION

25. Civil Defence (CD) is primarily organised on voluntary basis except for a small nucleus of paid staff and establishment which is augmented during emergencies. The present target of Civil Defence volunteers is 14.11 lakh, out of which 5.38 lakh have already been raised. Civil Defence is primarily organised on voluntary basis except for a small nucleus of paid staff and establishment which is augmented during emergencies. However, Duty/Training allowance is admissible to the C.D. Volunteers. These volunteers are administered and trained by Deputy Collectors, Medical Officers and C. D. Instructors which are full time paid posts.



Civil Defence

26. **Training of CD**. Apart from carrying out training and rehearsal/ demonstration of Civil Defence measures during peace time, Civil Defence volunteers are also deployed, on a voluntary basis, in various constructive and nation building activities, which include providing assistance to the a dministration in undertaking social and welfare services and in the prevention/mitigation of natural /man-made disasters as well as in post- disaster response and relief operations. Civil Defence training is conducted by the State Governments/ UT Administrations in three tiers, i.e. at the Local/Town/district level, State level and National level. Training of the volunteers in Civil Defence Organization is conducted at local/town levels by trained trainers in the form of short-term training programmers.

27. The Civil Defence Corps has the following 12 services in which volunteers are trained:-

(a) **Headquarters Service.** This service works under control of Civil Defence.

(b) **Warden's Service.** It is a link between the public and the authorities. This service is responsible for organizing self-help parties, fire parties and to check light restrictions, report damages and guide homeless to the Rest Centres.

(c) **Fire Fighting Service.** They detect small fires and put out the same.

(d) **Casualty Services.** The functions of this service are:-

(i) Rendering first aid on the spot.

(ii) Providing transport to casualties for short distances.

(iii) To send various causalities for further treatment.

(e) **Communication Services**. This service is responsible for:-

(i) Receipt and dissemination of air raid warning.

(ii) Provision of co-ordination and control facilities.

(iii) Provision of communication between warden posts, control centres through messengers or telephone etc.

(f) **Rescue Services.** Their duty is to rescue the injured and personnel trapped under the debris.

(g) **Welfare Services.** It is responsible to supply information about missing and dead etc, to provide shelter, food and clothing and to arrange evacuation from vulnerable areas.

(h) **Depot and Transport Services.** It is this service which is responsible to send various services to the scene of the incident and provide the necessary transport required from time to time.

(i) **Salvage Service.** It is responsible to salvage the damaged property and keep it in safe custody.

(j) **Corpse Disposal Service**. This service is responsible for collection, identification and disposal of dead bodies.

(k) **Supply Service.** This service is responsible for planning, organizing and procuring necessary equipment for Civil Defence Services and its proper storage and quick distribution of equipment at the time of need.

CONCLUSION

28. Disasters, whether natural or man-made, pose significant challenges to human safety, infrastructure, and livelihoods. Understanding the types of disasters such as earthquakes, floods, wildfires, pandemics, or industrial accidents - helps in planning targeted strategies for prevention, preparedness, and response

SUMMARY

- **Natural Disasters**.
  - **Meteorological**. Storms, cyclones, tornadoes, tidal waves, blizzards, etc.
  - **Hydrological**. Floods, flash floods, cloudbursts, excessive rains, drought, etc.
  - **Geological**. Earthquakes, tsunamis, avalanches, landslides, volcanic eruptions, etc.
- **Man-Made Disasters**.
  - **Accidents**. Road, rail, air, sea accidents or building collapse.
  - **Industrial Mishaps**. Gas leaks, explosion, sabotage and safety breaches.
  - **Fire**. In buildings, coal fields or oil or gas fields and oil or gas store depots.
  - **Forest Fires**. In tropical countries, forest fires are often man made.
  - **Contamination/Poisoning**. Incidents of mass food poisoning, water contamination, illicit-liquor poisoning and epidemics.
  - **Terrorists Activities**. Serial Blasts/ explosions in public transport or markets.
  - **Ecological**. Pollution of air, water, noise, soil degradation, loss of biodiversity, global warming, sea level rise, toxic wastes and nuclear accidents.
  - **Warfare**. Conventional, chemical, biological or nuclear.
- **Relief Agencies**.
  - National Disaster Management Authority (NDMA)
  - State Disaster Management Authority (SDMA)
  - District Disaster Management Authority (DDMA)
  - Local Authorities in District
  - National Disaster Response Force (NDRF)
  - Non-Governmental Organizations (NGOs)
  - Civil Defence Organizations
  - **Indian Armed Forces**. First responders and have adequate resources.
- **Essential Services**.
  - Postal, telegraph or telephone services.
  - Transport Services like rail, road, air and sea.
  - Running of air/ sea ports.
  - Provision of water, electricity and sanitation services.
  - Medical services and essential supplies.
  - Production and supply of essential commodities.
  - Running of government mint and security press

ASSESSMENT EXERCISE

Multiple choice Questions

Q1. Bhopal Gas Disaster is a kind of :-

(a) Natural disaster

(b) Manmade disaster

(c) Social Disaster

(d) None of the above

Q2. The National Disaster Management Authority (NDMA) is headed by

(a) Prime Minister of India

(b) President of India

(c) Governor of States

(d) Chief Minister of States

Q3. Which of the following is not a man-made hazard?

(a) Leakage of Toxic waste

(b) Wars and Civil Strife

(c) Drought

(d) Environmental pollution

Q4. Disaster Management includes:-

(a) Mitigation

(b) Reconstruction

(c) Rehabilitation

(d) All of the above

Q5. Which of the following is a man-made disaster?

(a) Terrorism

(b) Major fire

(c) Pollution

(d) All of the above

Q6. Which of the following organization is the apex authority of disaster management in India?

(a) NDA

(b) NDMA

(c) CDMA

(d) INDR

Q7. Armed forces are:-

(a) Last responders

(b) Called when free

(c) First responders

(d) All of the above

Q8. The cycle of disaster consists of the following components:-

(a) Mitigation, Preparedness, Response, Recovery

(b) Preparedness, vulnerability assessment, risk assessment, recovery

(c) Mitigation, Risk assessment, Response and Recovery

(d) None of the above

Q9. Essential services can be categorized as under:-

(a) Postal, telegraph or telephone services.

(b) Transport Services like rail, road, air and sea.

(c) Running of air / sea ports.

(d) All of the above

Q10. Which groups of NCC cadets need to be created for providing assistance:-

(a) Traffic Control Group.

(b) Boat Group.

(c) Garbage cleaning group.

(d) No Group.

Q11. The Civil Defence Corps has the following 12 services in which volunteers are trained:-

(a) Headquarters Service.

(b) Warden's Service.

(c) Fire Fighting Service.

(d) All of the above.

Q12. Which of the following skills are NCC cadets trained in for disaster management?

(a) First aid and CPR

(b) Search and rescue operations

(c) Crowd management and relief distribution

(d) All of the above

Q13. During floods, NCC cadets can help by:

(a) Operating boats and helping in evacuation

(b) Providing water purification tablets

(c) Distributing food and medical aid

(d) All of the above

Q14. Which organization do NCC cadets often collaborate with during disaster management efforts?

(a) National Cadet Corps of India

(b) National Disaster Response Force (NDRF)

(c) Indian Medical Association (IMA)

(d) Reserve Bank of India (RBI)

Short Questions

Q1. What are the different types of disasters?

Q2. What are the government governed agencies for relief at various levels?

Q3. What groups of NCC cadets are required for DM?

Long Questions

Q1. What is the role of NCC in DM?

Q2. How does Armed Forces help during DM?

Q3. What is the training required by NCC cadets for preparation for DM?

DM II (JD/JW)

CHAPTER II : DO's AND DONT's DURING DISASTERS

"During a disaster, every action matters. Acting responsibly and avoiding panic can save lives—yours and others'."

Ratan Tata



TEACHING INSTRUCTIONS:

Period	:	**Two.**
Type	:	**Lecture**
Year	:	**JD/JW (First year & Second year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Class Room, Computer and Projector, Power Point Presentation**

Time-plan

- Introduction : 05 Mins
- Criteria for Selection of Cadets : 05 Mins
- Do's and Don'ts, Before and After for Natural Disasters : 30 Mins
- Do's and Don'ts, Before and After for Natural Disasters -Earthquakes : 15 Mins
- Do's and Don'ts, Before and After for Man Made Disasters : 25 Mins



INTRODUCTION

1. Effective disaster management hinges on preparedness, timely actions, and informed decision-making. A critical aspect of this is understanding the essential "do's" and "don'ts" that guide individuals and communities during each phase of a disaster- before, during, and after its occurrence. This chapter focuses on the practical steps to be taken to minimize risks, protect lives, and ensure a swift recovery. By adhering to these guidelines, cadets can enhance their resilience, reduce the chaos during emergencies, and foster a safer, more organized response to disasters.

2. Understanding and implementing these do's and don'ts empower individuals to act confidently and responsibly, whether in preparation for potential hazards or in the face of an actual crisis. Cadets being young and exuberant can be selectively employed through correct selection of areas of intervention. Proper guidance and strict supervision of their activities will ensure success of cadets.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- (a) Part1: General Guidelines (b) Part II: Natural Disasters (c) Part III: Man-made Disasters	➢ Awareness and Preparedness ➢ Ensuring Personal Safety ➢ Safe Use of Resources and Equipment ➢ Responding to Specific Disasters

PART I : GENERAL GUIDELINES

3. **Criteria of Selection and Employment of Cadets**.

(a) Some disaster situations may, however, demand functioning of cadets on their own. It would, however, be preferable to determine their areas of activity and responsibility in any disaster situation before hand and limit the same to an indirect support role, while the direct intervention is left to the experts in the field. Ordinarily participation should be restricted to 2nd/3rd year SD/SW cadets only and selection of boys and girls should depend on area and distance from home town. Precautionary Measures to Be Followed by NCC Cadets.

(b) NCC cadets have to perform multifaceted duties during disaster under the guideline of District Disaster Management Authorities. JD/JW cadets are young and may not be considered suitable for such operations. SW cadets may be used for softer jobs like providing medical assistance or manning exchanges during strikes of nurses or telephone operators. Only SD cadets may be found suitable for helping in natural calamities like earthquakes, land-slides and floods.

4. **Prior to sending the cadets on such tasks**, suitable bonds would be required to be obtained from parents of cadets. Cadets are not adequately trained for specialized tasks related to Disaster Management. Suitable training must be given to them during institutional training. Adequate allowances would require to be allocated for the cadets taking part in these activities. Joint schemes with the State Disaster Relief machinery would be required to be made in which NCC cadets may be incorporated. Adequate signal equipment and other disaster relief equipment would be required to be authorised to NCC to carry out necessary training cadets would have to carry out rehearsals along with the Army, Police, Fire Fighting forces and others in the state.



Preparedness State

PART II : NATURAL DISASTERS

FLOODS

5. **Before Floods**.

(a) Do not litter waste, plastic bags, plastic bottles in drains.

(b) Try to be at home if high tide and heavy rains occur simultaneously.

(c) Listen to weather forecast at All India Radio, Doordarshan. Also, messages by Municipal bodies from time to time and act accordingly.



Do's & Don'ts during Floods

(d) Evacuate low lying areas and shift to safer places.

(e) Make sure that each person has lantern, torch, some edibles, drinking water, dry clothes and necessary documents while evacuating or shifting.

(f) Make sure that each family member has identity card.

(g) Put all valuables at a higher place in the house.

6. **During the Flood Situation.**

(a) Obey orders by Government and shift to a safer place.

(b) Be at safe place and then try to collect correct information.

(c) Switch of electrical supply and don't touch open wires.

(d) Don't get carried away by rumours and donot spread rumours.



7. **DO's.**

(a) Switch off electrical and gas appliances, and turn off services off at the mains.

(b) Carry your emergency kit and let your friends and family know where you are going.

(c) Avoid contact with flood water it may be contaminated with sewage, oil, chemicals or other substances.

(d) If you have to walk in standing water, use a pole or stick to ensure that you do not step into deep water, open manholes or ditches.

(e) Stay away from power lines electrical current can travel through water, Report power lines that are down to the power company.

(f) Look before you step-after a flood, the ground and floors are covered with debris, which may include broken bottles, sharp objects, nails etc. Floors and stairs covered with mud and debris can be slippery.

(g) Listen to the radio or television for updates and information.

(h) If the ceiling is wet shut off electricity. Place a bucket underneath the spot and poke a small hole into the ceiling to relieve the pressure.

(i) Use buckets, clean towels and mops to remove as much of the water from the afflicted rooms as possible.

(j) Place sheets of aluminium foil between furniture wet carpet.

8. **Don'ts.**

(a) Don't walk through flowing water - currents can be deceptive, and shallow, fast moving water can knock you off your feet.

(b) Don't swim through fast flowing water - you may get swept away or struck by an object in the water.

(c) Don't drive through a flooded area - You may not be able to see abrupt drop - offs and only half a meter of flood water can carry a car away. Driving through flood water can also cause additional damage to nearby property.

(d) Don't eat any food that has come into contact with flood water.

(e) Don't reconnect your power supply until a qualified engineer has checked it. Be alert for gas leaks - do not smoke or use candles, lanterns, or open flames.

(f) Don't scrub or brush mud and other deposits from materials, this may cause further damage.

(g) Never turn on ceiling fixtures if ceiling is wet. Stay away from ceilings those are sagging.

(h) Never use TVs, Computers terminals or other electrical equipment while standing on wet floors, especially concrete.

(i) Don't attempt to remove standing water using your vacuum cleaner.

(j) Don't remove standing water in a basement too fast. If the pressure is relieved too quickly it may put undue stress on the walls.

TSUNAMI

9. **Do's.**

(a) Remain calm.

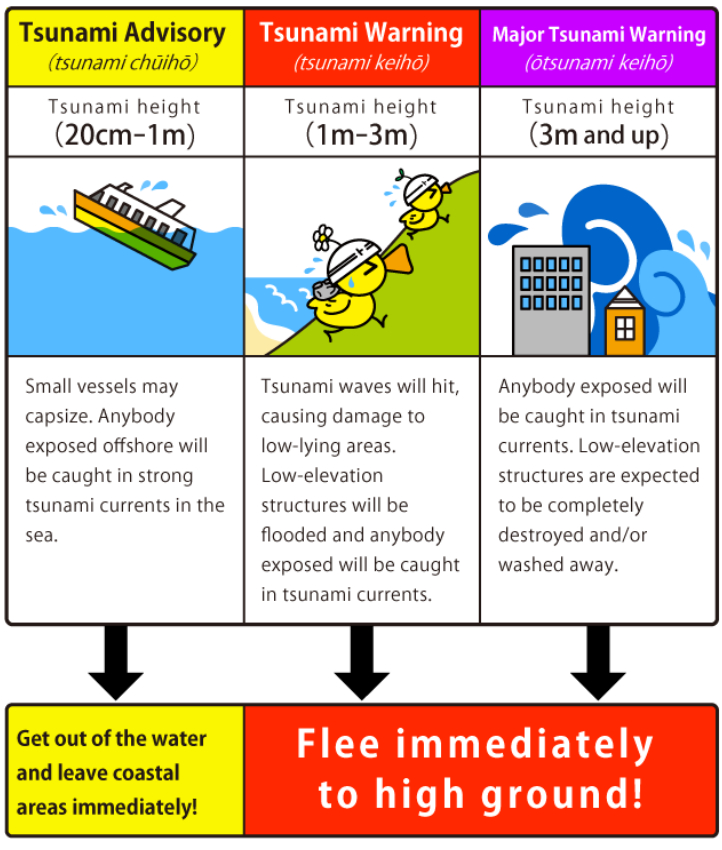
(b) Protect yourself if it is accompanied by an earthquake.

(c) Immediately head inland and to higher ground (at least 20 metres above sea level) if you experience an earthquake that lasts a minute or more, you are on the beach and the tide suddenly goes way out, or you see a wall of water rushing toward you. If you can't get inland and up, go up.

(d) Know whether you are in a tsunami hazard zone or not.

(e) Know where the nearest tsunami escape route is.

(f) Have a ready portable emergency survival kits for you and your family.



(g) Wait for an official announcement that the danger has passed before returning home or to the beach.

(h) Have emergency supplies set in at home, since it might take days or weeks for electricity, food, water, and protective services to be restored.

(i) You should find out if your home, school, workplace, or other frequently visited locations are in tsunami hazard areas along sea-shore.

(j) Know the height of your street above sea level and the distance of your street from the coast or other high-risk waters. (Local administration may put sign boards).

(k) Plan evacuation routes from your home, school, workplace, or any other place you could be where tsunamis present a risk.

(l) If your children's school is in an identified inundation zone, find out what the school evacuation plan is.

(m) Practice your evacuation routes.

(n) Use a Weather Radio or stay tuned to a local radio or television station to keep informed of local watches and warnings.

(o) Talk to your insurance agent. Homeowners' policies may not cover flooding from a tsunami. Ask the Insurance Agent about the benefits from Multi-Hazard Insurance Schemes.

(p) Discuss tsunamis with your family. Everyone should know what to do in a tsunami situation. Discussing tsunamis ahead of time will help reduce fear and save precious time in an emergency. Review flood safety and preparedness measures with your family.

10. **Don’t’s.**

(a) Rush to the beach to see the big wave.

(b) Rush to the beach after the first wave to see what has washed up on shore. (A tsunami may include several waves arriving over a period of hours.)

(c) Hop in your car to get to higher ground. (Roads may be impassable, you’ll just contribute to the traffic jam, and you may not get to safety. You’ll also make it harder for emergency vehicles to get through.)

(d) Stop to pack your most cherished possessions to take with you. (You may not have time.)

(e) Wait for an official warning if you feel an earthquake that lasts a minute or more, are on the beach and the tide suddenly goes out, or you see a wall of water rushing toward you. (By the time a warning is issued, it may be too late.)

(f) Start to put together an emergency survival kit. (You should already have one prepared.)

(g) Go back because you don't remember whether you turned off the oven.

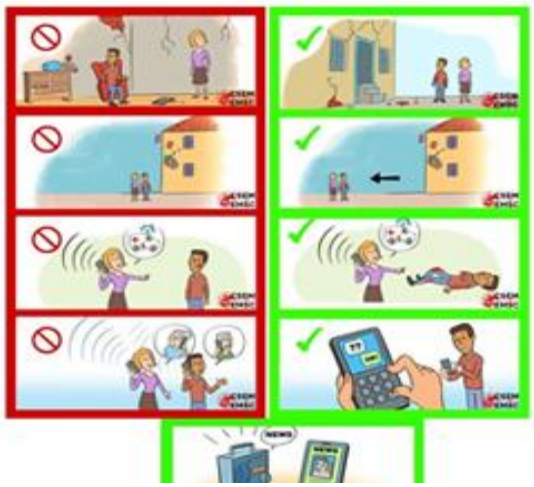
(h) Brush your teeth and put on your makeup before going out.

(i) Stop to put on clean clothes because you might have to go to the hospital.

(j) Live in a tsunami hazard zone.

EARTHQUAKES

11. **What to Do Before an Earthquake.**



Do's & Don'ts during Earthquake

(a) Repair deep plaster cracks in ceilings and foundations. Get expert advice if there are signs of structural defects.

(b) Anchor overhead lighting fixtures securely.

(c) Follow BIS codes relevant to your area for building standards

(d) Fasten shelves securely to walls.

(e) Place large or heavy objects on lower shelves.

(f) Store breakable items such as bottled foods, glass, and china in low, closed cabinets with latches.

(g) Hang heavy items such as pictures and mirrors away from beds, settees, and anywhere that people sit.

(h) Brace overhead light and fan fixtures.

(i) Repair defective electrical wiring and leaky gas connections. These are potential fire risks.

(j) Secure water heaters, LPG cylinders etc., by strapping them to the walls or bolting to the floor.

(k) Store weed killers, pesticides, and flammable products securely in closed cabinets with latches and on bottom shelves.

(l) Identify safe places indoors and outdoors.

(i) Under strong dining table, bed

(ii) Against an inside wall

(iii) Away from where glass could shatter around windows, mirrors, pictures, or where heavy bookcases or other heavy furniture could fall over

(iv) In the open, away from buildings, trees, telephone and electrical lines, flyovers and bridges (m) Know emergency telephone numbers (such as those of doctors, hospitals, the police).

12. **Have a disaster emergency kit ready.**

(a) Battery operated torch with extra batteries

(b) Battery operated radio

(c) First aid kit and manual

(d) Emergency food (dry items) and water (packed and sealed)

(e) Candles and matches in a waterproof container

(f) Knife

(g) Chlorine tablets or powdered water purifiers

(h) Can opener.

(i) Essential medicines

(j) Cash and credit cards

(k) Thick ropes and cords

(l) Sturdy shoes



13. **<u>What to Do During an Earthquake</u>**. Stay as safe as possible during an earthquake. Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur. Minimize your movements to a few steps that reach a nearby safe place and stay indoors until the shaking has stopped and you are sure exiting is safe.

14. **<u>If Indoors.</u>**

(a) Drop to the ground; take Cover by getting under a sturdy table or other piece of furniture; and Hold on until the shaking stops. If there is no a table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.

(b) Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.

<u>INTERESTING FACTS</u>

- Having an emergency kit with essentials like water, food, medications, and first-aid supplies can sustain you for up to 72 hours. Many households lack one, despite its importance.
- Text messaging often works better than phone calls during disasters due to network congestion.
- During wildfires, evacuation orders are sometimes issued based on a “Ready, Set, Go!” approach, emphasizing preparation, awareness, and quick action.
- In a fire, smoke inhalation causes more fatalities than burns.

(c) Stay away from glass, windows, outside doors and walls, and anything that could fall, (such as lighting fixtures or furniture).

(d) Stay in bed if you are there when the earthquake strikes. Hold on and protect your head with a pillow, unless you are under a heavy light fixture that could fall. In that case, move to the nearest safe place.

(e) Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported, load bearing doorway.

(f) Stay inside until the shaking stops and it is safe to go outside. Research has shown that most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.

(g) Be aware that the electricity may go out or the sprinkler systems or fire alarms may turn on.

15. **If outdoors.**

(a) Do not move from where you are. However, move away from buildings, trees, streetlights, and utility wires.

(b) If you are in open space, stay there until the shaking stops. The greatest danger exists directly outside buildings; at exits; and alongside exterior walls. Most earthquake-related casualties result from collapsing walls, flying glass, and falling objects.

16. **If in a moving vehicle.**

(a) Stop as quickly as safety permits and stay in the vehicle. Avoid stopping near or under buildings, trees, overpasses, and utility wires.

(b) Proceed cautiously once the earthquake has stopped. Avoid roads, bridges, or ramps that might have been damaged by the earthquake.

17. **If trapped under debris.**

(a) Do not light a match.

(b) Do not move about or kick up dust.

(c) Cover your mouth with a handkerchief or clothing.

(d) Tap on a pipe or wall so rescuers can locate you. Use a whistle if one is available. Shout only as a last resort. Shouting can cause you to inhale dangerous amounts of dust

PART III : MAN- MADE DISASTERS



ACCIDENTS

18. **Do's**

(a) Do seek medical attention before doing anything else.

(b) Do call the police to the scene of the accident, in appropriate cases.

(c) Do cooperate with all law enforcement and emergency personnel who respond to the scene.

(d) Do get the license plate numbers of all other vehicles involved in car accidents and the drivers' names, addresses, telephone numbers, and insurance information.

(e) Do write down the names, addresses, and phone numbers of all potential witnesses to an accident before the witnesses leave the area where the accident occurred.

(f) Do take photographs of all of the following, as applicable, as soon as possible after the accident:

(i) The scene of the accident, from all angles.

(ii) The surrounding area.

(iii) The product or animal that caused your injuries.

(iv) Photograph injuries, at different stages of healing.

(v) Any property damages.

(g) Do keep track of all work missed because of the accident and follow-up medical appointments, all medical treatment received, and how you felt physically and emotionally because of your injuries.

(h) Do get a property damage valuation from your insurance company or from two independent shops if you aren't satisfied with how your insurance company has valued the damage to your car.

19. **Don'ts.**

(a) Don't move your vehicle after an automobile accident unless necessary for safety or Required by law.

(b) Don't put yourself at risk of being further injury by standing or waiting in an area with traffic or other safety hazards.

(c) Don't leave the scene of an accident until the police tell you it's okay to do so.

(d) Don't throw away any potential evidence in the case, such as defective products, torn or bloodstained clothing, or car parts that came off the car during the accident.

(e) Don't remain in a burning car or building while calling for help. Leave the area of danger first, and then immediately call help from a safe place.

20. **Tips to Save Life.** Here are a few important things that you can do as a responsible citizen to save a precious life before the arrival of the ambulance:

(a) **Remain Calm** Do not panic. It is important for you and the victim to remain calm as it will help you take rational decisions. Do not allow any person at the scene, be it the victim or bystander to panic.

(b) **Assess the Accident Spot** Move closer to the accident area, to understand if the accident involves only a single person or there are more. Be careful and check for leaking CNG and petrol pipes, live wires or broken glass.

(c) **Call the Emergency Services** Dial 102 for ambulance and 100 for police. Give the exact location of the accident, so that they do not waste time in reaching the accident spot. In India , unified Helpline 112 is available.

(d) **Stop Cars and Ask for Help** If there aren't too many people on the road, try and stop other cars or bikes for help. Request other bystanders to help you.

(e) **Call Family and Friends** . Check the last dialled number from the victim's mobile or check for frequently called numbers or names like Mother, Father, Husband, Wife etc.

(f) **Provide First Aid**. If you know or are trained to give CPR (Chest pressure for heart rate / Mouth to Mouth Oxygen transfer) do it if the victim is unconscious. If it involved a car accident, search for a first aid kit inside car or take help from the bystanders.

(g) **Check for Pulse**. Try and assess the condition of the victim. If the victim is unconscious and not responding, then you might have to immediately take the victim to the nearest hospital without waiting for the ambulance. Remember to take care of the neck and head portion. Lesser movements and road jerks will help if you have given a little head and neck support to the victim's body. However, avoid moving the victim, unless absolutely necessary or you are trained in it as you might be hurting the victim and causing further damage.

(h) **Help Keep the Traffic Moving**. Make space for ambulance to come, so keep the traffic moving. Some curious people simply slow down their vehicles to check out an accident. Just let them know it is nothing serious. You should also warn the oncoming traffic and let drivers know that there is an accident and they need to avoid the area.

(i) **Comfort the Victim**. The accident victim is scared and even hurt. Talk to the victim if he or she is conscious with comforting and encouraging words like 'ambulance is on the way' and 'nothing serious has happened.

(k) **Accompany the Victim**. Do accompany the victim to the hospital till the arrival of the family members and provide all the support to the police to help them register a case.

CONCLUSION



21. A sound disaster prevention and response plan reflect on the effectiveness of the NCC cadets during the disaster. Suitable training must be given to them during institutional training. NCC cadets can effectively assist the state which could take the form of traffic management under supervision, conduct of cultural and recreational activities for victims to boost their morale at later or rehabilitation stages, collection, loading and dispatch of medical aid material, food and other articles of relief, help in setting up and administration of relief camps etc. Cadets must be well versed with various Do's and Don'ts associated with disaster related tasks.

SUMMARY

- **Selection and Employment of Cadets**
  - Cadets, especially 2nd/3rd year Senior Division (SD) and Senior Wing (SW), are selected for indirect support roles in disaster management under District Disaster Management Authorities.
  - Junior Division/Junior Wing (JD/JW) cadets are not suitable for disaster-related operations.
  - Cadets should participate in areas close to their home, and parental consent must be obtained.
- **Precautionary Measures**
  - Cadets require proper training during institutional sessions.
  - Joint schemes with state disaster relief agencies are essential for practical preparedness.
  - Adequate equipment like communication tools must be provided.

Natural Disasters

- **Floods**
  - **Preparation**: Avoid littering drains, stay updated with weather forecasts, and evacuate low-lying areas with essentials.
  - **During Floods**: Follow government instructions, switch off electrical appliances, and avoid rumours.
  - **Do's and Don'ts**: Avoid contact with floodwater, ensure safety measures, and never reconnect utilities without professional checks.
- **Tsunami**
  - **Do’s**: Move to higher ground immediately after signs like long earthquakes or receding tides, have emergency kits, and follow evacuation plans.
  - **Don'ts**: Avoid returning to the beach or packing belongings during emergencies.
- **Earthquakes**
  - **Preparation**: Secure heavy objects, repair structural defects, and have emergency kits ready.
  - **During Earthquakes**: Take cover under sturdy furniture or in safe spots indoors. If outdoors, stay away from structures and power lines.

Man-Made Disasters

- **Accidents**
  - **Do’s**: Seek medical help, record details like witnesses and evidence, and report to authorities.
  - **Don'ts**: Avoid moving vehicles unnecessarily or engaging in blame discussions.
- **Life-Saving Tips**
  - Stay calm, assess the accident spot, call emergency services, provide first aid, and ensure traffic flow for emergency vehicles.

ASSESSMENT EXERCISE

Multiple Choice Questions.

Q1. If the power went out during the evening, I would:

(a) Sit in the dark, waiting for the power to come back.

(b) Light candles.

(c) Search the kitchen drawers for flashlight batteries; they've got to be in there somewhere.

(d) Know exactly where to find flashlights, battery-powered lanterns and fresh batteries.

Q2. During an emergency, I would depend on the following for information:

(a) My neighbours.

(b) A battery-powered radio

(c) The Internet.

(d) The television.

Q3. If I suddenly had to leave my home for five days, I would:

(a) Grab my emergency kit and follow the steps in our family preparedness plan.

(b) Throw some clothes and necessities in a suitcase and take an impromptu vacation.

(c) Leave; then coordinate with family members or friends about what to do.

d) Hang out at the mall and wait to hear how long before we could return.

Q4. If local authorities told me to evacuate, I would:

(a) Refuse to leave. Most "emergencies" don't turn out to be a big deal.

(b) Wait to see if the situation worsened, then decide.

(c) Wait for word from the Governor; he's the only one who can order an evacuation.

(d) Follow the advice of local responders to ensure my safety and theirs.

Q5. A family emergency plan should include:

(a) Information about the emergency plan at your children's schools

(b) The name and phone number of an out-of-town contact person

(c) A list of important phone numbers, including those of doctors and emergency services

(d) A central meeting spot outside your home and one outside your neighborhood in case you need to leave the area

(e) All of the above.

Q6. Which of the following should NOT be done during an evacuation?

(a) Take your pets with you

(b) Use your car to evacuate if possible

(c) Move in groups to prevent getting lost

(d) Panic and separate from others

Q7. Which of the following is a "do" after a disaster?

(a) Ignore the risk of aftershocks or secondary hazards

(b) Share unverified information about the disaster on social media

(c) Wait for official guidance before returning to affected areas

(d) Return to your home immediately after the event

Q8. When evacuating during a natural disaster, you should:

(a) Leave pets behind

(b) Follow the crowd without considering official evacuation routes

(c) Take important documents and necessary items with you

(d) Go back to check if you missed something

Q9. What is the key precaution before involving cadets in disaster management activities?

(a) Providing parental consent

(b) Ensuring proper training

(c) Availability of communication tools

(d) All of the above

Q10. Which cadets are considered suitable for disaster management activities?

(a) Junior Division (JD) and Junior Wing (JW)

(b) Senior Division (SD) and Senior Wing (SW)

(c) Both JD/JW and SD/SW

(d) None of the above

Q11. What should you avoid during a tsunami?

(a) Moving to higher ground

(b) Listening to government instructions

(c) Returning to the beach

(d) Preparing an emergency kit

Q12. Which of the following is a recommended action during an earthquake if you are indoors?

(a) Stand near windows or heavy objects

(b) Take cover under sturdy furniture

(c) Use an elevator to evacuate

(d) Run to the nearest exit

Q13. What is the first step to take if you witness a road accident?

(a) Move the injured without assessing their condition

(b) Blame the responsible party

(c) Provide first aid and call emergency services

(d) Leave the site immediately

Q14. What should cadets do in preparation for disaster management activities?

(a) Participate in joint schemes with state relief agencies

(b) Rely on on-the-spot training

(c) Focus only on physical fitness

(d) Stay away from disaster zone

Q15. Which of the following is a "don't" during a flood?

(a) Avoid contact with floodwater

(b) Turn off utilities before evacuation

(c) Reconnect utilities without professional checks

(d) Stay updated with weather forecasts

Short Answers

Q1. What precautions will you take before an earthquake?

Q2. List out important do’s during a road accident.

Q3. What actions will you take during the flood situation?

Long Answers

Q1. Bring out important do’s and don’ts during the event of a flood.

Q2. What would you do while assisting civil administration during any disaster?

DM III (JD/JW)

CHAPTER III : EVACUATION

"Action expresses priorities. In moments of crisis, prioritizing the safety of lives through timely evacuation is the truest form of responsibility."

Ratan Tata



Here Are Some Tips For Disaster Preparedness

- *Know what disasters and hazards could affect your area.*
- *Learn what to do before, during, and after each type of emergency.*
- *Draw a floor plan of your home and mark two escape routes from each room.*
- *Post a copy of the drawings at eye level in each child's room.*
- *Include one complete change of clothing and shoes per person, including a jacket or coat, long pants, long sleeve shirt, sturdy shoes, hat, mittens, and scarf.*
- *Also include a sleeping bag or warm blanket per person.*

TEACHING INSTRUCTIONS:

Period : Three

Type : Theory (01 period) & Practical (02 periods)

Year : JD/JW (First year & Second year)

Conducting Officer : ANO

Training Aids : Class Room, Computer and Projector, Power Point Presentation

Time-plan

- Introduction 05 mins
- Part I: Evacuation Plan and Early Warning System 10 mins
- Part II: Emergency Communication 10 mins
- Part III: Methods of Evacuation and Training 15 mins
- Practical 80 mins



INTRODUCTION

1. Moving people and assets temporarily to safer places before, during or after the occurrence of a hazardous event in order to protect them. Evacuation training is a critical component of emergency preparedness aimed at ensuring individuals and teams are equipped to respond effectively during emergencies. These emergencies may include fires, natural disasters, hazardous material spills, medical crises, or other situations requiring rapid and safe removal from danger zones. This training focuses on teaching the knowledge, skills, and behaviors necessary to prioritize safety, minimize risks, and protect lives during evacuations. Whether in homes, schools, workplaces, or public spaces, evacuation training is essential for creating a culture of readiness and resilience.

PREVIEW	LEARNING OBJECTIVES
The lecture will be conducted in following parts:- (a) Part I: Evacuation Plan, Early Warning system and Emergency Communication (b) Part II: Evacuation Training and Methods (c) Part III: Practical by Cadets	➢ Understanding Evacuation Protocols ➢ Assessing Hazards and Risks ➢ Safe Lifting and Carrying Techniques ➢ Use of Evacuation Equipment

PART I : EVACUATION PLAN, EARLY WARNING SYSTEM & COMMUNICATION

2. **Evacuation Plan**. An emergency evacuation plan is a set of procedures developed by employers to help facilitate safe evacuations in case of workplace emergencies. Emergency evacuation plans usually contain exit routes, locations of designated safe areas, and the specific steps to follow for each type of emergency. Many people simple do not know what to do during an emergency, so having a clear evacuation strategy means that people are more prepared. In the event of a fire or other emergency, your evacuation strategy helps you gain some control of the situation.

3. **Understanding Need for Evacuation Planning**. An evacuation plan is a critical component of emergency preparedness, providing a structured approach to safely evacuating people during emergencies. Below are the key benefits of having an effective evacuation plan:

(a) **Ensures Safety of Lives.** Provides clear guidelines to evacuate individuals safely from hazardous areas. Reduces the risk of injuries and fatalities during emergencies. Protects vulnerable populations, including children, elderly individuals, and people with disabilities.

(b) **Minimizes Panic and Confusion.** Establishes a clear protocol, helping people stay calm and act efficiently during emergencies. Reduces fear and hesitation by providing step-by-step actions.

(c) **Facilitates Quick and Efficient Evacuation.** Saves time by providing pre-determined routes and assembly points. Ensures systematic and orderly movement, avoiding bottlenecks or overcrowding.

(d) **Enhances Emergency Preparedness.** Familiarizes individuals with exit routes, procedures, and safe zones through regular training and drills. Builds confidence to respond effectively in high-pressure situations.

(e) **Protects Property and Assets.** Reduces damage to infrastructure by ensuring timely evacuation. Allows emergency responders better access to contain or mitigate risks (e.g., fires, chemical spills).

(f) **Ensures Compliance with Legal and Safety Regulations.** Meets the safety standards set by local laws and workplace safety authorities. Avoids penalties and legal liabilities for non-compliance.

(g) **Promotes Efficiency.** Clearly defines roles and responsibilities, ensuring coordinated actions among employees or team members. Streamlines communication between individuals and emergency response teams.

(h) **Improves Recovery Time.** By ensuring a swift and organized evacuation, recovery efforts can begin sooner. Reduces downtime for businesses and communities post-emergency.

(j) **Builds Trust and Confidence.** Reassures cadets, rescuers or residents that their safety is a priority. Enhances morale by demonstrating a commitment to preparedness and risk management.

(k) **Adapts to Multiple Scenarios.** A well-designed evacuation plan is flexible, addressing various emergencies such as fires, earthquakes, chemical spills, or security threats. Ensures readiness for both natural and human-made disasters.

4. **Early Warning System**. An early warning system (EWS) is a system that monitors, predicts, and assesses hazards to help people prepare for and reduce the risks of disasters:

(a) **How it Works**. EWSs use sensors, event detection, and decision subsystems to identify hazards early. They also include communication and preparedness activities.

(b) **Benefits**. EWSs can help save lives, livelihoods, and assets. They can also reduce the damage caused by a disaster by up to 30% if issued within 24 hours.

(c) **Examples**. Some examples of EWSs include:

(i) Community or people-centered systems

(ii) Flood systems

(iii) National systems

(iv) Meteorological departments

(v) Geological observatories

(vi) Health ministries

(vii) Agricultural ministries

(d) **Effective EWSs**. Effective EWSs are:-

(i) **Multi-Hazard.** They can detect different hazards that may occur alone, simultaneously, or cascade.

(ii) **End-to-end.** They cover the entire range, from hazard detection to action.

(iii) **People-centered**. They are designed with people in mind, to empower them to act on time.

5. **Emergency Communication**. A disaster communication plan should include clear objectives, processes, and strategies for delivering information during an emergency. It should also include protocols for both proactive and reactive communication. Emergency communication is a critical part of disaster management and is used throughout all phases of a disaster:

(a) **Preparedness**. Communication can be used to educate the public about an impending disaster and encourage them to take precautions.

(b) **Response** Communication can be used to provide the public with warnings, evacuation instructions, and situation reports.

(c) **Recovery**. Communication can be used to provide information on how to register for disaster relief, how to prevent disease, and how to deal with other problems.

6. A disaster communication plan should include clear objectives, processes, and strategies for delivering information during an emergency. It should also include protocols for both proactive and reactive communication. Some communication methods that can be used during a disaster include:

(a) **Landline phones**. Can be reliable in many types of disasters, such as floods and power outages

(b) **Text messages**. Can be more reliable than wireline phones in some disasters, such as earthquakes

(c) **Email**. Can be a good way to send messages if you have internet access

(d) **Social media**. Can be used to share your status and obtain information

(e) **Two-way radios**. Can be very reliable when other methods fail

(f) **Cell Phone apps**. Can be used to help in a disaster setting

(g) **SuperGIG**. Can seamlessly transition between cellular and satellite networks to ensure uninterrupted connectivity

PART II : EVACUATION TRAINING AND METHODS OF CARRYING

7. **Purpose of Evacuation Training.** The primary purpose of evacuation training is to:

(a) **Ensure Safety**. Protect individuals from immediate and potential hazards.

(b) **Build Confidence**: Prepare participants to handle high-stress situations calmly.

(c) **Promote Efficiency**. Teach systematic and organized evacuation procedures to prevent confusion or delays.

(d) **Comply with Regulations**. Meet legal and organizational safety standards for emergency preparedness.

(e) **Save Lives**: Enhance the likelihood of a successful evacuation with minimal injuries or fatalities.

8. **Types of Stretcher Carrying**. Carrying casualties on stretchers is a critical skill in emergency medical services, search and rescue operations, and military settings. The methods depend on the type of stretcher available, the environment, the condition of the casualty, and the number of personnel. Below are common methods for carrying casualties on stretchers:

(a) **Two-Person Carry**. Two individuals, one at each end of the stretcher, lift and carry the casualty. Used only when only two rescuers are available and for relatively stable terrain.

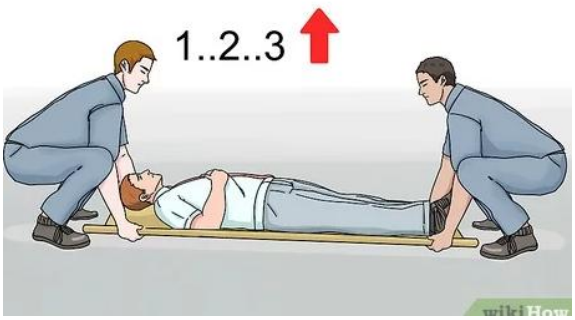




Fig 1. Two Person Carry Stretcher

(i) **Advantages.** Simple and requires minimal personnel.

(ii) **Disadvantages**. Can be physically demanding for the carriers, especially over long distances or uneven terrain.

(b) **Four-Person Carry.** Four individuals carry the stretcher, with two on each side. Used for over long distances or difficult terrain and when additional manpower is available to distribute the load.

(i) **Advantages**. Distributes weight more evenly, reducing fatigue and provides better control and stability.

(ii) **Disadvantages**. Requires more personnel.



Four Persons Carry Stretcher

(c) **Shoulder Carry**. Rescuers lift the stretcher onto their shoulders to carry it for long distances on even terrain.

(i) **Advantages**. Reduces strain on the arms and allows for a faster pace.

(ii) **Disadvantages**. Less stable, not ideal for uneven terrain or if the casualty is unstable.

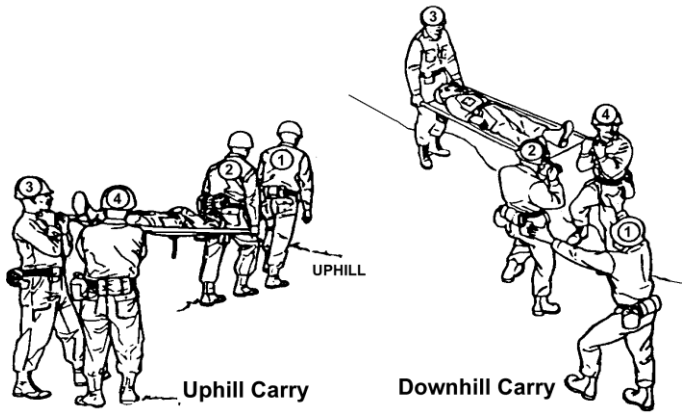


Shoulder Carry Stretcher

(d) **High-Lift Carry.** Rescuers lift the stretcher to chest or shoulder height using coordinated movements. Used to navigate obstacles like stairs or rough terrain.

(i) **Advantages**: Allows better maneuverability in complex environments.

(ii) **Disadvantages**: Requires coordination and strength.



High-Lift Carry Stretcher

(e) **Low-Lift or Ground-Level Carry.** Rescuers carry the stretcher close to the ground. Used For very rough or constrained environments.

(i) **Advantages**. Offers stability.

(ii) **Disadvantages**. More physically demanding for rescuers.

(f) **Drag or Slide Methods**. The stretcher is dragged or slid rather than carried. Used For short distances or when lifting is not feasible in snowy, icy, or smooth environments.



Drag Method to Carry Patient

(i) **Advantages**. Minimal lifting required.

(ii) **Disadvantages**. Can cause discomfort or additional injuries to the casualty.

(g) **Stretcher Basket or Rope Carry.** The stretcher is secured and carried using ropes or specialized handles. Used For vertical rescues, such as cliffs or buildings.

(i) **Advantages**. Safe for vertical or steep environments.

(ii) **Disadvantages**. Requires specialized equipment and training.

(h) **Improvised Carry**. Casualties are carried using improvised stretchers made from blankets, poles, or other materials. Used in emergencies where proper stretchers are unavailable.

(i) **Advantages**. Provides flexibility in resource-limited situations.

(ii) **Disadvantages**. May not provide optimal support or stability.



Improvised with Blanket

9. **Key Considerations for Carrying.**

(a) **Casualty's Condition**: Ensure the method minimizes movement, especially for spinal or neck injuries.

(b) **Environment**. Adapt the method based on terrain, weather, and obstacles.

(c) **Rescuer Safety**. Use proper lifting techniques to avoid injury.

(d) **Communication**. Clear commands and coordination are essential for smooth handling.

CONCLUSION

10. Evacuations are critical during emergencies, as they prioritize the safety and well-being of individuals and communities. A well-structured evacuation plan, combined with proper training and regular drills, can make the difference between chaos and an orderly, life-saving response. By understanding risks, preparing evacuation routes, and practicing effective communication, individuals and organizations can ensure swift and efficient action during crises. The key to success lies in being proactive, fostering a culture of readiness, and emphasizing the importance of safety for all. Ultimately, an evacuation plan is not just about compliance—it's about safeguarding lives and empowering people to act with confidence when it matters most.

SUMMARY

- **Evacuation Plan**
  - An evacuation plan details exit routes, safe areas, and step-by-step emergency actions.
  - **Key Benefits**: Ensures safety, minimizes panic, promotes efficiency, protects assets, ensures legal compliance, and improves recovery time.
- **Early Warning System (EWS)**
  - Uses sensors and communication tools to predict and mitigate disaster risks.
  - **Types**. Multi-hazard, end-to-end, and people-centered systems (e.g., flood and meteorological systems).
  - **Benefits**. Saves lives, reduces disaster damage by up to 30%, and prepares communities effectively.
- **Emergency Communication**
  - Crucial for all disaster phases (preparedness, response, recovery).
  - Methods include landlines, text messages, emails, social media, two-way radios, and mobile apps.
  - Proactive communication ensures timely warnings, while reactive communication aids recovery efforts.
- **Purpose of Evacuation Training**
  - Enhances safety, builds confidence, ensures compliance, and promotes efficient evacuation strategies
- **Types of Stretcher Carrying**
  - **Two-Person Carry**. Simple but demanding; used in stable terrain.
  - **Four-Person Carry**. Distributes weight; suited for long distances and rough terrain.
  - **Shoulder Carry**. Efficient for long distances but less stable.
  - **High-Lift Carry**. Ideal for obstacles; requires strength and coordination.
  - **Low-Lift Carry**. Stable but physically taxing.
  - **Drag or Slide Methods**. Minimal lifting; useful for icy or smooth terrain.
  - **Stretcher Basket or Rope Carry**. Safe for vertical rescues.
  - **Improvised Carry**. Flexible but less stable; used in emergencies.
- **Key Considerations for Carrying**
  - Adapt to the casualty's condition, environment, and rescuer safety. Effective communication is vital for smooth handling.

ASSESSMENT EXERCISE

MCQs

Q1. When evacuating during a disaster, you should:

(a) Wait for formal instructions before leaving

(b) Stay behind to gather all your belongings

(c) Follow the designated evacuation routes

(d) Ignore roadblocks and take shortcuts

Q2. During an evacuation, what is the best mode of transportation if roads are flooded?

(a) Drive a car through the water

(b) Walk through the floodwaters barefoot

(c) Use a boat or avoid flooded areas altogether

(d) Wait until the water recedes before evacuating

Q3. When authorities announce a mandatory evacuation, you should:

(a) Stay at home to assess the situation yourself

(b) Comply and leave immediately

(c) Wait until the situation worsens

(d) Gather a large group of people to leave together

Q4. Which of the following is a type of evacuation?

(a) Voluntary evacuation

(b) Mandatory evacuation

(c) Shelter-in-place evacuation

(d) All of the above

Q5. What is the primary purpose of using a stretcher in casualty evacuation?

(a) To provide mobility to rescuers

(b) To prevent further injury and provide stable transportation

(c) To move casualties faster than normal walking pace

(d) To reduce the workload of rescuers

Q6. Which of the following is a commonly used stretcher type?

(a) Basket stretcher

(b) Scoop stretcher

(c) Folding stretcher

(d) All of the above

Q7. When using a stretcher, what is the most important factor to consider?

(a) The weight of the casualty

(b) The rescuers' speed

(c) Proper alignment and securing of the casualty

(d) The material of the stretcher

Q8. In a two-person carry on a stretcher, the rescuers should:

(a) Walk at different speeds to maintain balance

(b) Coordinate and move together at the same pace

(c) Carry the stretcher with one hand each

(d) Switch positions frequently without stopping

Q9. What is the key advantage of using an improvised stretcher?

(a) It is lightweight and portable

(b) It can be created using available materials like blankets and poles

(c) It is more durable than regular stretchers

(d) It is designed for vertical lifts

Q10. When transporting a casualty on a stretcher over long distances, rescuers should:

(a) Move quickly to save time

(b) Take frequent breaks to avoid fatigue

(c) Carry the stretcher with only two people at all times

(d) Keep the casualty in an upright position

Short Questions

Q1. Name three key benefits of having an evacuation plan.

Q2. What are the characteristics of an effective early warning system?

Q3. Name three methods of communication during a disaster.

Long Questions

Q1. What is an improvised carry, and when is it used?

Q2. What is an early warning system? List three examples of EWSs

DM IV (JD/JW)

CHAPTER IV : FIRE SERVICES AND FIRE FIGHTING



TEACHING INSTRUCTIONS

Period	:	**One.**
Type	:	**Lecture**
Year	:	**JD/ JW (First Year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Power Point Presentation**

Time-plan

- Causes and Prevention of Fire : 05 mins
- Modes of Spreading : 05 mins
- How Fire can be extinguished : 05 mins
- Fire Fighting Parties : 10 mins
- Types of Fire Extinguishers : 10 mins
- Safety Measures : 05 mins



INTRODUCTION

1. Fire is a major cause for destruction of property / lives these days. Due to increase in the standard of living, electrical goods, air conditioners and cooking gas are found in most of the houses. Also, due to the influx of multinational companies, most offices, shopping malls and hospitals have air conditioners. With the influx of these electrical gadgets and cooking gas, occurrences of fire incidents have increased manifold, especially during winters and summers. It is therefore essential that everyone should be aware of how to prevent fire hazards and/or to provide assistance in fire fighting.



Army Fire Fighting Practice

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I: Causes and prevention of fire

(b) Part II: Modes of Spreading Fire.

(c) Part III: Extinguishing Fire.

(d) Part IV : Firefighting Parties

(e) Part V : Types of fire extinguishers

(f) Part VI: Safety Measures

LEARNING OBJECTIVES

- Fire behavior and modes of spreading.
- Fire hazards and Emergency plans
- Fire extinguisher use and fighting fire
- Fire prevention and Safety measures
- Appreciate the role of coordination and collaboration among stakeholders in effective disaster response with involvement of NCC.

PART I : CAUSES AND PREVENTION OF FIRE

2. Fires can be caused by a number of factors, including:

(a) **Smoking**. Smoking is a leading cause of home fire deaths, especially when it happens in bed or on a sofa while someone is asleep.

(b) **Electrical issues**. Faulty wiring, overloaded circuits, and malfunctioning appliances can cause electrical sparks, short circuits, and overheating, which can lead to fire.

(c) **Arson**. The intentional setting of fires by disgruntled employees or others with malicious intent can be a significant cause of fire accidents.

(d) **Heating equipment**. Issues with furnaces, boilers, radiators, and room heaters can lead to major fires, especially depending on the time of year and climate.

(e) **Combustible dust**. Combustible dust is a solid material that can present a fire or explosion hazard. When combined with oxygen and an ignition source, it can result in a fire.

(f) **Cooking equipment**. Burning food, leaving cooking equipment unsupervised, and the use of combustible materials can all present risks.

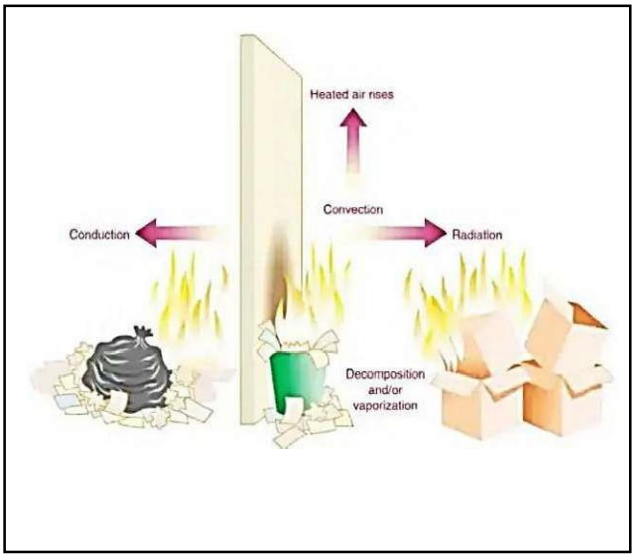
(g) **Flammable liquids**. Flammable liquids, such as diesel fuel and gasoline, can cause fires if they leak or if they are spilled on hot machinery or equipment.

3. A key strategy to prevent fire is to remove one or more of the three elements a fire needs to start or spread: heat, oxygen, and fuel. Prevention of fire is given out in subsequent part.

PART II : MODES OF SPREADING FIRE AND PREVENTION.

4. Following are some modes by which fire spreads:-

(a) **Convection**. Hot air and smoke rise and spread horizontally, especially in enclosed spaces. This can make upper floors dangerous and ignite materials above the fire's starting point.



(b) **Conduction**. Heat travels through solid materials, such as metal, to other parts of the object. For example, a metal rod with one end in a flame will become hot along its entire length.

(c) **Radiation**. Heat travels through electromagnetic waves to other combustible materials.

(d) **Direct contact**. Combustible materials catch fire when they come into direct contact with flames

5. Fire is the outcome of either heating or over heating of a combustible substance to the required temperature or igniting an inflammable material. The following three elements are essential for creation of fire and its continuation:-

(a) Oxygen.

(b) Sufficient heat to raise the temperature of fuel to its burning point or ignition temperature.

(c) Combustible or burnable material (Solid, Liquid or Gas).

Measures fo Prevention of Fire



6. **Domestic Fires - Kitchen Fires**.

(a) Don't keep any inflammable material like petrol, kerosene or clothing near the fire or the gas.

(b) Always check the gas cylinder, gas pipe for leakage. Keep the kitchen well ventilated to prevent leaking gas accumulation. Switch off the regulator when the gas is not in use.

(c) Before lighting the gas, ensure there is no gas leakage.

(d) Keep children away from gas or fire or stoves.

(e) Before leaving the kitchen, ensure that the gas and kerosene stoves are switched off and there are no burning embers in the 'Chulha'.

7. **Domestic - Other Fires.**

(a) Ensure that no electrical circuit is overloaded.

(b) Ensure that good quality electrical items are used.

(c) Ensure that all electrical gadgets are switched off when not in use, e.g. TV, AC, room heater or iron.

(d) Ensure that smokers do not leave any burning cigarettes or stubs in ashtrays near inflammable material.

(e) Don't ignite any fire cracker inside the house.

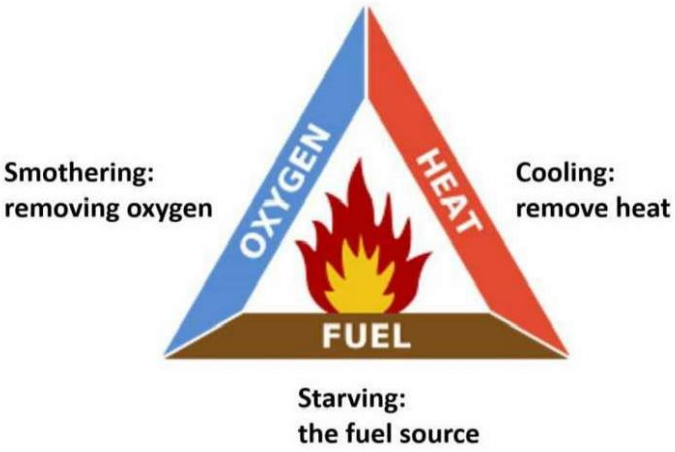


8. **Fire in Public Places**.

(a) Ensure that smokers do not leave any burning cigarettes or stubs in public dustbins or near inflammable material in closed AC offices, shopping malls or cinema halls.

(b) Don't ignite any fire cracker near petrol pumps, in crowded markets, near inflammable material or inside malls.

PART III : HOW FIRE CAN BE EXTINGUISHED



9. Fire can be extinguished if any one or more of the three main constituents are removed from the scene of fire. The fire can thus be extinguished by:-

(a) **Starvation**. Starvation means removal of fuel or combustible material and it can be achieved by either segregation of fire and un-burnt fuel by removing either of them e.g. removing un-burnt combustible materials from a room on fire with the help of hook or otherwise or division of a large fire into several smaller ones to prevent the radiated heat from setting alight combustible material at some distance



Extinguishing Fire by Starvation

(b) **Cooling**. Cooling implies the removal of heat to lower the temperature of burning material to a point below its ignition point. This is usually achieved by water. When water is poured over a burning material, it absorbs heat, becomes hot and flows away or is converted into steam. The burning substance loses heat to the water and its temperature comes down to below its ignition temperature and so the fire is extinguished.


Smothering Method

(c) **Smothering**. Smothering means Choking 'or restricting the supply of Oxygen (Air) to the burning material. This is also called - blanketing' and is achieved by sealing all the burning material from Oxygen (Air) by covering it with sand/dry earth/ foam or by creating an atmosphere over the fire of heavier than air inert gas.

PART IV : FIRE FIGHTING PARTIES

10. **House Fire Parties**. It consists of four persons who carry stirrup pumps and water buckets. They act as fire watchers and work under the orders of the wardens. They carry one stirrup pump, two buckets, one torch and one hand axe. One steel helmet and one whistle per member are envisaged as personal equipment.

11. **Auxiliary Fire Services**. This consists of eight persons with Trailer Pump which can throw water at the fire from a distance. The members of this Service are drawn from the Home Guards along with their Fire Fighting Equipment.

12. **Firing Parties**. Following are the parties to be detailed:-

(a) **Fire Fight Party**. This party will be responsible to do fire fighting

(b) **Fire Piquet Party**. This Party will piquet and surround the entire area where fire has broken out and protect the property

(c) **Salvage Party**. Salvage party will be responsible to move out stores from the affected building/room to a safer area

(d) **Medical aid/Evacuation Party**. This Party is responsible to provide first aid and evacuate serious patient to the hospital.

13. Fire Fighting Equipment can be divided into the following four categories:-

(a) Fire Extinguishers.

(b) Stirrup Pumps.

(c) Buckets.

(d) Fire Beaters and Hooks.

PART V : FIRE EXTINGUISHERS

14. **Fire Extinguishers**. PASS means Pull, Aim, Squeeze and Sweep used for all fire extinguishers from a minimum safety distan ce of 03 meters. For the convenience of study, these could be grouped as under:-

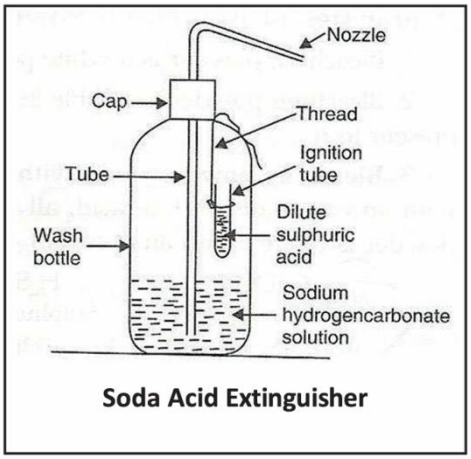
(a) **Foam Type or Dry Chemical Powder Extinguishers**. These fire extinguishers contain dry chemicals or solution and are exclusively meant for extinguishing fires involving inflammable liquids such as oils, fats, or grease, where blanketing the fire to isolate it from Oxygen (Air) is required.



Method to use Extinguisher

(b) **CTC Carbon dioxide and Dry Chemical Extinguishers**. These fire Extinguishers contain chemicals, either liquid, gas or dry, and are mainly used to fight fires involving Live 'electrical equipment' etc. where, the use of an electrically non-conductive extinguishing agent is of most importance.

(c) **Soda Acid Extinguishers**. These fire extinguishers are used for extinguishing fires involving ordinary combustible material, where the cooling effect is achieved by water or solution containing large percentage of water. Such extinguishers are conical /cylindrical in shape.



Soda Acid Extinguisher

(d) The main advantages of these extinguishers are:-

(i) They are easy to operate.

(ii) They need only one man to operate and carriage to another place.

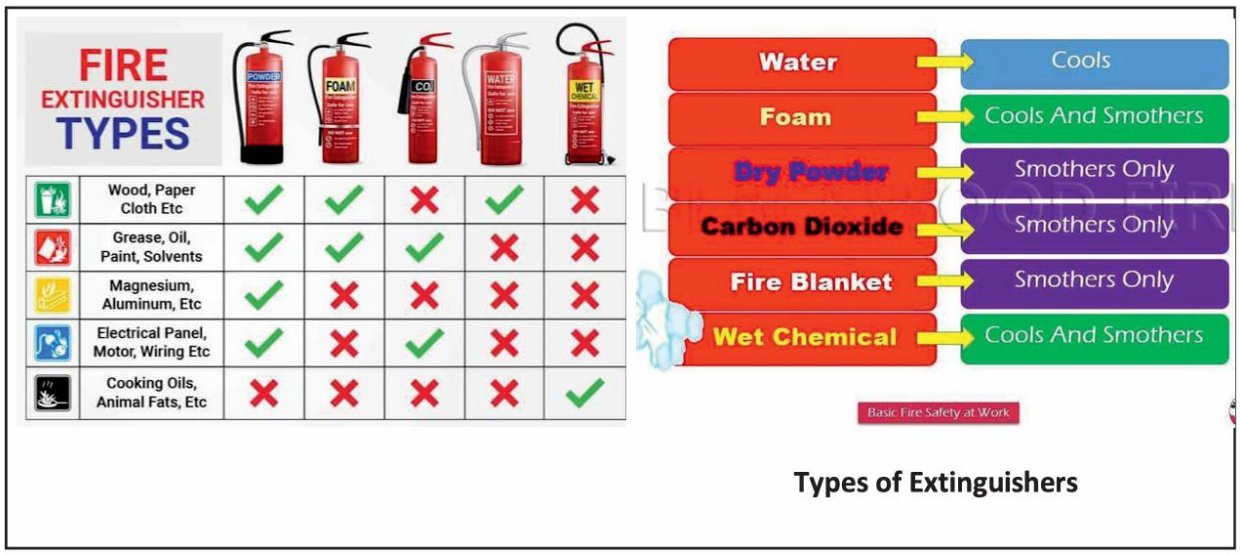
(iii) They are very useful in the initial stages of fire.

(e) The disadvantages of these extinguishers are:-

(i) The use is limited as the duration of the working of the extinguishers is approximately one to two minutes.

(ii) The cost of these extinguishers is high.

(iii) These extinguishers require constant care and careful maintenance



Types of Extinguishers

15. **Stirrup Pumps**. The stirrup pump is an excellent piece of first aid fire fighting equipment designed for use on small fire. It is very useful in localizing and controlling fires

with limited water supplies. Water spray from this equipment may be used on small fires for cooling the combustible material or the surrounding of scene of fire. It is generally operated by a team of four members but in an emergency a team of two members can also operate it effectively. The consumption of water is about 3.8 to 5.7 liters per minute. The spray produced by this pump can reach 15 to 20 feet away from the nozzle with water consumption 2.8 liters per minute.

16. **Bucket**. Buckets are ideal for storing water and sand for fighting small fires. They could be easily carried by one person, from one place to another.

17. **Fire Beaters/ Hooks**. Beaters made of wire net in a rectangular shape and hooks made of iron fitted on bamboo poles are ideal for separating the burning and unburnt combustible material, and extinguishing by beating the small fires.

PART VI : SAFETY MEASURES.

18. Firefighting is a high-risk activity, and safety is critical to protect both firefighters and civilians. Proper precautions and techniques can reduce injuries, prevent fatalities, and ensure the effective suppression of fires. Below are essential safety measures during firefighting:-

(a) **Personal Protective Equipment (PPE).** Wear complete firefighting gear, including Fire-resistant clothing (turnout gear), Heat-resistant gloves and boots, Self-contained breathing apparatus (SCBA) to prevent inhalation of smoke or toxic gases and Fire-resistant helmets with visors for head and face protection.

(b) **Situational Awareness**. Continuously assess the fire's behavior, spread, and potential hazards and monitor the environment for structural instability, electrical hazards, and explosive materials. Maintain visibility and awareness of team members' locations at all times.

(c) **Communication**. Use reliable communication devices (radios) to stay in contact with the command center and other team members.

(d) **Safe Entry and Exit**. Identify escape routes and ensure they remain accessible during operations. Always have at least two means of exit when entering a burning building. Avoid overcrowded entry points to prevent delays in evacuation.

(e) **Use the Right Equipment**. Test hoses, pumps, and extinguishers before use to ensure functionality. Choose appropriate extinguishing agents based on the fire class (A, B, C, D, or K).

(i) Water for Class A fires (wood, paper).

(ii) Foam or CO2 for Class B fires (flammable liquids).

(iii) Dry chemicals for Class C fires (electrical).

(f) **Ventilation and Smoke Management**. Use controlled ventilation techniques to release heat and smoke, improving visibility and reducing the risk of backdrafts or flashovers. Avoid breaking windows or creating unnecessary openings without a plan, as this can increase oxygen supply to the fire.

(g) **Teamwork and Coordination**. Always work in pairs or teams (buddy system) to ensure mutual safety.

(h) **Electrical and Gas Hazards**. De-energize electrical systems to prevent electrocution and Shut off gas supply to prevent explosions. Avoid water application near live electrical equipment unless properly insulated equipment is used.

U) **Evacuation and Rescue Precautions**. Ensure the safety of civilians by directing them to safe zones. Use proper rescue techniques, including smoke evacuation tools and stretchers, when helping injured individuals.

(k) **Emergency Medical Support**. Have medical personnel or first-aid responders on-site for immediate treatment of injuries. Know the symptoms of smoke inhalation, burns, and heat exhaustion, and respond promptly.

INTERESTING FACTS

- The first organized firefighting brigade dates back to Ancient Rome around 24 B.C., established by Emperor Augustus. Known as the "Vigiles," this group served as both firefighters and watchmen.
- Firefighting suits are made from heat-resistant materials like Nomex and Kevlar, allowing them to withstand temperatures of up to 1,000°F (537°C).
- The traditional red fire truck color was chosen in the early 1900s because it stood out, although today fire trucks come in various colors like yellow and lime green to improve visibility
- Women have been part of firefighting since the 19th century.

(l) **Training and Drills**. Regularly participate in fire safety and suppression drills. Stay updated on modern firefighting techniques and equipment.

19. **Other Safety Measures to be Followed**. Here are some safety measures to take in the event of a fire:-

(a) **Have an exit**: Stand with your back to an exit and move away from the fire.

(b) **Use a buddy system**: Have someone back you up or call for help if needed.

(c) **Use a sweeping motion**: Aim at the base of the fire.

(d) **Learn how to use a fire Extinguisher**: Know how to use a fire extinguisher and have one on hand.

20. Here are some fire safety tips to prevent fires:-

(a) Install smoke alarms and test them regularly.

(b) Plan an escape route.

(c) Be careful when cooking.

(d) Don't overload electrical sockets.

(e) Put out cigarettes properly.

(f) Use candles, decorations, and fabrics carefully.

(g) Store flammable liquids and combustible materials properly.

(h) Maintain your electrical wiring system.

U) Keep your heating equipment in check.

(k) Take special fire precautions in the kitchen

CONCLUSION

21. The first step in a firefighting operation is reconnaissance to search for the origin of the fire and to identify the specific risks. Fires can be extinguished by water, fuel or oxidant removal, or chemical flame inhibition; though, because fires are classified depending on the elements involved, such as grease, paper, electrical, etcetera, a specific type of fire extinguisher may be required. The classification is based on the type of fires that the extinguisher is more suitable for. It is extremely essential for all to be aware of the causes of fires and how to prevent fires or carryout firefighting in homes and public places. In summary, the objectives of fire safety are to protect life and property, prevent fires, limit damage, maintain continuity of operations, and ensure the safety of workers and others involved. Continuous education and training are key to sustaining a fire-safe environment. Emphasize the need for regular refresher courses for employees to keep up-to-date with the latest fire safety practices and equipment.

SUMMARY

- Fire is the outcome of either heating or over heating of a combustible substance to the required temperature or igniting an inflammable material. The following three elements are essential for creation of fire and its continuation: -
  - Oxygen.
  - Sufficient heat to raise the temperature of fuel to its burning point or ignition temperature.
  - Combustible or burnable material (Solid, Liquid or Gas).
- The fire can thus be extinguished by:-
  - Starvation.
  - Cooling.
  - Smothering.
- **Fire Fighting Parties.**
  - House Fire Parties.
  - Auxiliary Fire Services.
- Fire Fighting Equipment can be divided into the following four categories: -
  - Fire Extinguishers.
  - Stirrup Pumps.
  - Buckets.
  - Fire Beaters and Hooks

ASSESSMENT EXERCISE

Multiple Choice Question

Q1. What is the primary purpose of firefighting?

(a) To minimize water usage during fire suppression

(b) To extinguish fires and prevent loss of life and property

(c) To create evacuation plans for nearby residents

(d) To investigate the cause of the fire

Q2. Which of the following is the first step when approaching a fire?

(a) Start extinguishing the fire immediately

(b) Assess the situation and call emergency services

(c) Break windows for ventilation

(d) Pour water regardless of the fire type

Q3. What is the correct technique to extinguish a fire on a person's clothing?

(a) Spray them with a fire extinguisher

(b) Tell them to roll on the ground

(c) Use "Stop, Drop, and Roll"

(d) Throw a blanket over them

Q4. Which type of fire extinguisher is suitable for electrical fires?

(a) Water extinguisher

(b) CO2 extinguisher

(c) Foam extinguisher

(d) Wet chemical extinguisher

Q5. What should you do if your escape route is blocked by fire or smoke?

(a) Run through the fire as quickly as possible

(b) Stay low to the ground and look for another exit

(c) Wait for rescue without doing anything

(d) Break windows and shout for help

Q6. What is the primary reason for using a self-contained breathing apparatus (SCBA) in firefighting?

(a) To improve visibility in smoky conditions

(b) To protect against heat burns

(c) To prevent inhalation of toxic gases and smoke

(d) To enhance physical strength during firefighting

Q7. What is the best way to protect yourself from smoke during a fire evacuation?

(a) Use a damp cloth to cover your mouth and nose

(b) Walk upright and breathe through your mouth

(c) Avoid breathing until you leave the building

(d) Shout for help continuously

Q8. Which fire suppression method removes oxygen from the fire triangle?

(a) Cooling with water

(b) Smothering with a blanket or foam

(c) Removing the fuel source

(d) Increasing ventilation

Q9. What does PASS stand for when using a fire extinguisher?

(a) Push, Aim, Squeeze, Sweep

(b) Pull, Aim, Squeeze, Sweep

(c) Pull, Activate, Spray, Secure

(d) Push, Activate, Spray, Sweep

Q10. Why is it important to ventilate a building during firefighting?

(a) To cool the fire faster

(b) To reduce smoke and heat levels

(c) To bring in fresh air for the fire

(d) To clear the building for entry

Q11. What is the most common cause of residential fires?

(a) Lightning strikes

(b) Faulty electrical wiring

(c) Kitchen-related accidents

(d) Arson

Q12. What should you do if a fire extinguisher runs out while fighting a fire?

(a) Recharge it immediately

(b) Move to safety and call for help

(c) Use any nearby water source

(d) Reignite the extinguisher by shaking it

Q13. Why is teamwork important in firefighting?

(a) To minimize individual workload

(b) To ensure safety and effective communication

(c) To reduce the use of resources

(d) To divide blame in case of errors

Q14. What is the recommended distance to maintain when using a fire extinguisher?

(a) 1 meter (b) 3 meters

(c) 5 meters (d) 7 meters

Q15. What should firefighters check before entering a burning building?

(a) The temperature of the door and presence of smoke

(b) The height of the flames

(c) The proximity of fire engines

(d) The availability of media coverage

Q16. Which of the following is a key factor in post-fire recovery?

(a) Rapid reoccupation of the building

(b) Ensuring that hot spots are extinguished

(c) Leaving the site unmonitored

(d) Rebuilding immediately without investigation

Short Questions

Q1. What are the type of fire extinguishers in use?

Q2. What are the firefighting parties made for firefighting?

Q3. What are the categories of firefighting equipment?

Long Questions

Q1. What are the main causes of fire and how does fire spread?

ENVIRONMENTAL & GENERAL AWARENESS

5

CHAPTERWISE INDEX: ENVIRONMENTAL & GENERAL AWARENESS (JD/JW)

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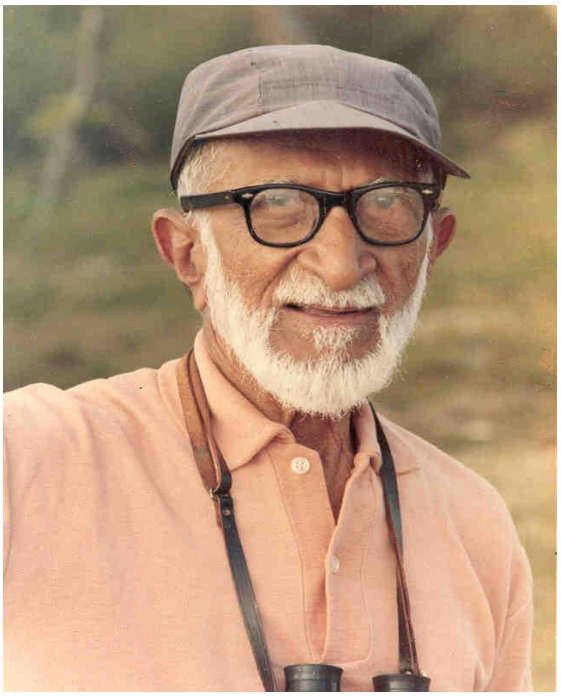
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EA I (JD/JW)

CHAPTER I : IMPORTANCE OF CONSERVATION

"I suppose I have done my bit, it's now up to you younger people."

Dr Salim Ali



TEACHING INSTRUCTIONS

Period	**:**	**One.**
Type	**:**	**Lecture and Discussion.**
Year	**:**	**JD/JW (First year)**
Conducting Officer conduct	**:**	**Cadets must be told to prepare for this class prior to**
Training Aids	**:**	**Class Room, Computer with OHP, Screen, Presentation, Script or Book Flagged or Lesson Plan in File, Board and Markers.**

Time-plan

- Introduction : 03 minutes
- Part I : 08 minutes
- Part II : 12 minutes
- Part III : 10 minutes
- Conclusion, Summary & Discussion : 07 minutes



INTRODUCTION

1. **Definition of Environmental Awareness**. Environmental awareness refers to the understanding and knowledge of environmental issues and the impact human actions have on the environment. It involves recognizing how our activities affect the natural world and taking steps to reduce negative impacts. Environmental Awareness can be promoted through a thorough understanding of environmental issues that occurs consequent of economic growth such as deforestation, pollution, use of plastics, industrialisation, urbanisation etc.

2. **Importance of Understanding Environmental Issues**. Understanding environmental issues is crucial because it helps us to make decisions that protect natural resources and promote sustainability. Being aware of these issues allows us to initiate policies and measures that address problems such as pollution, climate change, and biodiversity loss effectively. Environment awareness promotes the adoption of green initiatives, appropriate technology and other community projects that encourage use of renewable resources, proper waste management techniques, organic farming methods etc. Thus, environment awareness helps to improve various circumstances like Air and water quality, agricultural practices and production, quality of human life etc.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Importance of Biodiversity, Ecosystems and their Functions

(b) Part II : Environmental Pollution and Climate Change

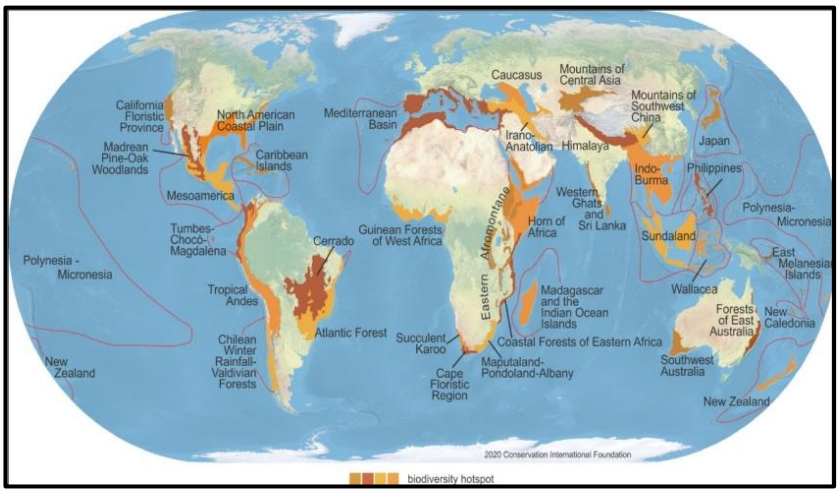
(c) Part III : Conservation, Environment Laws and Future Prospects

LEARNING OBJECTIVES

- Understand Environmental Awareness.
- Recognize the Importance of Biodiversity.
- Comprehend Ecosystem Functions.
- Identify Pollution and Its Impacts.
- Understand Climate Change and Resources.
- Explore Conservation and Sustainable Practices.
- Analyse Future Prospects and Challenges.

PART I : IMPORTANCE OF BIODIVERSITY, ECOSYSTEMS AND THEIR FUNCTIONS

Importance of Biodiversity



3. Biodiversity refers to the richness and variety of life on Earth, including plants, animals, fungi, and microorganisms. It deals with the number of different organisms, its frequencies and organisation at different levels in an ecosystem. It is the most important feature of our planet without which the life on earth would not sustain. Biodiversity which also refers to biological diversity exists at three levels- Species, genetics and ecosystem. Species diversity refers to the variety of different species found in a particular area ranging from plants to different microorganisms. Biodiversity changes overtime as extinction occurs and new species evolve. Genetic diversity refers to the variations in the genetic resources of the organisms. E.g. there are varieties in the same species of rice, wheat and even human beings. Ecological diversity refers to the variations in the plants and animal species living together in different ecosystems and are connected by food chains. E.g. diversity in different ecosystems like marine, deserts, rain forests etc.

DID YOU KNOW?

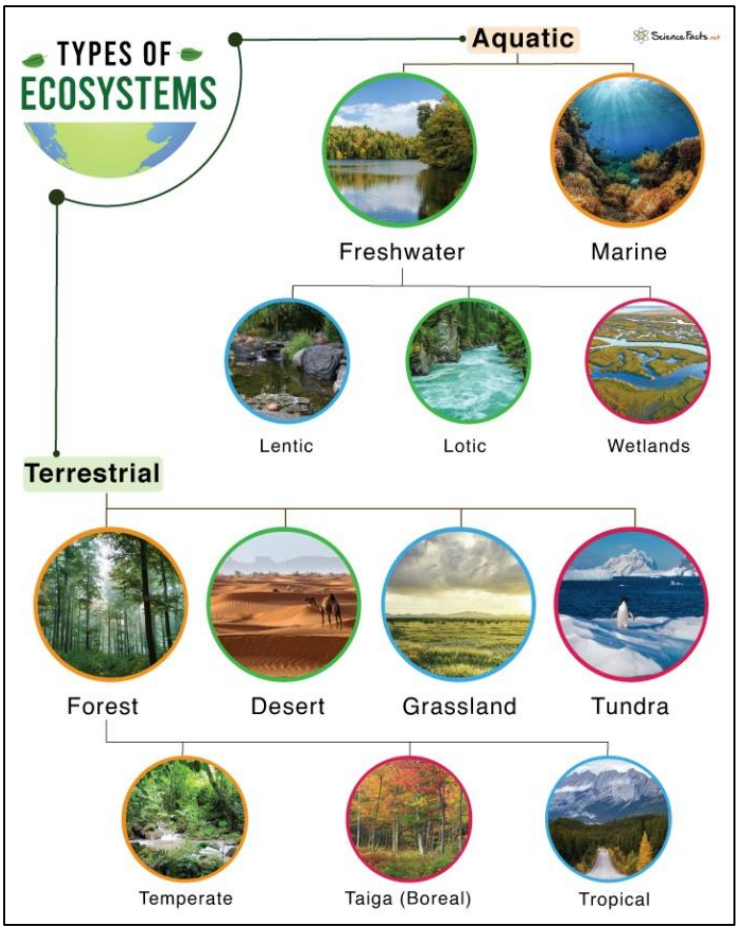
- **Western Ghats Biodiversity.** The Western Ghats, which run along the western coast of India, including Kerala, are one of the world's eight "hottest hotspots" of biological diversity. They are home to more than 7,000 species of plants, 139 mammal species, 508 bird species, 179 amphibian species, that are found nowhere else on Earth. This region's biodiversity is crucial for global ecological health, but it is under threat from deforestation and development.

4. Biodiversity has ecological, economic and ethical significance. It is ecologically significant because it ensures ecosystem stability and materials, and maintains ecological balance. Every species has a specific role in the ecosystem that helps to sustain life on earth. It is economically significant because it also provides us with resources for food, medicine, nourishment, housing, fuel, clothing and several other factors that also generates monetary benefits such as tourism. Finally, it is ethically significant because biodiversity preserves different cultures and spiritual heritage. All species have a right to exist and hence we should conserve it. Thus, knowledge of biodiversity is essential for a sustainable livelihood.

5. **Threats to Biodiversity**. Threats to biodiversity include habitat destruction, climate change, pollution, overexploitation, and invasive species. These threats can lead to the extinction of species and disrupt ecosystems.

Ecosystems and Their Functions

6. Ecosystems are communities of living organisms interacting with each other and their environment. The term ecosystem was first coined by the British ecologist A.G. Tansley in 1935. Any habitat of nature that includes plants and animals and non-living substances which interact to produce materials that can be exchanged between living and non-living parts of the habitat, is called an ecosystem. An ecosystem can be as small as a drop of pond water (micro-ecosystem) or as large as an ocean. It can be *aquatic* like a pool of freshwater or marine or can be terrestrial like a forest or grasslands. They provide essential functions such as nutrient cycling, pollination, water purification, and climate regulation. Understanding these functions helps us appreciate the importance of protecting ecosystems.



7. There are two basic functions of an ecosystem. One is the *cycling of materials* and other is *flow of energy* between living things and environment. The plants synthesise complex organic materials from the raw materials which are returned to the environment. Thus, the minerals, nitrogen, carbon dioxide and water are continually cycled through this system. Similarly flow of energy refers to the process whereby energy is transferred from one organism to another. For instance, the solar energy is captured by the green plants. The organisms derive their nutrition and energy from these plants which is further passed on to other organisms. Thus, it regulates and supports different life systems.

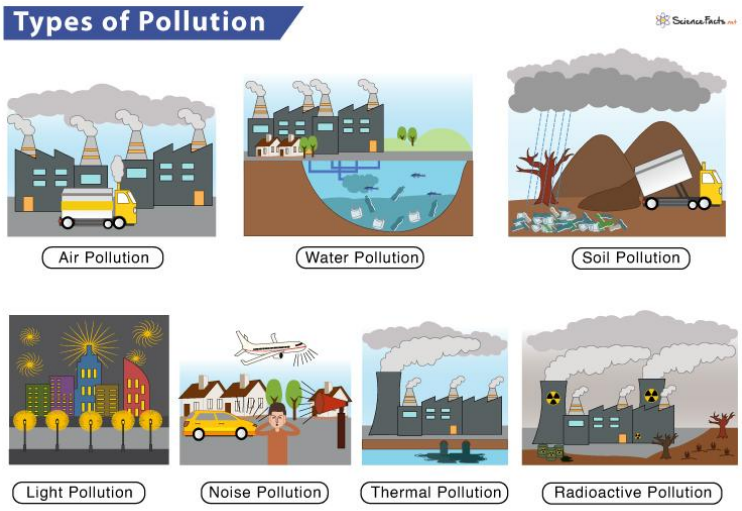
PART II : ENVIRONMENTAL POLLUTION AND CLIMATE CHANGE

Environmental Pollution and Its Impact

8. Environmental pollution refers to any change in the natural quality of the environment (air, water and land) brought about by the chemical, physical or biological factors. It involves the introduction of harmful substances into the environment, leading to adverse effects on health, ecosystems, and the climate.

9. Pollution is differentiated based on the nature of pollutants and include air, water, soil, and noise pollution. The pollutants are basically categorised into Biodegradable and Non-biodegradable pollutants. Biodegradable pollutants are capable of being removed by biological or microbial action for e.g. Sewage whereas the non-biodegradable pollutants cannot be removed in such manner for e.g. Plastics, aluminium cans, pesticides, gases etc. The impact can be severe, causing health problems, loss of biodiversity, and climate change.

10. The various major types of pollution are air pollution, water pollution, soil pollution and noise pollution. These can be natural or man- made.



11. Water pollution is the process of altering the properties of any water which renders it unfit or less fit for the purpose its unaltered form was used. The main water pollutants are bacteria, viruses, parasites, fertilisers and pesticides, plastics, faecal wastes, pharmaceutical products etc. They are mostly invisible pollutants that may not change the colour of the water. Water pollution causes many health hazards like diarrhoea, cholera, dysentery, typhoid etc that kill more than million people worldwide every year.

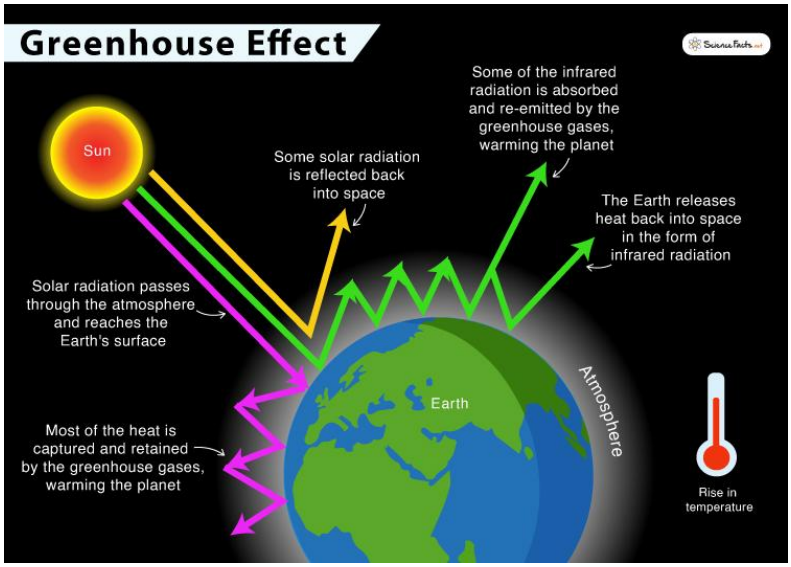
12. Air pollution is defined by WHO as the contamination of the indoor or outdoor environment by any chemical, physical or biological agent that modifies the natural characteristics of the atmosphere. E.g. Household combustion devices, motor vehicles, industrial smokes and forest fires are common sources of air pollution. Pollutants of major public health concern include particulate matter, carbon monoxide, ozone, nitrogen dioxide and sulphur dioxide. Outdoor and indoor air pollution cause respiratory and other diseases and are important sources of morbidity and mortality. According to WHO data 99% of the global population breaths air that exceeds WHO guideline limits and contains high pollutants especially in the low- and middle-income countries.

13. Soil pollution occurs when the levels of toxic chemicals like pollutants or contaminants whose amount exceeds the levels that should be present naturally through soil microbial activities or through decomposition of living organisms. For e.g. Metals like Lead, Mercury, Arsenic, Copper, Zinc and many organic compounds like fatty acids, hydrocarbons, PAHs, alcohols, pesticides etc. There are basically 2 causes of soil pollution- Natural and man-made. Man made pollution, which is the major cause, is generally through improper disposal of waste from industries or urban sources and from extensive use of pesticides and chemical fertilisers in agricultural sector. Soil pollution causes many health effects like headaches, nausea, fatigue, skin rashes, eye irritation and potentially many more serious conditions like kidney and liver damage and many forms of cancer.

14. Noise pollution harmful threshold is above 55 dB(daytime) and 45 dB(night time). It includes traffic noise, air traffic noise, construction sites, political and cultural rallies, festivals etc. Noise pollution can cause both physical and psychological effects on both human beings and animals. Headaches, hearing impairment, high BP, Colitis, depression, anxiety, hysteria etc are the impacts on human beings. Animals also suffer due to the disturbances in their natural habitats including reproductive problems and altered predator-prey relations leading to their gradual extinction.

Climate Change and Global Warming

15. **Causes and Impact**. Climate change refers to the long-term shifts in the temperature and weather pattern. It can cause naturally as well as due to human interventions leading to the increase in greenhouse gases, primarily carbon dioxide, methane and Chlorofluorocarbons (CFCs) from activities such as rapid industrialisation, burning fossil fuels and deforestation. When the greenhouse gases are maintained within limits, it helps to maintain the earth's mean temperature at 15 degree C which otherwise could fall to -18 degree C and could make life impossible on earth. However, the constant human interventions are changing the earth's natural greenhouse effect with the dramatic increase in the greenhouse gases which traps heat and causes global warming. The impact includes rising temperatures, melting ice caps, and more frequent extreme weather events. Ozone layer depletion is caused by CFCs which shields the earth from the harmful effects of ultra-violet rays and can ultimately induce "Acid rain". It also affects the ecosystem productivity; ecological stability and the

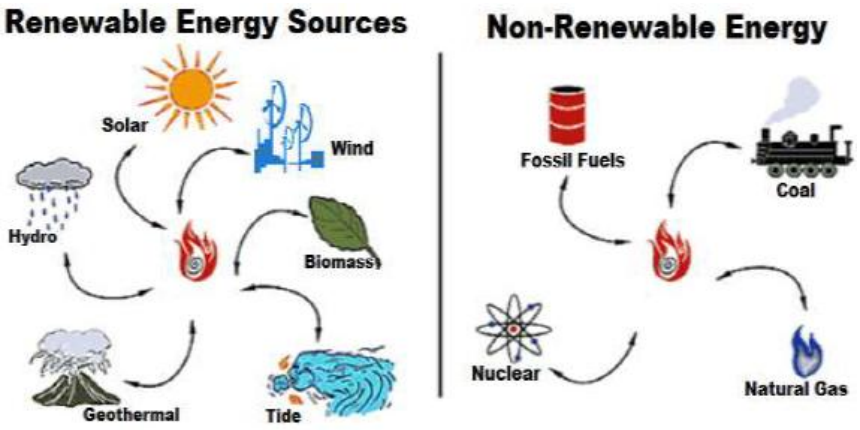


resultant climatic change affects the survival and stability of the living organisms and may cause certain physiological changes in man and animals.

16. **Mitigation and Adaptation Strategies**. Mitigation focuses on avoiding significant human interference with Earth's climate, stabilise greenhouse gas levels and allow ecosystems to adapt naturally to climate change, ensure that food production is not threatened and to enable sustainable economic development. The measure involves reducing greenhouse gas emissions through reducing use of fossil fuels and moving to renewable energy such as solar and wind, enhancing the "sinks" that accumulate and store these gases such as Oceans, forests and soil, adopting energy efficiency measures ranging from simple daily changes like reusing and recycling to bigger lifestyle changes like switching to electric vehicles and undertaking reforestation.

17. In order to maintain a healthy and sustainable life on earth, it is very essential to adapt to the changing climatic conditions. The goal of any adaptation strategy is to reduce the risks from harmful effects of climate change such as rising sea level, food insecurity, extreme weather conditions etc on the one hand and on the other to exploit the beneficial opportunities arising out of climatic change. Thus, various adaptation strategies at individual, local and government level is being undertaken in the country. They are measures like building flood defences, proper plans to deal with heat waves and high temperatures, improving water storage and use (e.g. Rain water harvesting), building resilient infrastructure and developing early warning systems for extreme weather. Sustainable development plans have been framed to manage disasters like drought and rising sea level, protecting coastal areas, land and forest, energy and infrastructure and develop new crop varieties.

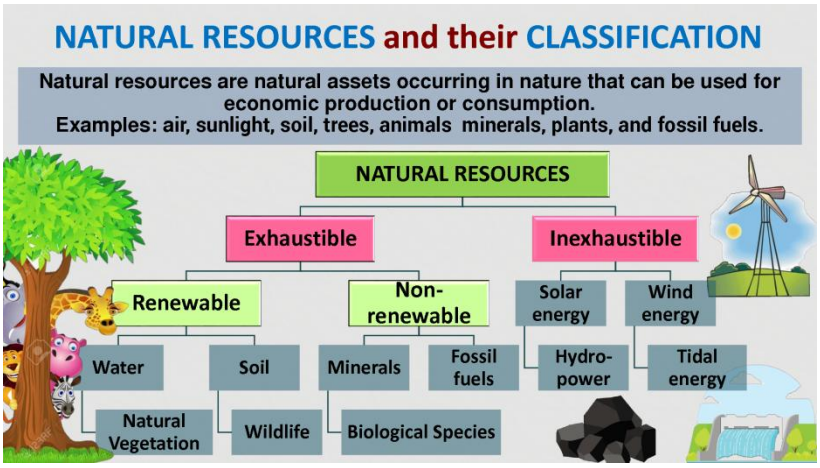
18. **Renewable and Non-renewable Resources**. 'Resource is a form of energy or matter which is essential for the functioning of organisms, populations and ecosystem.' Resources can be Renewable and Non-renewable. Renewable resources, such as solar and wind energy, hydro power etc are those that can be replenished naturally over time. Non-renewable resources, like fossil fuels and minerals, are finite and deplete with use. It is important to shift towards renewable resources to ensure sustainable energy use.



PART III : CONSERVATION, ENVIRONMENT LAWS AND FUTURE PROSPECTS

Conservation of Natural Resources

19. **Importance of Conserving Natural Resources**. Conservation means to stop the unplanned development that breaks the ecological as well as human laws by careless use of natural resources. Conserving natural resources is essential to ensure their availability for future generations and hence to maintain the existence of life on earth. It helps maintain ecological balance, climatic conditions and supports human well-being. International Union for the Conservation of Nature and Natural Resources is an organisation that focuses on the conservation of natural resources at the Global level. Conservation aims at ensuring preservation and the sustainable utilisation of species (plant and animal) and the ecosystem which helps in human survival.



20. **Methods of Conservation**. Methods of conservation include recycling, reducing waste, adopting sustainable practices, and protecting natural habitats. These actions help reduce our environmental footprint. Important conservation methods include:

(a) Reforestation- planting of trees and vegetation reduces soil erosion

(b) Rainwater harvesting- adopting methods to store rainwater at the household and institutional level

(c) Proper treatment of industrial waste to prevent chemical and thermal pollution of water

(d) Conservation of biodiversity- Protection of plants and animals both within and outside their natural habitat. E.g. maintenance of Zoos, wildlife sanctuaries, national parks on the one hand and on the other taking measures for Gene banks, Tissue culture, DNA preservation etc

(e) Legal measures- Laws like Environment Protection Act 1986, National Forest Policy 1988, Wild Life Protection act 1972, Water (prevention and control of pollution) Act 1974, Forest Conservation Act 1980 etc

(f) Public awareness rallies and campaigns can be conducted

(g) Adopting sustainable development goals and measures which aims at meeting the requirements of present generation without compromising the needs of future generations.

(h) Water conservation techniques through basic awareness spreading like reducing wastage of water and reusing or recycling water for household chores.

(i) Adopting Crop rotation and mixed cropping methods in agricultural sector to maintain soil fertility.

(j) Opting for alternate energy resources that are less polluting. Thus, transforming from Fossil fuels to renewable sources like solar, wind, hydro energy etc.

21. **Role of Individuals, Communities, and Governments**. Individuals can contribute by adopting eco-friendly habits, communities can engage in local conservation projects, and governments can implement policies and regulations to protect natural resources. The following measures can help in pollution control and environment conservation:-

(a) **Individuals**. Individuals can significantly contribute to environmental conservation by adopting simple yet impactful practices. Reducing the use of single-use plastics and promoting reusable alternatives is a crucial step. Conserving energy and water through mindful usage helps reduce resource depletion. Sustainable transportation options such as cycling, carpooling, or using public transport contribute to lowering carbon emissions. Planting trees and maintaining home gardens not only enhance air quality but also create green spaces. Additionally, practicing proper waste segregation and recycling at the household level ensures responsible waste management.

(b) **Communities**. Communities play a vital role in fostering collective environmental responsibility. Organizing clean-up drives for beaches, rivers, parks, and other public spaces helps keep the environment clean and healthy. Awareness campaigns on environmental protection and sustainable practices educate and inspire individuals to act. Community-based waste management systems are effective in handling waste responsibly. Encouraging rooftop gardening and community afforestation programs fosters greenery and biodiversity. Supporting local eco-friendly businesses and initiatives promotes sustainable economic growth.

(c) **Government**. Governments have a pivotal role in driving large-scale environmental change. Enforcing strict laws to curb industrial and vehicular pollution ensures accountability and compliance. Promoting renewable energy sources like solar, wind, and hydro power reduces dependency on fossil fuels. Programs for reforestation, afforestation, and biodiversity conservation contribute to ecological balance. Incentives for industries and individuals adopting green technologies encourage sustainable innovation. Proper regulation of waste disposal systems ensures effective treatment and recycling of solid and liquid waste. Finally, educating citizens through environmental policies and incorporating sustainability into school curricula builds a foundation for long-term environmental stewardship.

INTERESTING FACTS

- **Kerala's Climate Adaptation.** Kerala is known for its innovative approaches to climate adaptation. For instance, the state has implemented a comprehensive climate change action plan that includes measures like the promotion of sustainable agricultural practices and the development of climate-resilient infrastructure. Kerala also has a significant focus on reforestation and the conservation of its extensive network of rivers and wetlands, which play a vital role in the local climate and biodiversity.

22. **Sustainable Development Practices**. Sustainable development practices aim to meet present needs without compromising future generations' ability to meet theirs. This involves balancing economic growth, environmental protection, and social well-being. Thus, sustainable development aims at reducing the absolute poverty of the world's poor by providing lasting and secure livelihoods through careful and judicious utilisation of natural resources and minimising cultural disruption and social instability. It is our moral responsibility to handover earth in good order to our future generations. The term' Sustainable Development' was first coined by the United Nations World Commission on Environment and Development in its Brundtland report called 'Our Common Future" in 1987. Environment sustainability focuses on sustainable resource use, efficient pollution control and maintenance of stock of natural capital such that:-

(a) The next generation should inherit such a stock of wealth comprising both man- made and environmental assets.

(b) The next generation should inherit a stock of environmental assets no less than that inherited by the previous generation.

(c) Several steps have been taken by our country in this regard.

(d) Population control measures by spreading awareness on birth control measures and literacy.

(e) Use of environment supportive fuels to prevent global warming such as CNG, LPG etc.

(f) Use of Solar and wind energy.

(g) Banning use of one-time plastics.

(h) Focussing on Recycling and reusing of industrial and household waste products for environment sustainability.

(i) Imposing pollution tax and fines on industries and vehicles.

(j) Use of input efficient technology that ensures lesser utilisation of natural resources and promotes growth.

23. **Environmental Laws and Government Policies**. Environmental laws and policies, such as 'Mission LIFE – Lifestyle for The Environment,' promote sustainable practices and environmental protection. They provide guidelines and regulations to address environmental issues and encourage responsible behaviour. In broad terms four general methods have been adopted to frame Government laws and policies- a) moral suasion b) Regulations c) Market pricing or fiscal techniques d) Government investment program.

(a) **Moral Suasion** refers to promoting voluntary programs among the firms and households that meets their social responsibility e.g. Voluntary Garbage disposal and recycling programs, carpooling and other energy saving programs, declaring 'litter free zones' at certain specific places of visits etc.

(b) **Regulations or Direct controls** includes certain laws and policies that prevents the environment pollution and maintains sustainability. Such as-

(i) The Air (Prevention and Control of Pollution) Act, 1981.

(ii) The Water (Prevention and Control of Pollution) Act, 1974.

(iii) The Environment (Protection) Act of 1986.

(iv) The National Green Tribunal Act, 2010.

(v) Biological Diversity Act, 2002.

(vi) Clean Water Act of India, 1974.

(vii) Wild Life (Protection) Act, 1972

(c) **Pricing and fiscal techniques** include pollution taxes, subsidies, pollution permits etc.

(d) **Government investment programs** involve installation of waste treatment plans, slum-clearance, reforestation and afforestation, management of wild life (Core and buffer zones) etc.

Future Directions and Challenges in Environmental Conservation

24. Environmental conservation is at a critical juncture, with both challenges and opportunities defining the path forward. As we look to the future, addressing emerging issues such as climate change, resource scarcity, biodiversity loss, and the spread of invasive plants will be paramount.

25. **Challenges in Environmental Conservation**

(a) **Climate Change Impacts**. Rising global temperatures are causing sea-level rise, extreme weather events, and changes in ecosystems. These impacts threaten biodiversity, human settlements, and agriculture, making adaptation and mitigation essential.

(b) **Resource Scarcity**. Overuse of finite resources like fossil fuels, fresh water, and fertile land has led to shortages, emphasizing the urgent need for sustainable resource management.

(c) **Biodiversity Loss**. The extinction of species disrupts ecosystems and the services they provide, such as pollination and nutrient cycling. Factors like deforestation, habitat destruction, and illegal wildlife trade exacerbate this problem.

(d) **Invasive Plants**. The spread of non-native plant species disrupts local ecosystems by outcompeting native species, altering habitats, and affecting agriculture and forestry.

26. **Future Directions**

(a) **Innovations in Technology**. Advancements like artificial intelligence, remote sensing, and GIS mapping can improve monitoring and management of natural resources. Renewable energy technologies, such as solar and wind power, are also crucial in reducing dependence on fossil fuels.

(b) **Policy Shifts and Global Cooperation**. Governments must strengthen environmental laws and promote global agreements like the Paris Climate Accord to address shared challenges. Policies encouraging sustainable farming, water conservation, and afforestation are essential.

(c) **Restoration Projects**. Large-scale efforts like reforestation, wetland restoration, and coral reef rehabilitation can reverse some of the damage caused by human activities. Programs like India’s National Afforestation Program are examples of proactive measures.

(d) **Community Involvement**. Empowering communities to take part in conservation efforts through education, local initiatives, and participatory projects ensures that change happens at the grassroots level.

27. **A Sustainable Vision**. The future of environmental conservation lies in a holistic approach that integrates technology, policy, education, and individual action. While challenges are significant, human ingenuity and collaboration offer hope. By adopting sustainable practices and fostering a culture of conservation, we can secure a healthier, more resilient planet for future generations.

CONCLUSION

28. In conclusion, environmental awareness and conservation are essential for the health and sustainability of our planet. Understanding the impact of human activities on the environment, recognizing the importance of biodiversity, and acknowledging the functions of ecosystems are critical for effective conservation efforts. Pollution, climate change, and resource depletion pose significant challenges that require both mitigation and adaptation strategies. By transitioning to renewable resources, adopting sustainable practices, and enforcing environmental laws and policies, we can work towards reducing our environmental footprint. The roles of individuals, communities, and governments are vital in driving positive change and ensuring that natural resources are preserved for future generations. Ultimately, embracing environmental stewardship and sustainable development will help balance our needs with the health of the planet. Through informed choices and collective action, we can contribute to a more resilient and equitable world, ensuring a thriving environment for ourselves and generations to come.

SUMMARY

- **Environmental Awareness**. It involves understanding environmental issues caused by activities like deforestation, pollution, and urbanization, and taking measures to reduce their negative impacts.
- **Importance of Biodiversity**. Biodiversity, encompassing species, genetic, and ecosystem diversity, is crucial for ecological balance, economic benefits, and cultural heritage, ensuring the survival of life on Earth.
- **Ecosystem Functions**. Ecosystems, composed of interacting living and non-living components, perform vital functions like nutrient cycling, pollination, and climate regulation, supporting life and natural processes.
- **Environmental Pollution**. Pollution, categorized as air, water, soil, and noise pollution, disrupts ecosystems and poses health hazards due to harmful substances introduced by human and natural activities.
- **Climate Change**. Climate change results from greenhouse gas emissions and human activities, leading to global warming, extreme weather, and threats to ecosystems and biodiversity.
- **Conservation of Natural Resources**. Conservation aims to sustainably utilize resources like forests, water, and biodiversity through methods like reforestation, recycling, and adopting renewable energy.
- **Role of Individuals and Communities**. Eco-friendly practices by individuals, community clean-ups, and public awareness campaigns contribute significantly to conservation efforts.
- **Government Policies**. Policies like the Environment Protection Act, afforestation programs, and incentives for green technologies play a vital role in environmental conservation.
- **Sustainable Development**. It emphasizes balancing economic growth with environmental protection to meet present needs without compromising future generations' ability to thrive.
- **Future Challenges**. Climate change, resource scarcity, biodiversity loss, and invasive species remain critical challenges, requiring innovative technologies and global cooperation for effective conservation.

ASSESSMENT EXERCISE

Multiple-Choice Questions

Q1. What does environmental awareness primarily involve?

(a) Understanding economic policies
(b) Recognizing the impact of human activities on the environment
(c) Learning about historical events
(d) Studying technological advancements

Q2. Why is understanding environmental issues important?

(a) It helps us make informed decisions that protect natural resources
(b) It provides information on global politics
(c) It improves our knowledge of ancient cultures
(d) It teaches us to cook

Q3. What is biodiversity?

(a) The number of technological devices
(b) The variety of life on Earth, including plants, animals, and microorganisms
(c) The types of languages spoken worldwide
(d) The history of human civilizations

Q4. Which of the following is a threat to biodiversity?

(a) Habitat destruction
(b) Increased literacy rates
(c) Technological advancements
(d) Improved healthcare

Q5. What is one function of ecosystems?

(a) Nutrient cycling
(b) Creating internet networks
(c) Developing new medicines
(d) Urban planning

Q6. Why is it important to understand ecosystem functions?

(a) To appreciate the importance of protecting ecosystems
(b) To learn about fashion trends
(c) To understand political systems
(d) To study ancient architecture

Q7. What does environmental pollution involve?

(a) The creation of art
(b) The development of new technologies
(c) The expansion of educational institutions
(d) The introduction of harmful substances into the environment

Q.8 Which type of pollution can severely affect health and ecosystems?

(a) Air pollution
(b) Cultural pollution
(c) Technological pollution
(d) Historical pollution

Q9. What is a primary cause of climate change and global warming?

(a) Higher literacy rates
(b) Increase in greenhouse gases
(c) Advances in space exploration
(d) Growth in urban areas

Q10. Which of the following is a strategy for mitigating climate change?

(a) Reducing greenhouse gas emissions through renewable energy
(b) Expanding fossil fuel use
(c) Increasing deforestation
(d) Encouraging industrial pollution

Q11. What is an example of a renewable resource?

(a) Solar energy
(b) Coal
(c) Natural gas
(d) Uranium

Q12. Why is it important to shift towards renewable resources?

(a) To increase fossil fuel consumption
(b) To ensure sustainable energy use
(c) To deplete mineral resources
(d) To reduce biodiversity

Q13. Why is conserving natural resources important?

(a) To ensure their availability for future generations
(b) To maximize resource depletion
(c) To increase pollution levels
(d) To promote habitat destruction

Q14. Which method is a way to conserve natural resources?

(a) Recycling
(b) Increased waste production
(c) Deforestation
(d) Overexploitation

Q15. What role can governments play in conservation efforts?

(a) Encouraging pollution
(b) Implementing policies and regulations to protect natural resources
(c) Supporting habitat destruction
(d) Encouraging resource overuse

Q16. What is the goal of sustainable development practices?

(a) To meet present needs without compromising future generations' ability to meet theirs
(b) To maximize resource consumption
(c) To focus solely on economic growth
(d) To ignore environmental protection

Q17. What is the purpose of environmental laws and policies like 'Mission LIFE'?

(a) To increase greenhouse gas emissions
(b) To encourage industrial expansion
(c) To promote sustainable practices and environmental protection
(d) To support resource depletion

Q18. How can individuals contribute to environmental conservation?

(a) By increasing waste production
(b) By adopting eco-friendly habits
(c) By supporting deforestation
(d) By promoting pollution

Q19. What role do communities play in conservation?

(a) Engaging in local conservation projects
(b) Ignoring environmental issues
(c) Supporting habitat destruction
(d) Encouraging non-sustainable practices

Q20. What is a future challenge in environmental conservation?

(a) Expanding urban areas
(b) Increasing resource availability
(c) Addressing climate change impacts
(d) Promoting historical research

Short Answer Questions

Q1. What is environmental awareness?

Q2. Why is biodiversity important?

Q3. What are the main types of environmental pollution?

Q4. What are renewable resources?

Q5. How can individuals contribute to conservation efforts?

Long Answer Questions

Q1. Discuss the importance of understanding and addressing environmental issues.

Q2. Explain the concept of biodiversity and the threats it faces.

Q3. Describe the impact of climate change and the strategies for mitigation and adaptation.

Q4. What are the roles of individuals, communities, and governments in conservation efforts?

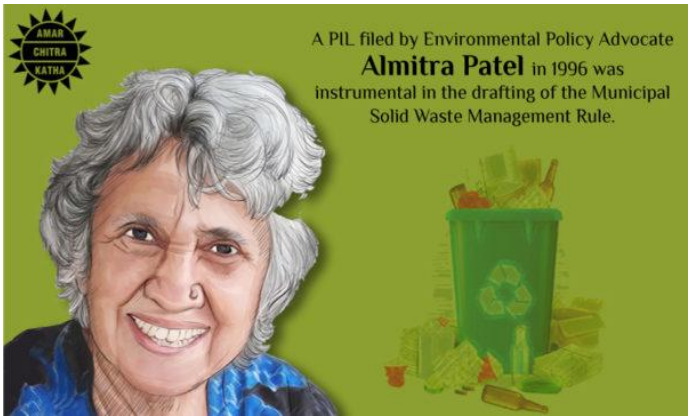
Q5. Explain the concept of sustainable development and its significance.

EA II (JD/JW)

CHAPTER II: WASTE MANAGEMENT & RECYCLING

"Change begins with individual action; every small step in waste management can lead to significant environmental benefits."

- Almitra Patel : Often called the 'Grandmother of Solid Waste Management in India'



TEACHING INSTRUCTIONS

Period : **Two.**

Type : **Lecture and Discussion.**

Year : **JD/JW (Second year)**

Conducting Officer : **ANO/ CTO.**

Training Aids : **Class Room, Computer with OHP, Screen, Presentation, Script or Book Flagged or Lesson Plan in File, Board and Markers.**

Own Time Work : **Cadets must be told to prepare for this class prior to conduct.**

Time-plan

- Introduction : 05 minutes
- Part I : 15 minutes
- Part II : 20 minutes
- Part III : 15 minutes
- Part IV : 15 minutes
- Conclusion & Summary : 10 minutes



INTRODUCTION

1. Waste management is the process of collecting, transporting, processing, and properly disposing of waste materials generated by human activity. It involves a systematic approach to ensure that waste is handled in ways that minimize its impact on the environment and public health. A crucial aspect of waste management is **recycling**, which involves converting waste into reusable materials, reducing the need for raw materials and cutting down on environmental pollution. In a country like India, where rapid urbanization and a large population generate enormous amounts of waste daily, managing this waste efficiently presents significant challenges. The lack of infrastructure, awareness, and resources further complicates the situation, making it essential to develop sustainable waste management solutions.

2. **Waste Management**. Proper waste management is essential for protecting air, water, and soil from pollution and preventing ecological harm. It promotes resource conservation through recycling and reuse, reduces strain on natural resources, and enhances community health and well-being.

3. **Recycling**. Recycling reduces the need for new raw materials, conserves energy, and lowers greenhouse gas emissions. It helps combat climate change, decreases waste sent to landfills, and alleviates pressure on disposal systems.

4. **Challenges in India**. With rapid urbanization and a large population, India faces issues like poor waste segregation, limited treatment facilities, and reliance on landfills. These challenges harm the environment and health, emphasizing the need for efficient waste management for a cleaner, sustainable future.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Waste Management in India

(b) Part II : Challenges in Waste Management

(c) Part III : Recycling and Government Initiatives

(d) Part IV : Public Awareness and Use of Future Technology in Waste Management

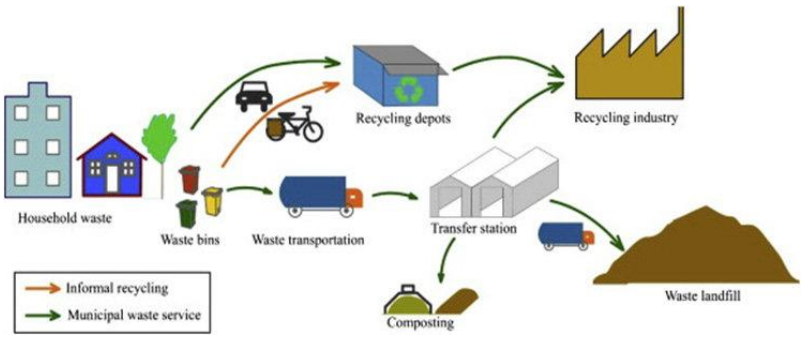
LEARNING OBJECTIVES

- Understand the importance of waste management and recycling.
- Identify the key components of an effective waste management.
- Analyse the current state of waste generation in India.
- Recognize the major challenges.
- Explore government initiatives.
- Discuss future technological advancements.

PART I : WASTE MANAGEMENT IN INDIA

Waste Generation and Composition

5. India is grappling with a burgeoning waste management crisis as it produces over 62 million tonnes of municipal solid waste (MSW) annually, with projections indicating this number will soar to 165 million tonnes by 2030 due to rapid urbanization and population growth. The composition of waste in India is diverse, comprising organic matter (50-60%), recyclable materials such as paper, glass, and metals (20-30%), hazardous waste like batteries and medical waste (10-15%), and inert construction debris. The improper handling of organic waste is particularly concerning as it decomposes to release methane, a potent greenhouse gas that exacerbates climate change, and leachate, a liquid pollutant that can contaminate soil and water. Recycling, though crucial, faces significant challenges due to poor segregation at the source, which results in valuable recyclables being contaminated. Hazardous waste management remains inadequate due to a lack of infrastructure and specialized facilities, further intensifying environmental and health hazards.



Waste Collection

6. Waste collection systems in India exhibit stark contrasts between urban and rural areas. In urban regions, around 75-80% of waste is collected, but the practice of mixed waste collection undermines efforts to recycle or compost effectively. Initiatives under the Swachh Bharat Mission have significantly enhanced door-to-door waste collection services in cities, raising awareness about the importance of proper disposal practices. However, in rural areas, waste management remains informal and largely unregulated. Organic waste is often composted using traditional methods, while non-biodegradable waste is either burned, leading to air pollution, or dumped in open areas, causing environmental degradation. Across both urban and rural settings, the primary challenge lies in the lack of source segregation at the household level. Without separating biodegradable, recyclable, and hazardous waste, downstream processes such as recycling and composting cannot achieve their full potential.

Waste Disposal

7. Disposal methods in India are far from sustainable, with most waste ending up in unscientific open dumps that are poorly managed. These open landfills contribute to significant environmental and health issues, including groundwater contamination from leachate seepage and methane emissions from decomposing organic waste. Composting and biogas generation are effective disposal solutions for organic waste, converting it into

nutrient-rich compost and energy, respectively. However, these methods face significant hurdles due to contamination from mixed waste, which reduces their efficiency and economic viability. Waste-to-energy plants are gaining traction as an innovative solution, converting non-recyclable waste into electricity. Yet, their success depends heavily on ensuring waste is adequately segregated and free of moisture or contaminants. The informal recycling sector plays an essential role in India's waste management ecosystem, with waste pickers recovering a significant portion of recyclables like plastics, metals, and glass. Despite their contributions, informal workers often operate in unsafe conditions without protective gear or access to health benefits, underscoring the need for their integration into formal waste management systems to ensure better safety, dignity, and efficiency.

8. Effective waste management in India demands a multi-pronged approach involving improved infrastructure, robust policies, and widespread public participation. Source segregation at the household level, combined with investments in sustainable waste processing technologies and the formalization of the informal recycling sector, can pave the way for a cleaner and more sustainable future.

INTERESTING FACTS

- **India's Largest Landfill is comparable to the Taj Mahal in height**. The **Ghazipur landfill** in Delhi has grown to over 65 meters tall, comparable to the height of the Taj Mahal. This massive pile of waste is a symbol of the country's struggle with effective waste disposal and the need for more sustainable waste management practices, such as composting and waste-to-energy technologies.



PART II : CHALLENGES IN WASTE MANAGEMENT

9. **Lack of Waste Segregation**. A fundamental challenge in India's waste management system is the lack of segregation of waste at the source. Most households and businesses fail to separate biodegradable waste, recyclable materials, and hazardous waste. This lack of segregation hampers downstream processing and prevents the efficient recovery of valuable



resources. Mixed waste often contaminates recyclables, rendering them unfit for reuse, and makes composting or biogas generation from organic waste less effective. Hazardous waste, when disposed of alongside general waste, poses significant health and environmental risks, including soil and water contamination and the release of toxic gases during decomposition. Awareness campaigns and strict enforcement of segregation policies are critical to addressing this issue.

10. **Insufficient Infrastructure**. India's waste management infrastructure is woefully inadequate to handle the growing volumes of municipal solid waste. Cities lack sufficient waste treatment plants, composting units, and recycling facilities, resulting in a heavy reliance on landfills, many of which are overburdened and poorly maintained. These unscientific dumps cause severe pollution, including groundwater contamination from leachate and air pollution from landfill fires. The absence of modern technologies and processing plants for waste-to-energy conversion and advanced recycling further aggravates the problem. Investments in sustainable infrastructure, such as integrated waste management facilities, are essential to modernize the system and reduce the environmental impact of waste.

11. **Funding Constraints**. Urban local bodies, which are primarily responsible for waste management, often face severe budget limitations. Insufficient funding and poor utilization of existing schemes like the Swachh Bharat Mission have stalled efforts to upgrade infrastructure and adopt modern waste management practices. Financial constraints also hinder the ability of municipalities to conduct awareness campaigns, provide adequate waste collection services, or maintain existing infrastructure. The lack of private sector participation and innovative financing models further limits the resources available for tackling the waste crisis. Addressing these financial challenges requires a combination of increased government investment, public-private partnerships, and efficient utilization of available funds.

12. **Low Public Awareness**. Public awareness and participation in waste management remain low, contributing to improper disposal practices and widespread littering. Despite government efforts through initiatives like the Swachh Bharat Mission, many citizens are unaware of the importance of waste segregation, recycling, and responsible disposal. Cultural attitudes and habits, such as throwing waste in open areas or burning it, exacerbate the problem. Without active community involvement, even the most advanced waste management systems cannot function effectively. Comprehensive educational campaigns, incentivizing responsible behaviour, and engaging communities in local waste management programs are necessary to increase public participation and accountability.

13. **Informal Sector Issues**. The informal sector plays a crucial role in waste recycling in India, with millions of waste pickers recovering valuable materials like plastic, metal, and glass. However, these workers often operate under unsafe conditions, without access to

protective equipment, healthcare, or formal recognition. The lack of integration of the informal sector into the formal waste management system limits their efficiency and reduces their potential contribution to sustainable waste management. Furthermore, the absence of legal protections and fair wages leaves these workers vulnerable to exploitation and health hazards. Formalizing the informal sector, providing safety training and equipment, and ensuring fair compensation can significantly enhance their contributions while improving their quality of life.

14. Addressing these challenges requires a holistic approach involving policy reforms, capacity building, community engagement, and investments in technology and infrastructure. By tackling these issues, India can move towards a more sustainable and efficient waste management system that not only protects the environment but also improves public health and economic outcomes.

15. **Multi-Faceted Approach For Effective Waste Management**

(a) **Government Policies**. Policies set standards for waste collection, treatment, and disposal, reducing environmental and health risks. Initiatives like Swachh Bharat Mission and Solid Waste Management Rules 2016 promote segregation, infrastructure, and waste-to-energy technologies.

(b) **Public Participation**. Citizens play a key role by segregating waste, recycling, and reducing consumption. Public awareness campaigns encourage sustainable habits and collective responsibility in waste management.

(c) **Private Sector Investment**. Private companies improve waste management through technology, infrastructure, and Public-Private Partnerships (PPP), introducing innovations like smart bins and waste-to-energy plants for greater efficiency.

(d) **Infrastructure Improvement**. Modern landfills, recycling facilities, and waste-to-energy plants are essential for reducing environmental hazards and processing waste sustainably, addressing both waste management and energy needs.

(e) **Integrating the Informal Sector**. Recognizing and empowering waste pickers can improve recycling rates and reduce the burden on municipal systems. Providing legal status, safety gear, and better resources creates an inclusive, efficient system.

PART III : RECYCLING AND GOVERNMENT INITIATIVES

Recycling Initiatives In India

16. India’s escalating waste management crisis has prompted concerted recycling efforts across the government, community, and private sectors. These initiatives aim to reduce the strain on landfills, conserve natural resources, and foster a culture of sustainability and

circular economy practices. Recycling of resources from solid waste in India is mostly undertaken by the informal sector. The formal recycling set-up in India in a minor fraction and is only in its initial stages, experimenting different models. Informal recycling in developing nations like India is a consequence of the increased gap in waste service provision



First Stage of Separation of Recyclables into Plastics, Metals and Glass, after Collection by Waste Pickers.

and the resultant ease of access to secondary raw materials which have immediate economic value. The informal sector comprises of waste pickers, itinerant waste buyers, dealers and recycling units. Waste pickers constitute the largest population in the informal sector. Generally, recyclables are collected in two ways; paper, glass and metal are collected before they enter the Municipality solid waste stream from households on an instant payment basis by local junk dealers, commonly referred as 'Kabadiwalas' and plastics are generally collected by waste-pickers from litter on streets or from heaps of waste in landfills. Shopkeepers sell recyclable items, such as newspaper, cardboard, glass containers, tin cans etc. to junk dealers too. Waste pickers retrieve recyclable materials like milk bags, plastic cups and containers, glass, etc from what is discarded by households, commercial establishments and industries. Larger commercial establishments and industries sell the recyclable waste to waste dealers in bulk, who then sell it to recycling units.

17. The recyclables collected are separated by pickers and collectors daily and transferred to small, medium and large dealers. Usually, the pickers and collectors sell to small dealers in the slums, near their residence. The small dealers sell the waste to medium or large dealers and finally the waste will be sold to the recycling units. There are almost 2000 known plastic recycling units in India. Most of these known units are in Tamil Nadu, Gujarat, Karnataka, Kerala and Madhya Pradesh. The total number of plastic recycling units (will be much higher) and the capacity of each of these units is yet to be ascertained.

18. **Government Initiatives**. The government has implemented robust policies and programs to enhance recycling and promote sustainable waste management practices:

(a) **Waste Segregation**. The Solid Waste Management Rules 2016 emphasize the segregation of waste into biodegradable, recyclable, and hazardous categories at the source. This foundational step improves recycling efficiency and facilitates better waste processing. Cities like Indore have emerged as role models, achieving 100%

door-to-door collection of segregated waste, setting benchmarks for waste management across the country.

(b) **Waste Treatment Plants**. The government has promoted the establishment of composting and waste-to-energy plants to manage organic waste sustainably. These facilities convert biodegradable waste into nutrient-rich compost or energy, reducing landfill reliance. Additionally, Material Recovery Facilities (MRFs) play a critical role in sorting recyclables such as plastic, metal, and glass, streamlining the recycling process.

(c) **Extended Producer Responsibility (EPR)**. Under EPR policies, manufacturers are responsible for recycling their products at the end of their lifecycle, particularly plastics and e-waste. By holding producers accountable, this initiative encourages the adoption of sustainable designs and supports the development of a circular economy. EPR has significantly improved recycling rates for products like packaging materials and electronic devices.

Other Government Initiatives

(d) **Swachh Bharat Mission (SBM)**. Launched in 2014, it focuses on eliminating open defecation and improving solid waste management through segregation, door-to-door collection, recycling plants, and public awareness campaigns.

INTERESTING FACTS

- **India Has One of the Highest Plastic Recycling Rates:** India recycles around 60% of its plastic waste, which is significantly higher than the global average of 20%. This is primarily due to the informal sector of waste pickers, who collect, sort, and sell plastic for recycling, playing a vital role in reducing plastic pollution despite working in challenging conditions.

(e) **Solid Waste Management Rules, 2016**. Mandates waste segregation at the source, composting, waste-to-energy technologies, and extended producer responsibility (EPR) for manufacturers.

(f) **Plastic Waste Management Rules, 2016**. Targets plastic pollution by restricting single-use plastics, promoting recycling, and requiring producers to manage their plastic waste.

(g) **Extended Producer Responsibility (EPR)**. Requires manufacturers to manage waste from their products, particularly plastic, electronic, and hazardous waste, through recycling programs and safe disposal.

(h) **Waste-to-Energy Plants**. Converts municipal waste into electricity or fuel, reducing waste volume and generating renewable energy.

(i) **National Clean Energy Fund (NCEF)**. Supports renewable energy projects, including waste-to-energy plants, and encourages public-private partnerships for waste management infrastructure.

(j) **E-Waste Management Rules, 2016**. Regulates e-waste collection and recycling, requiring producers to meet targets and promote safe disposal through formal channels.

(k) **Namami Gange Programme**. Focuses on cleaning the Ganga River by preventing waste dumping, building treatment plants, and improving waste disposal infrastructure.

(l) **Smart Cities Mission**. Promotes smart waste management with automated systems, smart bins, and real-time monitoring for better segregation and recycling.

(m) **Clean India Green India (CIGI)**. Encourages rural and urban communities to adopt eco-friendly waste practices like composting, recycling, and waste-to-energy technologies.

19. **NGO and Community Efforts**. Non-governmental organizations (NGOs) and local communities have been instrumental in creating awareness and fostering grassroots recycling initiative:

(a) **Education and Awareness**. Organizations like *Waste Warriors and Chintan* work actively to educate communities about waste segregation, recycling, and the environmental impact of improper waste disposal. These groups also collaborate with waste pickers to integrate them into recycling systems, enhancing their livelihoods and efficiency.

(b) **Composting and Plastic Recycling**. Initiatives such as *Daily Dump and Paryavaran Mitra* encourage households to adopt home composting, reducing organic waste sent to landfills. Similarly, these organizations promote innovative ways to recycle plastics, creating new products while reducing environmental pollution.

(c) **Clean-Up Campaigns**. Community-driven clean-up efforts like the *Versova Beach Clean-Up* have achieved remarkable results, removing thousands of tonnes of plastic waste from beaches and waterways. These initiatives also serve as powerful tools to raise public awareness about the importance of recycling and sustainable waste management practices.

20. **Private Sector Contributions**. Private enterprises are playing a pivotal role in advancing recycling technologies and integrating circular economy principles:

(a) **Technological Investment**: Companies such as GEM Enviro and Attero Recycling leverage advanced technologies to process materials like plastic and e-waste. These technologies enable the recovery of valuable resources, such as rare metals from electronics, reducing the dependency on virgin raw materials.

(b) **Circular Economy Models**. Innovators in the private sector are redefining waste as a resource. For instance, Reliance Industries has developed a system to transform discarded plastic bottles into fabrics, showcasing the potential of upcycling in fashion and textiles. Similarly, start-ups like *Banyan Nation* produce eco-friendly products by recycling industrial and consumer waste, demonstrating the viability of sustainable business models.

21. Recycling initiatives in India represent a collaborative effort involving the government, civil society, and the private sector. While significant progress has been made, scaling these efforts requires further investment in infrastructure, public awareness, and innovation. Strengthening policies, fostering community participation, and promoting technological advancements will be key to achieving a sustainable waste management system that aligns with India's environmental and economic goals.

PART IV : PUBLIC AWARENESS AND USE OF FUTURE TECHNOLOGY IN WASTE MANAGEMENT

Public Awareness

22. Public education and awareness campaigns are essential for promoting responsible waste management in India. These initiatives bridge the gap between policy and community involvement, encouraging citizens to participate in waste segregation, recycling, and reducing single-use plastics.

23. **Public Education Campaigns**. Public education campaigns play a pivotal role in fostering a cultural shift toward sustainable waste management practices. By educating individuals about recycling, waste reduction, and proper disposal methods, these campaigns empower communities to adopt eco-friendly habits. Nationwide initiatives, such as the Swachh Bharat Mission, leverage mass media and grassroots activities to raise awareness on a broad scale, driving significant behavioural changes. Social media platforms like Facebook and Instagram further amplify these messages, utilizing hashtags like **#SayNoToPlastic** to engage younger audiences and create viral movements around recycling and waste reduction. At the local

DID YOU KNOW?

- Several local bodies in Kerala have adopted community-based composting systems and introduced decentralized waste treatment plants. Alappuzha, known as the "Venice of the East," is a standout example, having nearly eliminated landfills by focusing on waste segregation and home composting initiatives.

level, city-specific campaigns employ community meetings, awareness rallies, and neighbourhood drives to inform residents about the importance of waste segregation and responsible disposal. These localized efforts ensure that even small communities actively contribute to the national goal of sustainable waste management.

24. **Role of Schools, NGOs, and Social Media**. Schools, NGOs, and social media collectively serve as influential agents of change in waste management education. Educational institutions are uniquely positioned to instil sustainable habits from an early age, with programs like the Green Schools Programme incorporating hands-on activities such as waste audits, composting, and recycling projects. These initiatives not only teach students about waste management but also encourage them to become ambassadors of change within their communities. NGOs like Chintan and Waste Warriors play a crucial role by organizing workshops, cleanup drives, and educational campaigns to engage diverse audiences and promote responsible practices. Meanwhile, social media platforms act as powerful tools for dissemination, where influencers and organizations share practical recycling tips, promote eco-friendly behaviours, and run creative campaigns to inspire action. This multifaceted approach ensures that waste management awareness reaches all sections of society.

25. **Successful Initiatives**. Certain cities and institutions in India have demonstrated remarkable success in waste management, serving as models for others to emulate. Indore, repeatedly ranked as India's cleanest city, owes its success to a combination of effective policies, community participation, and rigorous waste segregation practices. The city's innovative waste management systems, which include door-to-door collection and composting, have significantly reduced landfill dependency. Similarly, schools like The Riverside School have implemented exemplary practices such as waste segregation and composting, setting benchmarks for educational institutions and inspiring nearby communities to adopt similar measures. These success stories highlight the transformative impact of well-planned initiatives and collective action.

26. **Reducing Single-Use Plastics and Composting**. Public education campaigns have been instrumental in reducing single-use plastics and promoting composting. India's ban on specific single-use plastic items is supported by widespread educational efforts that advocate for eco-friendly alternatives like cloth bags, biodegradable packaging, and reusable products. Campaigns emphasize the environmental dangers of plastic pollution while encouraging individuals and businesses to adopt sustainable practices. Composting is another critical focus area, with public education initiatives teaching households and communities to manage organic waste effectively. Home and community composting programs not only reduce the burden on landfills but also produce nutrient-rich compost for agricultural and gardening purposes, creating a circular economy for organic waste.

27. **Proper Disposal Methods for Hazardous Waste**. Hazardous waste, including e-waste, poses significant environmental and health risks if not managed properly. Public education campaigns emphasize the importance of safe disposal methods for such waste. E-waste collection drives, often organized in collaboration with local authorities and NGOs, ensure that harmful materials like batteries, electronics, and medical waste are processed responsibly. Awareness efforts also educate individuals about designated drop-off points, recycling programs, and the long-term benefits of proper hazardous waste management. These initiatives are essential for minimizing the toxic impact of hazardous waste on the environment and public health while fostering a culture of responsibility and sustainability.

DID YOU KNOW?

- Indore has been ranked the cleanest city in India for six consecutive years under the Swachh Survekshan rankings. The city has achieved this by implementing effective waste segregation at source, door-to-door collection, and processing almost 100% of its waste through composting and recycling.

Future Technological Advancements In Waste Management

28. As India continues to grapple with mounting waste management challenges, technological innovations offer transformative solutions that can revolutionize how waste is processed, recycled, and managed. These advancements focus on enhancing resource recovery, reducing environmental degradation, and increasing operational efficiency, setting the stage for a cleaner and more sustainable future.

29. **Waste-to-Energy Technologies.** Waste-to-energy (WTE) technologies play a pivotal role in addressing the dual challenge of reducing landfill dependency and generating renewable energy.

(a) **Overview**. WTE processes convert non-recyclable waste into electricity, heat, or fuel, significantly lowering landfill volumes while creating sustainable energy.

(b) **Incineration Plants**. Incineration remains a popular method for converting waste into energy. For instance, the Timarpur-Okhla plant in Delhi processes 1,950 tonnes of waste daily to generate 16 MW of power. However, concerns about air pollution and the release of toxic emissions necessitate advanced filtration and pollution control measures.

(c) **Biogas Production**. Organic waste, such as food scraps and agricultural residue, can be effectively managed through anaerobic digestion to produce biogas. A notable example is the Indore Bio-CNG plant, which processes 550 tonnes of organic waste daily to generate compressed natural gas (CNG) for vehicles, reducing reliance on fossil fuels.

(d) **Emerging Methods**. Advanced technologies like pyrolysis and gasification are gaining traction. Pyrolysis converts waste into bio-oil, while gasification produces syngas, which can be used for energy generation. These methods are versatile, capable of handling diverse waste types, including plastics, with reduced emissions compared to traditional incineration.

30. **Smart Waste Management Systems.** Smart technologies leveraging Artificial Intelligence (AI) and the Internet of Things (IoT) are revolutionizing the efficiency and transparency of waste management processes.

(a) **AI and IoT Integration**. AI-driven optimization of waste collection routes and sorting processes enhances efficiency while reducing costs. For example, smart bins equipped with IoT sensors can notify waste collectors when full, ensuring timely pickups and avoiding unnecessary trips. These systems are being piloted in cities like Bengaluru and Pune to streamline collection processes.

(b) **Data-Driven Approaches**. Real-time monitoring and data analytics empower municipalities to track waste generation, monitor disposal sites, and optimize resource allocation. Cities like Mumbai and Hyderabad are exploring smart waste management systems to improve urban waste management efficiency and responsiveness.

31. **Advanced Recycling Technologies.** Recycling technologies are evolving to tackle the challenges of processing contaminated, complex, or mixed waste, particularly plastics, which are notoriously difficult to manage.

(a) **Chemical Recycling**. Unlike traditional mechanical recycling, chemical recycling breaks down plastics into their basic chemical components, enabling the recycling of mixed or contaminated plastics. Companies like Reliance Industries are spearheading initiatives to implement this cutting-edge technology in India.

(b) **Plastics-to-Fuel**. Through pyrolysis, plastic waste can be converted into liquid fuels, offering an alternative energy source while reducing plastic pollution. This approach aligns with circular economy principles, turning waste into a valuable resource.

(c) **Innovations in Polymer Recycling**. Emerging enzymatic processes and other advanced methods enable the recycling of complex plastics, such as multi-layered packaging, which typically ends up in landfills due to their challenging composition. These innovations promise to significantly enhance recycling rates and material recovery.

CONCLUSION

32. In conclusion, waste management and recycling are essential for protecting the environment, conserving natural resources, and addressing India's growing waste problem. We have discussed the importance of managing waste effectively, the current challenges, such as improper waste segregation, inadequate infrastructure, and low public awareness, and the need for a multifaceted approach involving government policies, public participation, and private sector investment.



33. Public education campaigns, innovative recycling technologies, and waste-to-energy solutions hold promise for addressing these issues. However, success largely depends on everyone contributing to waste reduction and recycling efforts. The role of public participation is crucial- citizens need to segregate waste, reduce single-use plastics, and support recycling initiatives.

34. For **NCC cadets**, there are many ways to contribute to better waste management in your daily life. Start by **reducing waste** wherever possible, such as avoiding single-use plastics. Practice **reuse** by finding creative ways to give items a second life. **Recycle** as much as you can, segregating your waste properly at home and school. Cadets can also play a key role in raising awareness within their communities, promoting responsible waste disposal and encouraging others to adopt eco-friendly habits. By taking small yet meaningful actions, each of us can help make India cleaner, greener, and more sustainable for future generations.

SUMMARY

- **Definition and Importance of Waste Management and Recycling.** Waste management involves the collection, transportation, processing, and disposal of waste, while recycling focuses on converting waste materials into reusable forms. These practices are essential for preventing environmental pollution and conserving natural resources.
- **Challenges in Waste Management in India**. Major challenges include lack of waste segregation at the source, inadequate infrastructure for waste treatment, insufficient funding, low public awareness, and unsafe working conditions for informal waste workers.
- **Waste Composition and Current Scenario in India**. India generates around 62 million tonnes of waste annually, comprising organic waste (50%), recyclables like paper and plastic (20%), and non-recyclables. Waste collection rates are improving, but proper treatment and disposal remain inadequate.
- **Government Initiatives**. Programs like the **Swachh Bharat Mission** have significantly improved sanitation and waste management through awareness campaigns, waste segregation drives, and investments in waste processing facilities.
- **Role of Public Participation**. Citizens play a critical role in waste management by segregating waste at the source, reducing waste generation, and adopting recycling practices. Public awareness campaigns by schools, NGOs, and social media are key to fostering behavioural change.
- **Recycling Initiatives**. The government, NGOs, and private companies are actively involved in promoting recycling. Initiatives include composting organic waste, developing recycling plants, and addressing challenges like single-use plastic and e-waste.
- **Technological Advancements**. Future solutions include waste-to-energy plants for renewable energy generation, smart waste management systems using AI and IoT, and advanced recycling methods like chemical recycling for plastics.
- **Success Stories in Indian States**. States like Kerala have excelled in decentralized waste management through community-driven composting and recycling efforts, serving as a model for other regions.
- **Role of Informal Waste Workers**. Informal waste pickers contribute significantly by recovering recyclables, reducing landfill waste, and promoting recycling. Their integration into formal waste management systems is crucial for improving efficiency and safety.
- **Call to Action for NCC Cadets and Communities**. To address waste management challenges, individuals are encouraged to adopt sustainable practices, such as waste segregation, composting, reducing single-use plastics, and raising awareness about the importance of recycling.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Which Indian city has been ranked the cleanest city in India for multiple years under the Swachh Survekshan rankings?

(a) Delhi

(b) Mumbai

(c) Indore

(d) Chennai

Q2. What percentage of India's plastic waste is typically recycled?

(a) 20%

(b) 30%

(c) 50%

(d) 60%

Q3. Which initiative aims to clean up cities and rural areas in India?

(a) Clean India Mission

(b) Green India Mission

(c) Swachh Bharat Mission

(d) Sustainable Development Goals

Q4. What is a significant challenge in waste management in India?

(a) Overuse of raw materials

(b) Excessive recycling

(c) Lack of proper waste segregation

(d) Overproduction of biodegradable waste

Q5. Which Indian state is known for its decentralized waste management systems?

(a) Tamil Nadu

(b) Maharashtra

(c) Kerala

(d) Karnataka

Q6. How much organic waste does India generate approximately?

(a) 25%

(b) 40%

(c) 50%

(d) 75%

Q7. What does the Swachh Bharat Mission aim to achieve?

(a) Increase industrial productivity

(b) Promote sustainable agriculture

(c) Improve sanitation and waste management

(d) Boost tourism

Q8. What is a major component of India's waste composition?

(a) Glass

(b) Hazardous waste

(c) Organic waste

(d) E-waste

Q9. Which sector contributes significantly to recycling efforts in India but often works in hazardous conditions?

(a) Government workers

(b) Private sector employees

(c) Informal waste workers

(d) Educational institutions

Q10. What is the primary benefit of recycling waste?

(a) Increasing waste production

(b) Reducing energy consumption

(c) Enhancing pollution levels

(d) Depleting natural resources

Q11. What is the primary source of waste-to-energy plants in India?

(a) Organic waste

(b) Recyclable materials

(c) Plastic waste

(d) E-waste

Q12. Which of the following is NOT a challenge in waste management in India?

(a) Adequate funding

(b) Low public awareness

(c) Insufficient infrastructure

(d) Informal sector involvement

Q13. Which community-based initiative is prominently used in Kerala for waste management?

(a) Landfill expansion

(b) Decentralized composting

c) Large incinerators

(d) Waste-to-energy plants

Q14. Which organization plays a significant role in promoting waste segregation and recycling at the grassroots level?

(a) Central Pollution Control Board

(b) Ministry of Environment

(c) Waste Warriors

(d) TERI

Q15. What is the primary goal of Extended Producer Responsibility (EPR) in India?

(a) Increase production rates

(b) Reduce product costs

(c) Hold companies accountable for their products' waste

(d) Promote international trade

Q16. Which of the following materials is considered hazardous waste?

(a) Paper

(b) Plastic bottles

(c) Batteries

(d) Glass jars

Q17. What role do smart waste management systems use to improve waste handling?

(a) Manual monitoring

(b) AI and IoT technology

(c) Paper-based systems

(d) Traditional methods

Q18. What is one significant technological advancement in waste management?

(a) Manual sorting of waste

(b) Waste-to-energy technology

(c) Increased landfilling

(d) Reduced recycling efforts

Q19. Which of the following is NOT typically a component of the informal recycling sector?

(a) Waste pickers

(b) Recycling centres

(c) Waste brokers

(d) Informal workers

Q20. What is the estimated daily capacity of the largest waste-to-energy plant in Delhi?

(a) 1,000 tonnes

(b) 1,500 tonnes

(c) 2,000 tonnes

(d) 2,500 tonnes

Short Answer Questions

Q1. Explain the significance of the Swachh Bharat Mission in improving waste management in India.

Q2. Describe the role of informal waste workers in India's recycling sector.

Q3. What are the primary challenges faced in implementing effective waste management systems in India?

Q4. How does decentralized composting contribute to waste management, particularly in Kerala?

Q5. What are the benefits of using waste-to-energy plants for waste management?

Long Answer Questions

Q1. Discuss the impact of rapid urbanization on waste generation and management in India. Include specific challenges and potential solutions.

Q2. Evaluate the effectiveness of government initiatives like the Swachh Bharat Mission in enhancing waste management practices in Indian cities. What improvements can be made?

Q3. Analyse the role of public awareness and participation in waste management. How can educational campaigns and community involvement improve recycling rates and waste reduction?

Q4. Compare and contrast the waste management strategies of different Indian states, focusing on successful initiatives and areas needing improvement. Use Kerala as a case study.

Q5. Explore future technological advancements in waste management and recycling. How might innovations such as smart waste management systems and chemical recycling shape the future of waste handling in India?

GA I (JD/JW)

CHAPTER I : ADVENTURE ACTIVITIES

"Adventure is the essence of life; it teaches us to face fear, conquer challenges, and emerge stronger."

Colonel Narendra 'Bull' Kumar



TEACHING INSTRUCTIONS:

Period	:	**One.**
Type	:	**Lecture and Discussion**
Year	:	**JD/ JW (Second Year)**
Conducting Officer	:	**ANO/ CTO.**
Training Aids	:	**Class Room, Computer with OHP, Screen, Presentation, Script or Book Flagged or Lesson Plan in File, Board and Markers.**
Own Time Work	:	**Cadets must be told to prepare for this class prior to conduct.**

Time-plan

- Introduction : 03 minutes
- Part I : 07 minutes
- Part II : 08 minutes
- Part III : 07 minutes
- Part IV : 08 minutes
- Conclusion, Summary & Discussion : 07 minutes



INTRODUCTION

1. Adventure activities are more than just thrilling experiences; they are powerful tools for holistic development, combining physical, mental, and social growth. Activities like trekking, rock climbing, rafting, paragliding, and mountaineering encourage individuals to step out of their comfort zones, providing a platform to build essential life skills and improve overall well-being. Engaging in adventure activities promotes excellent physical health. Trekking and rock climbing enhance stamina, strength, and endurance, while activities like rafting improve cardiovascular fitness and coordination. These high-energy activities challenge the body in diverse ways, leading to improved agility, balance, and flexibility. Beyond fitness, they foster a deep connection with the natural world, encouraging healthier lifestyle choices and a greater appreciation for outdoor physical activity. Adventure activities play a significant role in reducing stress and boosting mental clarity. Immersing oneself in nature and facing personal challenges helps individuals break free from daily routines and fosters mindfulness. The adrenaline rush during these activities enhances focus and concentration, while the sense of accomplishment that follows boosts self-esteem and confidence. Overcoming obstacles in an adventurous setting fosters resilience, teaches perseverance, and cultivates a positive mindset.

2. Adventure activities are a natural training ground for critical life skills. They demand quick decision-making, strategic thinking, and creative problem-solving, often under pressure. Participants develop leadership skills as they take initiative and guide others, while teamwork and cooperation are strengthened through group challenges. These skills are transferable to various aspects of life, from academics and professional settings to personal relationships. On a social level, adventure activities bring people together, encouraging collaboration and building camaraderie. Whether navigating a mountain trail or coordinating a raft through rapids, participants must communicate effectively and rely on each other. These shared experiences foster trust, improve communication, and create lasting bonds. Such activities often bring together diverse groups of people, promoting inclusivity and mutual respect, which enrich participants' social interactions and networks. Many adventure activities occur in natural settings, fostering a sense of environmental stewardship among participants. Through direct interaction with pristine landscapes, individuals become more conscious of the importance of conserving natural resources and protecting ecosystems.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Physical & Mental Health Benefits of Adventure.

(a) Part II : Personal and social development through adventure activities.

(a) Part III : Various Adventure Activities.

(a) Part IV : Safety Aspects

LEARNING OBJECTIVES

- Understand the significance of adventure activities.
- Identify the physical & mental health benefits.
- Analyse the growth in personal development, teamwork and social connections.
- Learn about various adventure activities.
- Explore adventure in NCC.
- Understand the essential safety measures.

PART I : PHYSICAL & MENTAL HEALTH BENEFITS OF ADVENTURE ACTIVITIES

3. Adventure activities provide a unique and engaging way to enhance both physical and mental health. By combining outdoor exploration with physical exertion, these activities challenge the body and mind, leading to holistic well-being.

4. **Physical Health Benefits.** Adventure activities are dynamic and often involve rigorous physical exertion, providing a multitude of health benefits:

(a) **Cardiovascular Fitness**. Engaging in activities like hiking, mountain biking, or rafting helps increase heart rate and improve circulation. These activities strengthen the heart and lungs, enhancing cardiovascular endurance and reducing the risk of conditions like hypertension, heart disease, and stroke. Regular participation contributes to a healthier cardiovascular system, promoting longevity and vitality.

(b) **Muscle Strength and Endurance**. Activities such as rock climbing, trekking, and kayaking require the use of multiple muscle groups simultaneously. For instance, rock climbing strengthens upper body muscles like the arms and shoulders while also engaging core muscles for stability. Trekking builds lower body strength, and kayaking tones the arms, chest, and back. Over time, these activities improve muscle endurance, allowing participants to sustain physical effort for extended periods.

(c) **Coordination and Flexibility**. Adventure sports like surfing, skiing, demand precision, balance, and agility. These activities train the body to coordinate movements effectively, enhancing motor skills. Dynamic motions, such as those in climbing or yoga-based adventure programs, improve flexibility, reducing the risk of muscle strain and injury during everyday activities or other physical endeavours.

(d) **Weight Management and Body Composition**. Adventure activities are excellent for burning calories and managing body weight. Whether it is cycling up a challenging trail or paddling in a river, these activities increase metabolism and contribute to fat loss. At the same time, they build lean muscle mass, leading to a healthier and more balanced body composition.

5. **Mental Health Benefits.** In addition to physical fitness, adventure activities offer profound psychological advantages that contribute to mental well-being:-

(a) **Stress Reduction**. Physical activities, especially those conducted in natural outdoor settings, are known to release endorphins—hormones that alleviate stress and promote happiness. Adventure activities provide a refreshing escape from daily life’s monotony and pressures, fostering relaxation and mental rejuvenation. Immersing oneself in nature adds an element of calmness, reducing anxiety and elevating mood.

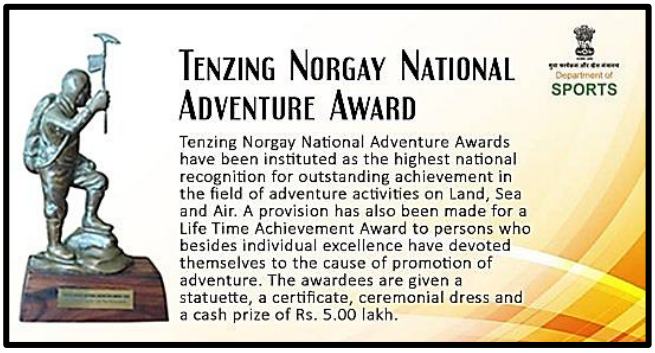
(b) **Boosting Self-Confidence**. Conquering physical and mental challenges in adventure sports, such as scaling a rock face or completing a long hike, instils a strong sense of accomplishment. These experiences build self-confidence, helping individuals feel empowered to tackle challenges in other aspects of life. The newfound resilience gained through these achievements creates a positive and motivated outlook.

(c) **Enhancing Focus and Concentration**. Adventure activities often demand acute mental engagement, whether it is navigating a trail, strategizing for a climb, or executing precise movements in an obstacle course. This need for focus and quick decision-making sharpens mental clarity and concentration. Over time, these skills enhance cognitive function, benefiting academic, professional, and personal endeavours.

6. Awards for adventure activities in India are conferred by both government and private organizations to recognize individuals and institutions for their courage, leadership, and contribution to promoting adventure sports and outdoor activities.

7. **Government Awards for Adventure Activities**

(a) **Tenzing Norgay National Adventure Award**. The Tenzing Norgay National Adventure Award, instituted by the Government of India under the Ministry of Youth Affairs and Sports, is the highest national honour for adventure sports in India. Named after Tenzing Norgay, one of the first individuals to scale Mount Everest in 1953, the award celebrates extraordinary achievements in adventure sports and efforts to promote a spirit of adventure among youth. It is presented in four categories: Land Adventure, Water Adventure, Air Adventure, and Lifetime Achievement. Recipients are honoured with a cash prize, a citation, and a bronze statuette of Tenzing Norgay.



(b) **Arjuna Award (Adventure Sports)**. The Ministry of Youth Affairs and Sports, Government of India, recognizes exceptional performance in adventure sports as one of the eligible disciplines for its awards. This recognition is based on outstanding achievements over four years in the field. The award includes a statuette, a citation, and a cash prize, honouring athletes who excel in various sports, including adventure disciplines, and celebrating their contributions to the sporting landscape.

8. **Private and Non-Governmental Awards**

(a) **Himalayan Club Awards**. The Himalayan Club is dedicated to recognizing outstanding mountaineering expeditions and significant contributions to Himalayan exploration. Its awards honour achievements across categories, including lifetime accomplishments and exceptional expeditions, celebrating excellence and commitment in the field.

(b) **National Adventure Foundation Awards**. The National Adventure Foundation (NAF) recognizes institutions and individuals dedicated to promoting adventure activities, with a special emphasis on encouraging participation among women and children. To honour their contributions, the NAF presents a prestigious trophy and citation, aiming to foster grassroots involvement and enthusiasm for adventure pursuits.

(c) **Indian Mountaineering Foundation (IMF) Awards**. The Indian Mountaineering Foundation recognizes and honours mountaineers and climbers who have successfully completed challenging expeditions. Through awards comprising plaques, citations, and occasional sponsorships, the institution encourages innovation and exploration in mountaineering, fostering a spirit of adventure and excellence in the field.

9. **Corporate and Adventure Tourism Awards**

(a) **Adventure Tour Operators Association of India (ATOAI) Awards**. The Adventure Tour Operators Association of India (ATOAI) recognizes excellence in adventure tourism and eco-tourism through its prestigious awards. These accolades are categorized into areas such as Best Adventure Operator and Best Adventure Destination, among others. By honouring outstanding achievements, ATOAI plays a significant role in boosting quality standards within the adventure tourism sector, fostering innovation and sustainability in this dynamic industry.

(b) **Corporate-Sponsored Awards**. Corporates like Tata, Red Bull, and others sponsor awards for specific activities such as marathons, extreme sports, and endurance events. Examples: Red Bull X-Alps Challenge, Tata Mumbai Marathon Adventure Categories.

PART II : PERSONAL AND SOCIAL DEVELOPMENT THROUGH ADVENTURE ACTIVITIES

10. **Building Confidence.** Many adventure activities, like group expeditions or team sports, require cooperation and collaboration. Participants learn to communicate effectively, respect diverse viewpoints, and work towards common goals, strengthening their teamwork skills.

11. **Developing Leadership Qualities.** Participants often take turns leading group activities, making decisions, and guiding others, which fosters leadership. Adventure settings encourage individuals to take initiative, manage resources, and inspire others, essential qualities in any leader.

12. **Improving Problem-Solving Abilities.** Adventure activities often present unexpected challenges that require quick thinking and creative solutions. Participants learn to assess situations, evaluate options, and implement effective strategies to overcome obstacles.

13. **Resilience and Perseverance.** Participants often face setbacks or difficulties during adventure activities (e.g., bad weather, challenging terrains). Overcoming these obstacles teaches individuals the importance of perseverance and adaptability, essential traits for personal growth.

14. **Communication Skills.** Clear communication is crucial in team settings, especially during activities that require coordination (e.g., rock climbing, rafting). Participants learn to articulate ideas, listen actively, and provide constructive feedback, which are valuable skills in all aspects of life.

15. **Cultural Awareness and Sensitivity.** Engaging in activities in diverse environments often involves interacting with people from different backgrounds. This exposure fosters appreciation and understanding of various cultures, enhancing empathy and social harmony.

16. **Trust-Building.** Activities like zip-lining or trust falls require participants to rely on teammates, fostering mutual trust. Building trust enhances group dynamics, leading to stronger relationships both in and out of adventure settings.

17. **Goal Setting and Achievement.** Adventure activities often involve setting specific goals (e.g., reaching a summit, completing a difficult hike). Achieving these goals teaches participants the value of planning, dedication, and the satisfaction of accomplishment.

18. **Environmental Stewardship.** Engaging with nature during adventure activities fosters a sense of responsibility towards the environment. Participants often learn the importance of preserving natural resources and can become advocates for sustainable practices.

19. **Creativity and Innovation.** Facing new challenges requires participants to think outside the box and come up with creative solutions. This process enhances cognitive flexibility and encourages innovative thinking, which can be applied in other areas of life.

20. **Self-Discovery.** Engaging in challenging situations helps individuals understand their strengths, weaknesses, and preferences. This self-awareness is crucial for personal development and helps guide future life choices.

PART III : VARIOUS ADVENTURE ACTIVITIES

21. Land Adventure Activities

(a) **Hiking/ Trekking**. Hiking or trekking involves walking along natural trails, often in mountainous, hilly, or forested regions. While hiking usually refers to shorter, easier trails, trekking is typically more challenging and involves multi-day journeys. It requires basic fitness, navigation, and endurance and is popular in destinations like the Roop Kund Trek and Valley of Flowers in Uttarakhand, as well as the Hampta Pass in Himachal Pradesh. Benefits include physical fitness, mental rejuvenation, and a connection with nature.



(b) **Camping**. Camping involves staying outdoors in tents, often in natural settings such as forests, mountains, or riversides. It combines activities like cooking over a fire, stargazing, and storytelling, requiring survival skills and the ability to set up tents. Popular locations include Rishikesh, Tso Moriri Lake in Ladakh, and Coorg in Karnataka. Camping fosters self-reliance and bonding with nature.

(c) **Mountaineering**. Mountaineering combines hiking, trekking, and climbing to reach mountain summits, often navigating glaciers, snow, and extreme weather conditions. It requires high endurance, technical climbing skills, and knowledge of survival techniques. Popular peaks include Stok Kangri in Ladakh, Mount Everest Base Camp, and Kanchenjunga in Sikkim. The activity fosters adventure, personal growth, and teamwork.

(d) **Mountain Biking**. Mountain biking involves cycling on off-road trails through forests, hills, or rugged terrains using specialized bikes with shock absorbers and rugged tires. Requiring proficiency in cycling, stamina, and balance, it is popular on trails such as the Manali-Leh Highway, Coorg in Karnataka, and Munnar in Kerala. The activity promotes cardiovascular health, adventure, and scenic exploration.

(e) **Caving (Spelunking)**. Caving or spelunking is the exploration of underground caves and passages, requiring crawling, climbing, and sometimes swimming. It demands navigation skills, safety awareness, and physical agility. Famous locations include the Meghalaya caves (Siju , Mawsmai and Liat Prah caves). It allows the exploration of geological wonders and enhances problem-solving abilities.

(f) **Zip Lining**. Zip lining involves gliding on a steel cable using a harness across trees, rivers, or valleys. It requires basic fitness and the ability to overcome a fear of heights. Popular locations include Neemrana Fort in Rajasthan, Rishikesh in Uttarakhand, and Jodhpur in Rajasthan. It offers a thrilling experience with panoramic views.

(g) **Bungee Jumping**. Bungee jumping is an adrenaline-pumping activity where participants jump from a high platform with an elastic cord tied to their feet. This activity demands mental preparation and courage and is popular in Rishikesh, Lonavala, and Bangalore. It helps in overcoming fear and provides an intense adrenaline rush.

(h) **Rock Climbing**. Rock climbing involves ascending natural rock faces or artificial climbing walls using specialized equipment like ropes, harnesses, and carabiners. This activity demands strength, balance, and problem-solving skills and is popular in places such as Hampi in Karnataka, Shey Rock in Ladakh, and Malshej Ghat in Maharashtra. It enhances physical strength, focus, and confidence.



Rock Climbing by NCC cadets at Gwalior

(i) **Off-Roading**. Off-roading involves driving specially designed vehicles over unpaved and challenging terrains like mud, sand, and rocks. It demands vehicle handling skills, terrain assessment, and technical driving. Popular routes include Spiti Valley in Himachal Pradesh, the Rann of Kutch in Gujarat, and the sand dunes of Rajasthan. It combines adventure, mechanical skills, and exploration of remote areas.

(j) **Horseback Riding**. Horseback riding along wilderness trails offers a peaceful and adventurous way to explore natural landscapes. Requiring riding proficiency and knowledge of horse care, it is popular in Gulmarg in Kashmir, Munnar in Kerala, and Udaipur in Rajasthan. It promotes bonding with animals, improves posture, and provides relaxation.

(k) **Safari**. A safari is a wildlife exploration activity focused on observing animals in their natural habitat, often through guided tours in vehicles. It requires wildlife awareness and patience and is popular in Jim Corbett National Park, Kaziranga National Park, and Ranthambore National Park. It enhances understanding of biodiversity and conservation.

(l) **Skiing**. Skiing involves gliding on snow-covered trails using skis for recreation or competition. It requires balance, coordination, and skiing techniques and is popular in Gulmarg, Auli, and Solang Valley. Skiing combines adventure, physical fitness, and scenic snow-clad landscapes.

22. **Water Adventure Activities.**

(a) **Scuba Diving**. Scuba diving involves exploring underwater ecosystems using a self-contained breathing apparatus (scuba). It requires swimming proficiency, breathing techniques, and basic training. Popular destinations include the Andaman and Nicobar Islands, Lakshadweep, and Goa. It allows an up-close experience of marine biodiversity and improves breathing control.

(b) **Snorkelling**. Snorkelling is a surface water activity using a mask and snorkel to observe marine life. It requires basic swimming skills and breathing techniques. Popular locations include Netrani Island, Elephant Beach, and Tarkarli. It offers easy access to marine ecosystems without the need for deep diving.

(c) **Kayaking**. Kayaking involves manoeuvring a narrow boat through water using a double-bladed paddle. It requires upper body strength and navigation skills and is popular in places like the Zanskar River, Ganga River, and Alleppey backwaters. Kayaking builds strength, relieves stress, and offers scenic exploration.



NCC Cadets Kayaking at Backwaters of Alappuzha as part of Fit India Week

(d) **Rafting**. Rafting involves paddling through rivers in inflatable rafts, often tackling white-water rapids. It requires teamwork, quick reflexes, and endurance. Popular locations include Rishikesh, the Teesta River, and the Beas River. Rafting provides thrills and the joy of conquering natural challenges.

(e) **Surfing**. Surfing involves riding waves on a specially designed board while balancing and manoeuvring. Requiring balance, core strength, and wave judgment, it is popular in Kovalam, Pondicherry, and Varkala. Surfing enhances fitness and offers an adrenaline rush.

(f) **Wakeboarding**. Wakeboarding is an exciting activity where participants glide on a wakeboard while being pulled by a motorboat, often performing stunts. It demands core strength, balance, and agility and is popular in Goa, Rishikonda Beach, and the Andaman Islands. It combines thrill with skill development.

(g) **Kitesurfing**. Kitesurfing involves riding a surfboard while being pulled by a large kite. It requires wind judgment, balance, and coordination and is popular in Rameshwaram, Mandwa, and Goa. Kitesurfing offers a high-energy activity that blends windsurfing with kite flying.

(h) **Jet Skiing**. Jet skiing involves riding a motorized watercraft at high speeds on open waters. It requires hand-eye coordination and basic navigation skills. Popular destinations include Goa, the Andaman Islands, and the Kerala Backwaters. Jet skiing combines high-speed thrill with exploration of scenic coastlines.

(i) **Canyoning**. Canyoning is an adventure sport that involves hiking, climbing, rappelling, and swimming to traverse natural canyons. It requires physical fitness, rope-handling skills, and swimming proficiency. Popular locations include Vashisht, Sandhan Valley, and Sohra Canyons in Meghalaya. Canyoning combines multiple adventure skills in one thrilling activity.

(j) **Windsurfing**. Windsurfing merges surfing and sailing, requiring balance, wind judgment, and agility. Popular locations include Rameshwaram, Mandwa, and Goa. Windsurfing builds endurance and provides an exciting blend of surfing and sailing.

23. **Air Adventure Activities.**

(a) **Skydiving**. Skydiving involves jumping from an airplane and free-falling through the air before deploying a parachute to descend safely to the ground. This activity requires physical fitness, mental courage, and proper training to ensure the safe deployment of the parachute. Popular locations for skydiving in India include Mysore in Karnataka, Dhana in Madhya Pradesh, and Aamby Valley in Maharashtra. The experience provides an unparalleled adrenaline rush, helps individuals overcome fear, and offers a thrilling sense of freedom.



Skydiving

(b) **Paragliding**. Paragliding is the art of gliding through the air with a lightweight, parachute-like wing, often launched from a hill or cliff. To engage in this activity, one needs to understand wind patterns, steer the glider effectively, and have basic navigation skills. Bir-Billing and Manali in Himachal Pradesh, as well as Kamshet in Maharashtra, are renowned paragliding spots in India. The activity allows participants to enjoy breathtaking aerial views and the exhilaration of soaring like a bird.

(c) **Hot Air Ballooning**. Hot air ballooning offers a serene and panoramic adventure by floating high above the ground in a large balloon filled with hot air. While piloting is managed by trained professionals, passengers can simply relax and take in the unique views without any prior experience. Some of the best places in India for hot air ballooning include Jaipur in Rajasthan, Lonavala in Maharashtra, and Hampi in Karnataka. This peaceful adventure is suitable for all age groups, providing unique aerial perspectives and a tranquil experience above the landscapes.

24. **Adventure Activities Undertaken by NCC**

(a) **Trekking Expeditions.** Organized in various terrains, including mountains and forests, to instil endurance and team spirit.

(b) **Mountaineering Expeditions.** NCC cadets participate in mountaineering, scaling peaks in the Himalayan and other ranges. Specialized training is provided to cadets in rock climbing and high-altitude survival in India's prestigious mountaineering institutes.

(c) **Para Sailing.** Cadets participate in parasailing activities, allowing them to glide through the air using a parachute towed by a vehicle.

(d) **Para Jumping.** NCC organizes para jumping activities where cadets learn and experience parachute jumps, usually from aircraft or high platforms. Cadets are trained at Army Airborne Training School (AATS) Agra.

(e) **Sailing Expeditions.** Sailing camps and expeditions are conducted, especially for naval wing cadets, to develop maritime skills and sea navigation.

(f) **Scuba Diving.** NCC naval wing cadets are trained in scuba diving, focusing on underwater exploration and survival skills.

(g) **White Water Rafting.** Cadets are exposed to the thrills of white-water rafting, particularly in rivers in northern India like the Ganges.

(h) **Cycling Expeditions.** Long-distance cycling expeditions are held to promote endurance, fitness, and eco-awareness.

(i) **Rock Climbing.** Rock climbing camps are organized to train cadets in basic climbing techniques and build confidence in handling tough terrains.



NCC Cadets on a Cycling Expedition at Alappuzha

(j) **Horse Riding.** NCC cadets, particularly in the Remount & Veterinary (R&V) wing, undergo horse riding training, developing balance and control in challenging conditions.

(k) **Skiing.** Skiing camps are organized in snow-clad regions like Kashmir, where cadets learn to navigate snow-covered terrains.

(l) **Desert Safari with Camels.** NCC organizes camel safaris in desert regions, such as Rajasthan, to expose cadets to life in arid environments. Cadets also learn how to navigate and survive in desert environments, covering long distances using camels, which teaches resilience in harsh climates.

(m) **Motorcycle Expeditions.** NCC organizes motorcycle expeditions across challenging terrains to instill road safety awareness and promote adventure travel.

(n) **All India Cycle Expeditions.** Large-scale cycle expeditions across multiple states, promoting fitness, camaraderie, and national integration.

(o) **Micro-light Flying.** Air wing cadets receive training in microlight flying, introducing aviation and flying small aircraft.



NCC Cadets Training for Micro-light Flying

(p) **Gliding.** Air wing cadets also experience gliding, learning the basics of flying non-powered aircraft in air currents.

(q) **River Crossing.** Cadets participate in river-crossing activities, learning to navigate swift currents using ropes and other techniques. This builds teamwork and resilience in challenging conditions.

(r) **Sea Swimming.** Especially for naval cadets, sea swimming teaches survival techniques in open water and strengthens their endurance and swimming skills.

(s) **High-Altitude Camping & Snow and Ice Climbing.** Cadets experience high-altitude camping in mountainous regions, which includes cold weather survival training and acclimatization exercises. Various activities focusing on climbing snow-capped peaks and glaciers, teaching cadets how to handle cold environments, ice axes, and other climbing gear, are conducted

(t) **All-India Hot Air Ballooning.** Cadets get to experience hot air ballooning, learning basic principles of flight and navigation while floating above landscapes.

(u) **Winter Expeditions.** Cadets participate in winter expeditions, often in snow-covered mountainous regions, where they learn snow navigation, cold survival, and group coordination.

(v) **Watermanship Training.** Aimed at naval cadets, watermanship involves handling various watercraft such as sailboats, rowboats, and powerboats, teaching watercraft navigation and safety.



NCC Cadets undergoing Watermanship Training at Ashtamudi Lake, Kollam

(w) **Yachting.** Cadets are taught the basics of handling and navigating yachts, with a focus on wind directions, tacking, and crewing skills.

(x) **Rappelling.** Rappelling is a technique used for descending steep slopes or cliffs using ropes. It is commonly taught in NCC mountaineering or rock-climbing camps.

(y) **Paddle Sports.** Paddle sports, such as canoeing and kayaking, are included in the NCC curriculum, especially for naval wing cadets. These activities help build water navigation and paddling skills.

PART IV : SAFETY ASPECTS WHILE UNDERTAKING ADVENTURE ACTIVITIES

25. **Proper Training and Supervision.** Before participating in any adventure activity, thorough training is essential. Instructors should be certified professionals who can teach the proper techniques and procedures. All activities should be supervised by experienced guides or professionals, especially for beginners. Adequate supervision ensures immediate action in case of emergencies.

26. **Use of Appropriate Safety Gear.** For activities like rock climbing, cycling, and rafting, helmets are crucial to protect the head from impacts. For climbing and rappelling, ensure that harnesses, ropes, and carabiners are of high quality and correctly fastened. For water activities like rafting, kayaking, and scuba diving, life jackets are mandatory to prevent drowning. Weather-appropriate clothing, such as wet suits, thermal wear, or UV-protective gear, should be used to prevent exposure to cold, heat, or water.

27. **Pre-Activity Health Check.** Participants should undergo a medical fitness check before engaging in strenuous activities like trekking or skydiving. Certain medical conditions (e.g., heart issues, asthma) may disqualify individuals from some activities. Ensure that participants are well-hydrated and have adequate nutrition before starting the activity to avoid exhaustion or dehydration.

28. **Environmental Awareness.** Always check weather conditions before starting any activity. Avoid venturing into extreme weather (heavy rains, storms, etc.) that can pose risks, especially in outdoor activities like trekking or paragliding. Know the terrain and natural hazards of the area. Whether it is a mountain, river, or forest, understanding the environment reduces the chances of accidents. In wilderness areas, be cautious of local wildlife. Avoid disturbing animals, and know how to respond in case of encounters.

29. **Emergency Preparedness.** A well-stocked first aid kit should always be available, and at least one person should know how to use it. Ensure easy access to emergency contact numbers, including local medical services, park rangers, and rescue teams. Carry reliable communication devices, such as radios, satellite phones, or mobile phones with GPS tracking, especially in remote areas.

30. **Risk Assessment.** Conduct a risk assessment before starting an activity. Identify potential hazards (like unstable rock formations or rapid water currents) and plan measures to mitigate them. Ensure all participants understand the risks involved in the activity and are comfortable proceeding. Psychological readiness is as important as physical readiness.

31. **Group Coordination.** Participants should operate in pairs or small groups to keep track of one another. This is especially important in high-risk activities like scuba diving or trekking. Establish clear signals or communication methods to use in case of emergencies or when assistance is needed.

32. **Proper Hydration and Nutrition.** Carry sufficient water, especially for high-endurance activities like hiking or cycling. Dehydration is a common issue during such activities. Energy-rich snacks should be carried for long activities to maintain stamina and prevent fatigue.

33. **Physical Conditioning.** Ensure that participants have the physical fitness required for the activity. Weakness or exhaustion can lead to accidents. Engage in proper warm-up exercises before activities like rock climbing, biking, or hiking to prevent muscle injuries.

34. **Respect for Rules and Regulations.** Participants must adhere to the instructions provided by the activity leaders or instructors. Ignoring safety instructions can lead to serious accidents. Many adventure spots have specific rules to protect the environment and the safety of participants. Following them is crucial for personal safety and environmental conservation.

35. **Know Your Limits.** Participants should be aware of their own physical limits. It is important not to push beyond what they are trained or capable of, especially in endurance-based activities. Fear and hesitation can impair judgment. Participants should assess whether they are mentally prepared for the activity and should not be pressured into participation.

36. **Contingency Plans.** Have a clear exit or evacuation plan in case weather conditions deteriorate or someone gets injured. For trekking or climbing, it is advisable to have an alternate route in case the primary path becomes too dangerous.

37. **Water Safety.** For water-based activities like rafting, kayaking, or scuba diving, participants should have basic swimming skills. Non-swimmers should be disclosed to the instructors beforehand. Understand the water conditions, such as river currents, tides, or depth, before engaging in any water activity.

38. **Altitude Safety (High-Altitude Activities).** When engaging in high-altitude activities like trekking or mountaineering, gradual acclimatization is critical to avoid altitude sickness. Ensure access to supplemental oxygen if ascending to very high altitudes where oxygen levels are low.

39. **Use of Safety Guidelines and Certifications.** Ensure that all equipment used, whether for climbing, water sports, or flying, meets international safety standards. Guides and instructors should be certified by recognized authorities to lead adventure activities safely.

CONCLUSION

40. Adventure activities offer more than just a thrill—they are a powerful way to boost your overall well-being. Trekking, rock climbing, and rafting strengthen your body, improve endurance, and keep your heart healthy. Mentally, these activities reduce stress and anxiety by releasing feel-good endorphins, building resilience, and boosting your confidence. They are also a great way to discover your strengths, develop leadership skills, and create lasting connections through teamwork and shared experiences. Of course, safety is key! With proper gear, guidance, and precautions, adventure becomes a safe path to growth, fun, and lifelong friendships.

SUMMARY

- Adventure activities play a crucial role in enhancing overall well-being and personal growth.
- Adventure activities encourage the individuals to step out of their comfort zones.
- Physically, these activities improve fitness, strength, and cardiovascular health.
- Mentally, they help reduce stress and boost emotional resilience.
- Adventure activities also promote personal development by fostering teamwork and social connections among participants.
- A diverse range of adventure activities, such as trekking, climbing, and water sports, cater to various interests.
- The National Cadet Corps (NCC) organizes specific adventure activities that further enhance skills and camaraderie among cadets. Safety is paramount, necessitating adherence to essential protocols and measures to ensure a secure experience.
- To sum up, adventure activities provide a holistic approach to personal development, offering physical, mental, and social benefits that contribute to overall well-being and resilience in the face of life's challenges.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is a primary benefit of engaging in adventure activities?

(a) Enhances social media skills

(b) Promotes physical fitness

(c) Increases screen time

(d) Improves memorization skills

Q2. Which of the following best describes adventure activities?

(a) Activities that require no physical effort

(b) Activities that are only for the elite

(c) Challenging experiences that promote personal growth

(d) Activities primarily done indoors

Q3. Which physical benefit is associated with activities like trekking and rock climbing?

(a) Improved flexibility

(b) Decreased stamina

(c) Reduced muscle strength

(d) Increased body fat

Q4. Adventure activities primarily enhance which aspect of health?

(a) Emotional well-being

(b) Cardiovascular fitness

(c) Intelligence quotient

(d) Academic performance

Q5. How do adventure activities impact mental health?

(a) They increase stress levels

(b) They reduce feelings of anxiety and depression

(c) They lead to social isolation

(d) They require constant supervision

Q6. Which chemical is released during adventure activities that can improve mood?

(a) Adrenaline

(b) Cortisol

(c) Endorphins

(d) Serotonin

Q7. Adventure activities can help build which of the following skills?

(a) Time management

(b) Leadership and teamwork

(c) Technical writing

(d) Data analysis

Q8. Which of the following is a social benefit of adventure activities?

(a) Decreased social interaction

(b) Development of strong friendships

(c) Increased competition

(d) Limited teamwork

Q9. Which of the following is NOT typically considered an adventure activity?

(a) Rock climbing

(b) Skydiving

(c) Painting

(d) White-water rafting

Q10. Which of these activities is often categorized under adventure sports?

(a) Running

(b) Paragliding

(c) Yoga

(d) Reading

Q11. Which adventure activity is commonly organized by the NCC?

(a) Chess tournaments

(b) Mountaineering expeditions

(c) Painting competitions

(d) Cooking classes

Q12. The NCC encourages cadets to participate in which of the following activities?

(a) Video gaming

(b) Sailing and kayaking

(c) Blogging

(d) Office work

Q13. What is the primary focus of safety protocols in adventure activities?

(a) Maximizing excitement

(b) Minimizing risks

(c) Increasing competition

(d) Reducing equipment costs

Q14. Which of the following is essential for ensuring safety during adventure activities?

(a) Proper training and gear

(b) Ignoring weather conditions

(c) Rushing through activities

(d) Avoiding supervision

Q15. Adventure activities ultimately aim to promote what?

(a) Isolation and competition

(b) Personal growth and resilience

(c) Academic success

(d) Technical skills

Q16. What is a key takeaway regarding the importance of adventure activities?

(a) They are only for thrill-seekers

(b) They offer holistic benefits for body and mind

(c) They are too risky for most people

(d) They do not foster social connections

Q17. Which of the following activities is known for promoting cardiovascular fitness?

(a) Sleeping

(b) Meditation

(c) Hiking

(d) Sitting

Q18. In terms of mental health, which benefit is primarily linked with adventure activities?

(a) Increased anxiety

(b) Improved self-esteem

(c) Decline in mood

(d) Decreased motivation

Q19. Adventure training often involves which type of learning?

(a) Theoretical learning

(b) Experiential learning

(c) Memorization

(d) Passive learning

Q20. What is the role of teamwork in adventure activities?

(a) It is not necessary

(b) It enhances collective problem-solving and support

(c) It creates competition among participants

(d) It increases the risk of failure

Short Answer Questions

Q1. What are the key physical health benefits of adventure activities?

Q2. How do adventure activities impact mental health?

Q3. What personal and social development can result from adventure activities?

Q4. What safety measures should be considered during adventure activities?

Q5. What types of adventure activities are typically undertaken by the NCC?

Long Answer Questions

Q1. What is the significance of adventure activities in enhancing overall well-being?

Q2. How do adventure activities contribute to personal growth and development?

Q3. What are the mental health benefits associated with participating in adventure activities?

Q4. What safety measures should individuals take when participating in adventure activities?

Q5. How do adventure activities promote teamwork and social skills among participants?

GA II (SD/SW)

CHAPTER II : FINANCIAL LITERACY

"Financial independence is paramount. My mom always says that when a woman is financially independent, she has the ability to live life on her own terms. I think that was the soundest advice that I ever got. No matter where you go in life or who you get married to, you have to be financially independent — whether you use it or not."

– Actress Priyanka Chopra



NCC Signs MOU With SBI To Open Zero Balance Accounts For Cadets

TEACHING INSTRUCTIONS

Period	:	**One.**
Type	:	**Lecture and Discussion.**
Year	:	**JD/JW (Second Year)**
Conducting Officer	:	**ANO/ CTO.**
Training Aids	:	**Class Room, Computer with OHP, Screen, Presentation, Script or Book Flagged or Lesson Plan in File, Board and Markers.**
Own Time Work	:	**Cadets must be told to prepare for this class prior to conduct.**

Time-plan

- Introduction : 03 Mins
- Part I : 08 Mins
- Part II : 10 Mins
- Part III : 07 Mins
- Part IV : 05 Mins
- Conclusion, Summary & Discussion : 07 Mins



INTRODUCTION

1. Financial literacy involves understanding financial concepts and managing personal finances effectively. For young people, acquiring financial literacy early on is crucial for long-term financial stability and success. It is the first step towards becoming independent and self-reliant.

Benefits of Early Financial Literacy.

2. **Improved Money Management**. Learning to budget helps manage expenses, allocate funds for savings, and avoid unnecessary debt. Early budgeting skills help in understanding how to live within one is means. Knowing the importance of saving money for emergencies and future goals. Early saving habits can lead to a secure financial future.

3. **Debt Avoidance**. Understanding how credit works, including interest rates and repayment terms, can prevent the accumulation of high-interest debt. Early awareness helps in making informed borrowing decisions. Being knowledgeable about the risks of payday loans and other high-interest borrowing options helps avoid financial pitfalls.

4. **Investment Awareness**. Familiarity with different types of investments, such as stocks, bonds, and mutual funds, enables better decision-making for growing wealth. Understanding the concept of compounding can encourage saving and investing early, which maximizes returns over time.

5. **Future Planning**. Financial literacy helps in setting and achieving financial goals such as higher education, buying a car, or owning a home. Early planning for retirement can lead to a more comfortable and financially secure retirement.

PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Opening Bank Accounts & Applying for PAN Card

(b) Part II ; Money transactions & Avoiding Financial Fraud

(c) Part III : Pehli Udaan scheme

(d) Part IV : Debit Card & KYC

LEARNING OBJECTIVES

- Understand the importance of financial literacy
- Procedure for opening bank accounts and linking Aadhar
- Procedure for applying for a PAN card
- Learn the procedure to transfer money avoiding financial frauds
- Familiarise with Pehli Udaan Scheme
- Learn how to use debit cards
- Understand the concept of KYC

PART I : OPENING BANK ACCOUNTS & APPLYING FOR PAN CARD

Steps to Open a Bank Account

6. **Choose a Bank**.

(a) **Research Banks.** Compare banks based on services, fees, and interest rates. Consider factors such as branch locations, online banking facilities, and customer service.

(b) **Account Types.** Decide on the type of account needed (savings, current, etc.) based on personal requirements.

7. **Visit the Bank.** Go to the selected bank branch to start the account opening process. Some banks also offer online account opening options.

8. **Fill Out an Application Form.** Complete the application form with necessary details like name, address, date of birth, and employment status.

9. **Required Documents**

(a) **Aadhar Card.** Provides a unique identification number linked to personal details and serves as proof of identity and address. The Aadhar card is often used to link with the bank account for verification purposes.

(b) **Proof of Address.** The accepted documents are utility bills, rental agreements, or government-issued documents showing your current address.

(c) **Passport-sized Photographs.** Typically, two passport-sized photographs are needed for the account opening process.

(d) **PAN Card.** Used to verify income and for tax purposes. Required for accounts with certain minimum balances or specific services.

(e) **Proof of Age.** Birth certificate or school certificate for minors to establish age and guardianship details.

Linking Aadhar and Phone Number

10. **Aadhar Linkage**. During the account opening process, you will be required to provide your Aadhar number, which is a unique 12-digit identification number issued by the Government of India. The bank will link your Aadhar to your account to verify your identity, as well as for regulatory compliance purposes. This linkage ensures smooth integration with government schemes and subsidies, and allows you to access various financial services, such as direct benefit transfers (DBT), easily. Additionally, linking Aadhar helps to meet KYC (Know Your Customer) requirements, which are essential for preventing fraud and maintaining security in financial transactions.

11. **Phone Number Registration**. It is equally important to register your mobile number with the bank when opening an account. The registered mobile number will be used to send real-time alerts for every transaction, ensuring that you stay informed of all activities on your account. This is critical for both personal security and account management. Additionally, the registered phone number is often needed for two-factor authentication (2FA) when accessing online banking or carrying out digital transactions. Without a registered phone number, accessing online banking services and making secure transactions would be more challenging. Both Aadhar and phone number linkage are fundamental steps to ensure your banking experience is secure, seamless, and integrated with modern financial systems.

Procedure for Applying for a PAN Card

12. Applying for a PAN (Permanent Account Number) card is a vital process for individuals and entities in India for tax-related transactions. The following outlines the steps involved in the application procedure.

Steps to Apply for a PAN Card

13. **Online Application.** Start by visiting the official **Income Tax Department's** website for PAN card services or the **UTI Infrastructure Technology and Services Limited (UTIITSL)** portal. Both platforms are authorized to process PAN card applications.

14. **Fill Out Form 49A.** Complete **Form 49A** with accurate personal information such as your full name, date of birth, gender, residential address, and your Aadhaar number. Make sure all the details match the documents you are submitting to avoid any rejection of the application.

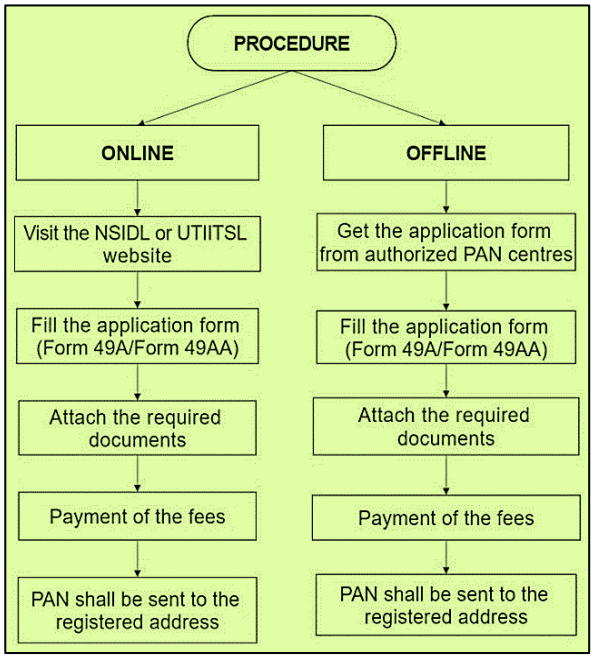
15. **Submit Required Documents.**

(a) **Identity Proof.** Provide identity verification using documents like your Aadhaar card, voter ID, passport, or driver's license.

(b) **Address Proof.** Address proof can be given through utility bills, such as electricity, water, or gas bills, or a bank

REQUIREMENT OF LINKING PAN TO AADHAAR

- **Mandate:** As per the guidelines of the Income Tax Act, linking your PAN with your Aadhaar number is mandatory. It ensures smoother tax filings and helps the government track tax fraud and prevent the duplication of PAN cards.
- **Process:**
  - ➢ You can easily link your PAN to Aadhaar online via the Income Tax Department's e-filing website.
  - ➢ Many banks and financial service providers also offer PAN-Aadhaar linking through their mobile apps and websites.



statement from the last three months.

(c) **Age Proof.** Submit proof of age with documents like a birth certificate, passport, or any other official certificate indicating your date of birth.

16. **Make the Payment.** After filling out the form and uploading the required documents, pay the necessary application fee. Payments can be made using net banking, debit/credit cards, or UPI. The fee varies if the PAN is to be delivered abroad.

17. **Verification Process.** Once your application is submitted, it will undergo verification by the Income Tax Department. If all details are correct, a PAN card will be issued and delivered to the provided address. In the meantime, you can also receive an e-PAN via email, which is legally valid for online transactions.

ILLUSTRATIVE EXAMPLE

Scenario: Judith Smith, a college student, needs to apply for a PAN card to open a bank account for her new part-time job. She has her Aadhaar card and wants to apply online.

Steps Judith follows:

- **Online Application.** Judith visits the official NSDL PAN application portal and selects "Apply for New PAN" under the individual category.
- **Filling Out Form 49A.** Judith carefully enters her personal details like her full name, date of birth, Aadhaar number, and address into **Form 49A**. She double-checks to ensure all details match her Aadhaar card.
- **Document Submission.** Judith uploads a scanned copy of her Aadhaar card as both proof of identity and address. Since her Aadhaar has her birthdate, it serves as her age proof as well.
- **Payment.** She pays the nominal fee of ₹110 using UPI.
- **Verification.** Her documents are verified by the authorities, and within a week, she receives an **e-PAN** via email. The physical PAN card is delivered to her address within two weeks.

PART II : MONEY TRANSACTIONS & AVOIDING FINANCIAL FRAUD

18. Transferring money is an essential financial operation, whether it is done through traditional methods like cheques or modern digital transactions. Here is an overview of both methods and how to execute them.

Transferring Money through Cheque

19. **Fill Out the Cheque.** A cheque is a written instruction directing your bank to pay a specified amount from your account to another person or organization. Here's what needs to be filled out:

(a) **Date.** Write the current or post-dated date at the top of the cheque.

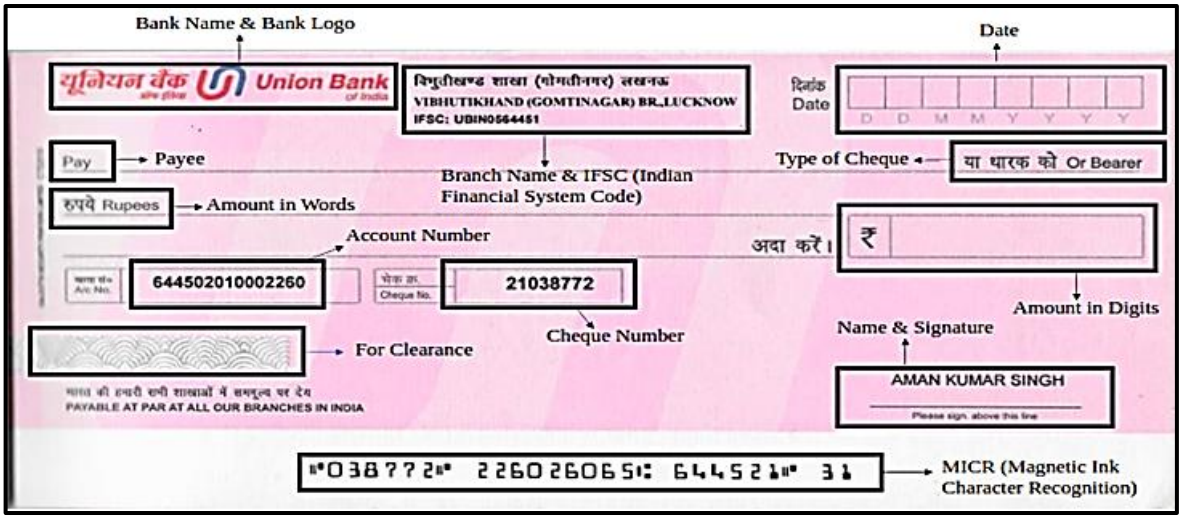
(b) **Payee's Name.** Write the name of the person or organization receiving the payment. If you want to make it payable to yourself for cash withdrawal, you can write "Self."

(c) **Amount in Figures.** Mention the amount in numbers in the designated box.

(d) **Amount in Words.** Write the exact amount in words to prevent tampering or misunderstanding.

(e) **Signature.** Sign the cheque in the signature area to authorize the payment.

20. **Submit the Cheque and Deposit.** After filling out the cheque, you can hand it over to the payee, or they can deposit it into their own account. If you are giving a cheque to someone, they will either deposit it physically in their bank or use digital cheque deposit services (if available). For self-withdrawals, you may submit the cheque to your bank's counter or ATM.



Parts of a Cheque Leaf

21. **Processing Time.** Once deposited, the cheque typically takes **1-3 working days** to clear, depending on whether it is an intra-bank or inter-bank transaction. Local cheques might clear within a day, but outstation cheques may take longer.

Transferring Money via Online Transactions

22. **Log In.** To initiate an online transfer, log in securely to your bank's **online banking portal** or mobile banking application. Ensure that you are using a safe network and avoid public Wi-Fi for security reasons.

23. **Add Beneficiary.** Before transferring money, you need to add the recipient (or beneficiary) to your account. The following details are required:

(a) **Beneficiary Name.** The full name of the person or organization.

(b) **Bank Account Number.** Double-check to ensure accuracy.

(c) **IFSC Code.** This unique identifier for the beneficiary's bank branch ensures the money is routed to the correct branch. It can usually be found on the beneficiary's cheque leaf or online.

(d) **Other Details (Optional).** Some banks may ask for additional information like email or phone number.

IMPORTANT CONSIDERATIONS FOR MONEY TRANSFERS

- **Security Measures.** Always ensure the banking portal or app you are using is secure (look for "https" in the website address) to avoid phishing or unauthorized access. Keep your banking passwords, PINs, and OTPs confidential. Do not share them with anyone.
- **Transfer Limits.** Each bank may have daily transaction limits depending on the method (e.g., UPI might have a lower limit compared to NEFT or RTGS). Be sure to check your bank's policy if transferring large amounts.
- **Charges and Fees.** While many online transactions (like UPI) are free, other methods (such as NEFT or RTGS) may have small transaction fees based on the transfer amount. Always check with your bank for applicable charges.
- **Beneficiary Addition Time.** Some banks require a waiting period before you can initiate a transfer to a new beneficiary. This can range from a few minutes to 24 hours. Plan accordingly for urgent transactions.

24. **Initiate Transfer.** Once the beneficiary is added and approved (this may take a few minutes to 24 hours depending on the bank's policies), you can start the money transfer. Here are the common methods available for online transfers in India:

(a) **NEFT (National Electronic Funds Transfer).** Ideal for transactions that are not time-sensitive. NEFT usually takes a few hours or one working day.

(b) **RTGS (Real-Time Gross Settlement).** Used for large, time-critical transfers. RTGS transfers are immediate but may require a minimum transaction amount (e.g., ₹2 lakh).

(c) **IMPS (Immediate Payment Service).** For instant, 24/7 transfers. IMPS can be used for lower-value transactions.

(d) **UPI (Unified Payments Interface).** A fast-growing payment system for instant, low-value transfers via mobile apps.

25. **Transaction Verification.** After entering the amount to transfer, the system will prompt you to confirm the transaction using a security method, such as:

(a) **Secure PIN.** A personal identification number set by you.

(b) **OTP (One-Time Password).** Sent to your registered mobile number or email for each transaction to add an extra layer of security.

26. **Confirmation.** After completing the transaction, you will receive an acknowledgment in the form of a receipt. This may be in the form of an SMS or email, which confirms the transfer with a reference number for future tracking.

EXAMPLE SCENARIO FOR ONLINE TRANSFER

Let us say Raj needs to pay his utility bill using his mobile banking app.

- **Log In.** Raj securely logs in to his mobile banking app using his credentials.
- **Add Beneficiary.** He adds the utility company as a beneficiary by entering the company's bank account number and IFSC code (provided on the bill).
- **Initiate Transfer.** After the beneficiary is approved, he selects the amount due and initiates the payment using the **NEFT** option.
- **Confirmation.** Raj receives an SMS with a transaction reference number confirming that the payment has been made successfully.

Safety Aspects to Avoid Financial Frauds

27. With the rise of digital banking and online transactions, safeguarding personal financial information is more important than ever. The following tips outline key strategies to avoid financial fraud and protect yourself from common cyber threats.

Tips to Ensure Financial Safety

28. **Secure Personal Information.** Avoid sharing sensitive financial information such as PINs, passwords, CVV numbers, or your bank account details over the phone, via email, or through text messages. Legitimate organizations, including banks, will never ask for these details through unsolicited communications.

29. **Use two-factor authentication (2FA)** for added security when accessing online banking services or making payments. This ensures that even if someone gains access to your password, they still need a second form of verification (e.g., an OTP).

29. **Use Trusted Websites.** Always ensure the websites you use for online purchases or financial transactions are secure. Look for **"https://"** in the URL, as this indicates that the site uses encryption to protect your data. Avoid using public Wi-Fi for financial transactions, as public networks are often less secure. If necessary, use a **virtual private network (VPN)** to add a layer of protection.

30. **Regular Monitoring.** Regularly review your bank statements and transaction history for any unauthorized activity or discrepancies. Early detection of fraudulent transactions can

help prevent further losses. Set up **transaction alerts** via SMS or email to notify you of all activities related to your bank account or credit card. These alerts will immediately inform you of any suspicious transactions.

31. **Beware of Phishing.** Do not click on suspicious links or open email attachments from unknown sources. Phishing attempts often masquerade as legitimate companies (such as banks or government agencies) to steal your personal information. Be cautious of emails or messages asking you to "verify your account" or "update your information," especially if they create a sense of urgency. Always verify the source by contacting the organization directly using their official communication channels.

ADDITIONAL PRECAUTIONS FOR DIGITAL TRANSACTIONS

- **Avoid Oversharing on Social Media.** Be cautious of sharing too much personal information on social media platforms. Scammers can use these details to guess security questions or impersonate you in fraud attempts.
- **Be Wary of Investment Scams.** Be cautious when dealing with unknown investment schemes that promise high returns with low risk. Always research and verify the legitimacy of investment platforms and ensure they are registered with proper regulatory authorities (e.g., SEBI in India).

32. **Use Strong Passwords and Update Regularly.** Create strong, unique passwords for all your financial accounts. Avoid using easily guessable information like birthdays or simple sequences (e.g., 12345). Consider using a **password manager** to store and generate strong passwords securely. Regularly update your passwords to reduce the risk of unauthorized access.

33. **Enable Credit and Debit Card Controls.** Many banks and financial institutions offer services that allow you to temporarily block or limit the usage of your debit or credit cards. This can be useful if you suspect fraud or if you want to restrict online transactions. You can also set spending limits for your cards and disable international transactions unless needed, which adds an extra layer of security.

34. **Be Aware of Social Engineering.** Scammers may use emotional manipulation or create a sense of urgency to trick individuals into providing personal information or making payments. Common examples include fake emergency calls, job offers, or romance scams. Always verify the identity of the person contacting you, especially if they request sensitive information or money transfers. Scammers often impersonate friends, family members, or officials.

35. **Monitor Credit Reports.** Regularly check your **credit report** to detect any unauthorized credit activity, such as new accounts or loans taken in your name. This will also help you spot errors and correct them before they affect your credit score. Many

financial institutions and credit bureaus offer free annual credit reports that allow you to stay updated on your financial history.

36. **Secure Mobile Devices and Apps.** If you use mobile banking apps, ensure that your phone is protected with a **strong passcode** or biometric security (fingerprint or facial recognition). Only download banking apps from **official app stores** (Google Play Store, Apple App Store) and keep them updated to ensure the latest security features are in place.

37. **Report Suspicious Activity Immediately.** If you suspect any fraudulent activity or unauthorized transactions, contact your bank or credit card company immediately to block your account or card and prevent further damage. Most financial institutions have **24/7 fraud support hotlines** that you can contact in case of emergencies.

COMMON TYPES OF FINANCIAL FRAUDS

- **Phishing.** Fraudsters send emails or text messages pretending to be from reputable sources (banks, government institutions) to steal login credentials or other sensitive information.
- **Vishing (Voice Phishing).** Scammers make phone calls pretending to be customer service agents or officials, tricking victims into revealing their financial information over the phone.
- **Skimming.** Criminals use hidden devices at ATMs or point-of-sale terminals to capture card details and PIN numbers, which they use to create duplicate cards for fraudulent transactions.

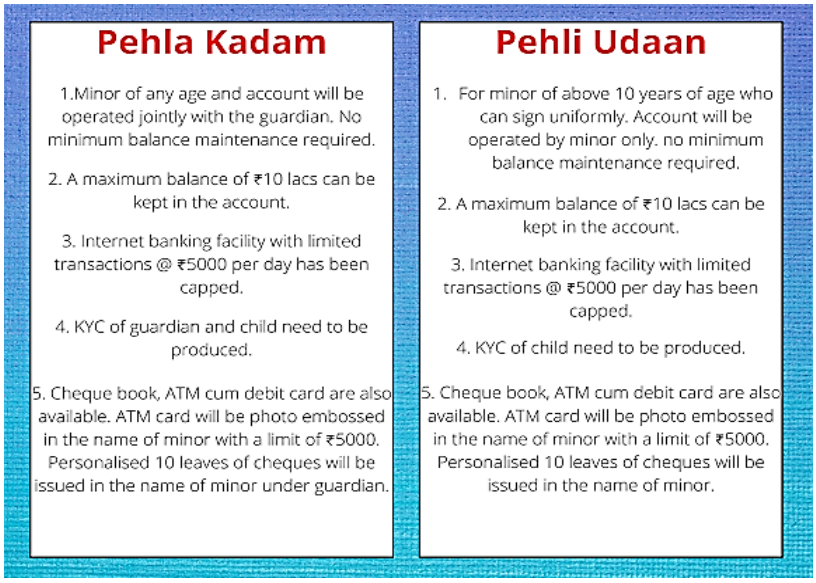
38. Practicing these safety measures will greatly reduce the risk of financial fraud and help you stay vigilant in today's digital economy. Being proactive and taking steps to protect personal information, monitor account activity, and report suspicious actions immediately are essential for ensuring financial security.

Aspect	Public Sector Banks	Private Sector Banks
Ownership	Majority stake (>50%) is held by the government.	Majority stake is held by private individuals or institutions.
Examples	SBI, PNB, Canara Bank, Bank of Baroda.	HDFC Bank, ICICI Bank, Axis Bank, Kotak Mahindra Bank.
Customer Base	Larger base, especially in rural and semi-urban areas.	Smaller but focused on urban and tech-savvy customers.
Objective	Focus on financial inclusion and social welfare.	Profit-driven and customer-centric services.
Interest Rates	Slightly lower loan interest rates.	Competitive but higher interest rates on loans.

Technology Adoption	Slower adoption compared to private banks.	Faster adoption of digital banking and technology.
Government Backing	Upto Rs 5 Lakhs guarantee from the government.	No government guarantee but regulated by RBI.
Service Speed	Moderate, often slower due to traditional processes.	Faster due to advanced digital infrastructure.
Risk Appetite	Conservative approach to lending.	Higher risk appetite, focusing on retail loans.

PART III : PEHLI UDAAN SCHEME

39. The **Pehli Udaan Scheme** is a special initiative aimed at promoting financial inclusion, particularly targeting young individuals, students, and minors. It encourages them to develop a habit of saving from an early age while familiarizing them with basic banking services. This scheme is in line with the broader objectives of financial literacy and inclusion, especially among those who are new to the banking system.



Key Objectives of the Pehli Udaan Scheme

40. **Financial Inclusion for Youth.** The primary goal of the Pehli Udaan Scheme is to bring **children and minors** into the formal banking system, enabling them to access banking services independently. It emphasizes the importance of financial education at a young age, preparing the youth to manage their finances responsibly as they grow older.

41. **Encouraging the Habit of Saving.** One of the key features of the scheme is to instil a **habit of saving** among students and young individuals. By opening savings accounts under the Pehli Udaan Scheme, children can start saving small amounts, learning the value of money and financial discipline.

42. **Promoting Digital Banking Awareness.** The scheme introduces young individuals to **digital banking platforms** such as online banking, mobile apps, and UPI payments, helping them become familiar with modern banking technologies. This helps bridge the digital divide and ensures that the younger generation is well-versed in cashless transactions.

Eligibility Criteria

43. The Pehli Udaan Scheme is designed for **minors (under 18 years)** who are eligible to open a **savings account** either independently or with the help of a guardian. Generally, children aged **10 years and above** are allowed to operate the account independently, provided they are capable of understanding and managing the account responsibly.

Key Features of the Pehli Udaan Scheme

44. **Zero-Balance Savings Account.** The savings accounts under the Pehli Udaan Scheme are **zero-balance accounts**, meaning that children are not required to maintain any minimum balance. This ensures that even those from economically weaker sections can participate without worrying about penalties for not maintaining a balance.

45. **Free ATM/Debit Card.** Children are provided with a **free debit card** that can be used to withdraw money from ATMs or make digital payments. Some banks also offer customized cards with spending limits to help minors manage their money safely. The scheme includes controls on how much money can be withdrawn to ensure safe and responsible use of the funds.

46. **Mobile Banking and Digital Access.** The scheme provides **online banking facilities** to minors, allowing them to access their accounts, check balances, and view transactions through mobile banking apps or websites. This also helps in promoting digital literacy. The scheme allows children to participate in **cashless payments** through UPI platforms, fostering early exposure to India's digital payment ecosystem.

47. **Joint Account Option.** For younger children (usually below 10 years), the scheme allows for **joint accounts** with a guardian or parent. This enables parents to monitor and guide their children's banking activities, ensuring responsible financial habits.

48. **Limit on Transactions.** To ensure security, especially for young account holders, the Pehli Udaan Scheme often has predefined **limits on transactions**, both online and offline, preventing large withdrawals or payments without oversight.

49. **Interest on Savings.** Like regular savings accounts, the money deposited in Pehli Udaan accounts earns **interest** at prevailing rates, helping children grow their savings over time.

50. The **Pehli Udaan Scheme** is a forward-thinking initiative that empowers minors by introducing them to the formal banking system. It not only offers them access to essential banking services but also serves as a foundation for **financial literacy and independence**. By integrating savings habits, digital transactions, and financial education, the scheme aims to create a financially responsible and digitally savvy generation.

BENEFITS OF PEHLI UDAAN SCHEME

- **Early Exposure to Banking.** The scheme provides **hands-on experience** in managing bank accounts, using digital platforms, and understanding financial systems from a young age. This knowledge is crucial in shaping responsible financial behaviour later in life.
- **Building Financial Literacy.** By using banking services independently, minors learn the fundamentals of **financial literacy**, including budgeting, saving, and the value of digital payments. This ensures that as they enter adulthood, they are financially empowered.
- **Safe and Controlled Financial Access.** While minors gain access to financial tools like debit cards and online banking, the scheme ensures safety through **controlled access** to funds and restrictions on transactions, protecting them from risks like overspending or fraud.
- **Bridge to Financial Independence.** Pehli Udaan serves as a **stepping stone** toward financial independence. Once the child turns 18, they can convert the account into a regular savings account with full access to all banking facilities.

PART IV : DEBIT CARD & KYC

51. **Using Debit Cards**. Using a debit card involves understanding the processes for in-store, online, and ATM transactions while adhering to safety measures to protect against fraud and unauthorized use. By staying vigilant and following best practices, you can ensure secure and effective management of your debit card.



Debit Card

52. **In-Store Transactions**

(a) **Swiping or Inserting the Card.** For traditional magnetic stripe cards, swipe the card through the point-of-sale (POS) terminal. Ensure the magnetic stripe is facing the correct direction, usually towards the machine. For EMV (Europay, MasterCard, and Visa) chip cards, insert the card into the chip reader slot at the POS terminal. The chip must be inserted face-up and fully into the reader.

(b) **Entering PIN.** After swiping or inserting the card, you will be prompted to enter your Personal Identification Number (PIN). This is a security code you set up

when you received your debit card. Enter your PIN on the keypad. Be cautious of your surroundings and cover the keypad to prevent others from seeing your PIN.

(c) **Transaction Confirmation.** After entering your PIN, you will receive a receipt as proof of the transaction. Review the receipt for accuracy and keep it for your records. You may receive an SMS or email notification confirming the transaction, depending on your bank's services.

53. **Online Transactions**

(a) **Entering Card Details.** When making an online purchase, you will need to enter your debit card details on the checkout page. This typically includes.

- **Card Number.** The 16-digit number on the front of the card.
- **Expiration Date.** The month and year when the card expires.
- **CVV/CVC.** The 3-digit security code on the back of the card.
- **Billing Address.** Some sites may also ask for the billing address associated with the card.

(b) **Secure Transactions.** Ensure the website is secure by checking for **"https.//"** in the URL and a padlock icon in the browser's address bar. Use trusted and recognized payment gateways for transactions.

(c) **Confirmation and Follow-Up.** After completing the payment, you should receive an order confirmation on the website and via email. Regularly check your bank statements for any unauthorized online transactions.

54. **ATM Withdrawals**

(a) **Using ATMs.** Insert your debit card into the ATM slot, usually located at the front of the machine. Enter your PIN on the ATM keypad. Ensure that no one is watching you while entering your PIN. Choose the type of transaction (withdrawal, balance inquiry, etc.) from the menu on the screen.

(b) **Withdrawal.** Enter the amount you wish to withdraw. Confirm the amount if prompted. Choose whether to receive a receipt for the transaction. This provides proof of the transaction and helps in tracking your account balance.

(c) **Collecting Card and Cash.** After completing the transaction, ensure you take your debit card and any cash dispensed by the ATM. Check the ATM for your card to avoid forgetting it.

Safety Measures

55. **Protect Your PIN**

(a) **Keep It Confidential.** Do not share your PIN with anyone, including family and friends. Do not write your PIN down or store it with your debit card.

(b) **Use Caution.** When entering your PIN at ATMs or POS terminals, cover the keypad with your hand to prevent others from seeing it. Be cautious of your surroundings when using your card in public places.

56. **Monitor Account Activity**

(a) **Regular Review.** Regularly review your bank statements and transaction history for any unauthorized or suspicious activity. Use online banking services to monitor your account activity frequently.

(b) **Alert Notifications.** Register for SMS or email alerts for transactions and account activity to stay informed about your account status.

57. **Secure Transactions**

(a) **Use Trusted Sites.** Ensure you are shopping on reputable and secure websites with “https.//” in the URL and a padlock icon. Use known and reliable payment processors for online transactions.

(b) **Avoid Public Wi-Fi.** Avoid making financial transactions over public or unsecured Wi-Fi networks. Use a secure and private internet connection.

(c) **Be Wary of Phishing.** Do not click on links or open attachments in unsolicited emails or messages asking for your card details. Always verify the authenticity of any request for your card details by contacting your bank directly.

58. **Card Security**

(a) **Report Loss or Theft.** If your card is lost or stolen, report it to your bank immediately to block the card and prevent unauthorized use.

(b) **Card Locking.** Many banks offer the option to temporarily lock or freeze your card through their mobile app or online banking portal.

(c) **Secure Disposal.** When disposing of an old or expired card, ensure it is properly shredded to prevent misuse of your card information.

What is KYC – Know Your Customer?

59. KYC stands for Know Your Customer, a fundamental process used by financial institutions and other regulated entities to verify the identity of their clients. This process is

crucial in preventing illegal activities such as money laundering, fraud, and terrorist financing. Here is a comprehensive look at KYC.

60. **Purpose of KYC**

(a) **Preventing Financial Crimes.** KYC helps prevent money laundering by ensuring that financial institutions know their customers' true identities and sources of funds. It prevents the misuse of the financial system for financing terrorism or other criminal activities.

(b) **Ensuring Compliance.** KYC is required by financial regulators and laws in many countries to comply with anti-money laundering (AML) and counter-terrorist financing (CTF) regulations. Helps institutions manage risks associated with financial transactions and clients.

(c) **Protecting Customers.** Protects customers from identity theft and fraud by ensuring that their financial information is secure and used appropriately.

61. **KYC Process**

(a) **Customer Identification.** Customers are required to provide identification documents such as a passport, driver's license, or Aadhar card. These documents are verified to confirm the customer's identity. The verification process may include checking the authenticity of the documents and matching them with the customer's details.

(b) **Address Verification.** Customers must provide documents that confirm their residential address, such as utility bills, bank statements, or rental agreements. Address documents are verified to ensure they are valid and correspond to the customer's provided information.

(c) **Risk Assessment.** Financial institutions assess the customer's profile to determine the risk level. This includes understanding the nature of the customer's business, source of funds, and transaction patterns. For high-risk customers, enhanced due diligence may be required, involving more detailed background checks and ongoing monitoring.

62. **KYC Documentation**

(a) **Identity Documents.** Include government-issued IDs such as a passport, driver's license, or national ID card. May include additional forms of identification like utility bills or social security cards.

(b) **Proof of Address.** Utility bills (electricity, water, gas), bank statements, credit card statements, or rental agreements. Documents must be recent and clearly show the customer's name and address.

(c) **Additional Information.** Customers may need to provide information about the source of their funds or income, such as employment details, business income, or investment statements. Information on the purpose of the account or the expected transaction types and volumes.

63. **KYC Regulations and Compliance**

(a) **Regulatory Framework.** KYC requirements are influenced by international standards set by organizations like the Financial Action Task Force (FATF).

Local Regulations. Each country has its own regulatory framework governing KYC procedures. Institutions must comply with these local laws to ensure legal operations.

(b) **Ongoing Monitoring.** Institutions conduct periodic reviews of customer information to ensure it remains accurate and up-to-date.

Transaction Monitoring. Ongoing monitoring of transactions to detect any suspicious activity or deviations from the customer's known profile.

(c) **Record Keeping.** Financial institutions are required to maintain records of KYC documentation and verification processes for a specified period. Ensuring that customer data is stored securely and protected from unauthorized access or breaches.

64. KYC is a vital component of the financial system, helping to maintain the integrity and security of financial transactions. By understanding and implementing robust KYC practices, institutions can protect themselves and their customers from financial crimes while ensuring regulatory compliance.

CONCLUSION

65. Effective financial management is a vital life skill that ensures financial security and responsible decision-making. By understanding concepts such as budgeting, saving, investing, and the prudent use of financial tools like bank accounts, debit/credit cards, and digital payment systems, cadets can take charge of their financial future. As NCC cadets, disciplined financial habits are as important as physical and mental discipline. These skills not only prepare you to manage your personal finances but also equip you to guide others as responsible citizens. With knowledge of government schemes, tax basics, and fraud prevention, you can contribute to a financially aware and empowered society. Remember, financial management is not just about earning money but about utilizing it wisely to achieve your goals while securing your future. Make every rupee count, and let this knowledge guide you toward a path of financial independence and stability

SUMMARY

- Financial literacy is vital for young individuals, equipping them with the tools to manage money effectively, avoid debt, and ensure a secure financial future.
- To open a bank account, individuals must present necessary documents and link their Aadhar card and phone number for enhanced security.
- The application process for a PAN card requires specific documentation and linking it to the Aadhar card for compliance.
- Money transfers can be made through cheques or online methods such as UPI and NEFT, with precautions in place to prevent fraud.
- Initiatives like the Pehli Udaan scheme provides young girls with essential financial knowledge.
- Safe usage of debit cards involves protecting PINs and steering clear of public networks.
- KYC (Know Your Customer) is crucial for identity verification in banking.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Why is financial literacy important for young individuals?

(a) It helps manage their money effectively

(b) It ensures they never lose money

(c) It teaches them how to avoid taxes

(d) It ensures they get rich fast

Q2. What is the primary document required to open a bank account in India?

(a) Passport

(b) Aadhar card

(c) Voter ID

(d) PAN card

Q3. Why is it important to link a phone number with a bank account?

(a) For OTP verification during transactions

(b) To receive marketing messages

(c) To reduce bank fees

(d) To avoid taxes

Q4. Which of the following is required to apply for a PAN card?

(a) Birth certificate

(b) Driving license

(c) Aadhar card

(d) Passport

Q5. Why is it necessary to link a PAN card with Aadhar?

(a) To avoid duplication of PAN numbers

(b) To earn more interest on savings

(c) To reduce income tax

(d) For free bank services

Q6. What is the name of the system used for online bank transfers in real-time in India?

(a) NEFT

(b) RTGS

(c) UPI

(d) Cheque

Q7. Which of the following is required to transfer money via a cheque?

(a) Aadhar number

(b) Bank account number of the recipient

(c) PAN number of the recipient

(d) Debit card

Q8. Which of the following is the best way to protect yourself from phishing scams?

(a) Share your password only with trusted people

(b) Ignore unknown links or suspicious emails

(c) Use the same password for all accounts

(d) Save your bank information online

Q9. What is two-factor authentication?

(a) Using two devices to access an account

(b) A security feature that requires two forms of identity verification

(c) Calling the bank for every transaction

(d) Logging in with a password only

Q10. What is the key benefit of the MoU between NCC and SBI?

(a) Cadets can open zero-balance accounts

(b) Cadets receive higher interest rates

(c) Free credit cards for all cadets

(d) Free international transfers

Q11. The Pehli Udaan scheme is aimed at empowering which group?

(a) Contractual employees in cities

(b) Elderly women in rural areas

(c) Young girls in rural areas

(d) Government employees

Q12. What should you do if your debit card is lost?

(a) Keep using your online banking until it is found

(b) Immediately report it to the bank and block the card

(c) Wait for the card to expire

(d) Share the PIN with the bank

Q13. Which of the following is a recommended safety measure when using a debit card?

(a) Use public Wi-Fi for transactions

(b) Keep your PIN confidential

(c) Share your PIN with family members

(d) Write your PIN on the card for easy access

Q14. What is the main purpose of KYC in banking?

(a) To verify customer identity and prevent fraud

(b) To offer loans

(c) To increase interest rates

(d) To open more accounts

Q15. Which document is most used for KYC in India?

(a) Passport

(b) Voter ID

(c) Aadhar card

(d) Driving license

Q16. What is the primary benefit of investing in a fixed deposit?

(a) High liquidity

(b) Guaranteed returns

(c) Risk-free investment

(d) High interest rates

Q17. What does income tax refer to?

(a) Tax on savings

(b) Tax levied on an individual's income

(c) Tax on purchases

(d) Tax on fixed deposits

Q18. Which of the following is NOT a characteristic of a credit card?

(a) It allows you to borrow money

(b) Interest is charged on late payments

(c) It offers rewards for spending

(d) You can only spend money available in your bank account

Q19. What is the typical validity period of a debit card?

(a) 1 year

(b) 2 years

(c) 5 years

(d) Lifetime

Q20. Which of the following is a public sector bank?

(a) Canara Bank

(b) Axis Bank

(c) ICICI Bank

(d) HDFC Bank

Short Answer Questions

Q1. Why is financial literacy important for young individuals?

Q2. What are the essential documents required to open a bank account, and why is linking the Aadhar card and phone number important?

Q3. What documents are needed to apply for a PAN card, and why must it be linked to an Aadhar number?

Q4. What are two methods of transferring money, and how do they differ?

Q5. What are some essential safety measures to avoid financial fraud?

Long Answer Questions

Q1. Discuss the importance of financial literacy at a young age and its impact on long-term financial stability.

Q2. Describe the procedure for opening a bank account and explain the significance of linking an Aadhar card and phone number to the account.

Q3. Explain the process of applying for a PAN card and discuss the legal requirement of linking the PAN card with the Aadhar number.

Q4. Compare the methods of money transfer using cheques and online transactions, highlighting the advantages and disadvantages of each.

Q5. Discuss the essential safety measures individuals should adopt to protect themselves from financial fraud.

LIVING WITH NATURE

6

CHAPTERWISE INDEX: LIVING WITH NATURE (JD/JW)

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LIVING WITH NATURE (JD/JW)

CHAPTER I: PECULIARITIES OF DESERTS, MOUNTAINS AND JUNGLE TERRAIN

""Believe the terrain, not the map."



TEACHING INSTRUCTIONS

Period	:	**01 (One)**
Type	:	**Lecture and Discussion**
Year	:	**JD/JW (First year)**
Conducting Officer	:	**ANO**
Training Aids	:	**Class Room, Computer with OHP, Screen, Presentation, Script or Book Flagged or Lesson Plan in File, Board and Markers. Cadets must be told to prepare for this class prior to conduct.**

Time-plan

- Introduction : 02 Mins
- Part I : 10 mins
- Part II : 10 mins
- Part III : 10 mins
- Conclusion, Summary and Practice : 08 mins

INTRODUCTION

1. India is a country with varied types of terrain, be it deserts, mountains or jungles. Deserts are defined by their arid conditions, typically receiving less than 10 inches or 25 cms of rainfall each year. Deserts are characterized by a dry, arid climate where evaporation rates exceed precipitation. This results in a stark and often inhospitable environment. Plant life is limited and drought-resistant species like cacti and succulents, as well as certain grasses adapt to these harsh conditions. Deserts experience dramatic temperature variations. Hot deserts can scorch during the day, while temperatures can plummet at night. In contrast, cold deserts can have bitterly cold winters. Rainfall is minimal and often unpredictable, leading to dry, cracked earth. Desert soils tend to be sandy or rocky, with low nutrient content and limited organic matter. India's mountain ranges are diverse and play a significant role in the country's geography, climate, and culture. The climatic conditions in the mountain ranges of India vary significantly due to their diverse topography, altitude, and geographical location. The ranges vary in altitude from 600 to over 8,000 meters The Jungle terrain in India mainly consists of various types of forests. The word 'forest' is usually used to describe a dense growth of trees covering a large area of land.



PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Peculiarities of the Desert Terrain

(b) Part II : Peculiarities of the Mountain Terrain

(c) Part III : Peculiarities of the Jungle Terrain

LEARNING OBJECTIVES

- Different types of terrain
- Peculiarities of Different Terrain
- Strategic Importance of Himalayas

PART I : PECULIARITIES OF DESERT TERRAIN

2. **Definition and Characteristics of Deserts** A desert can be defined as a large area of land, usually in a hot region, where there is almost no water, rain, trees, or plants. Deserts are typically characterised by less than 10 inches or 25 cms of rainfall each year and by a dry, arid climate where evaporation rates exceed precipitation. Plant life is limited and drought-resistant species like cacti and succulents thrive in deserts.

3. **Types of Deserts**. Deserts can be broadly categorized into two types:

(a) **Hot Deserts.** Take the Sahara, for instance. This region is known for its high temperatures and minimal vegetation. Example – Thar Desert.



(b) **Cold Deserts.** The Ladakh region in India, showcases extreme winter temperatures that can drop significantly. Example – Spiti Cold Desert.

4. **Location of Thar Desert.** The Thar Desert is located in the northwestern part of India and eastern Pakistan. It spans about 77,000 square miles, primarily across Rajasthan. The Thar Desert is bordered by the Indus River Plain to the west, the Punjab Plain to the north, the Aravalli Range to the southeast, and the Rann of Kutch to the south.

5. Climate and Its Impact on Desert Terrain. The climate profoundly shapes desert terrain. Some key impacts are as under :-

(a) **Temperature Extremes.** Deserts often see extreme temperature fluctuations—scorching days and chilly nights, which affects both soil composition and vegetation.

(b) **Low Precipitation.** With less than 10 inches of rainfall annually, water scarcity leads to arid landscapes, including sand dunes and rocky plateaus.



(c) **Wind Erosion.** Strong winds erode surfaces, creating unique features like yardangs—wind-eroded ridges.

(d) **Soil Composition.** Limited rainfall causes salinization, leading to

high salt concentrations in soils, which impacts plant growth.

(e) **Vegetation Adaptations.** Plants like cacti have adapted with deep root systems and reduced leaf surfaces to minimize water loss.

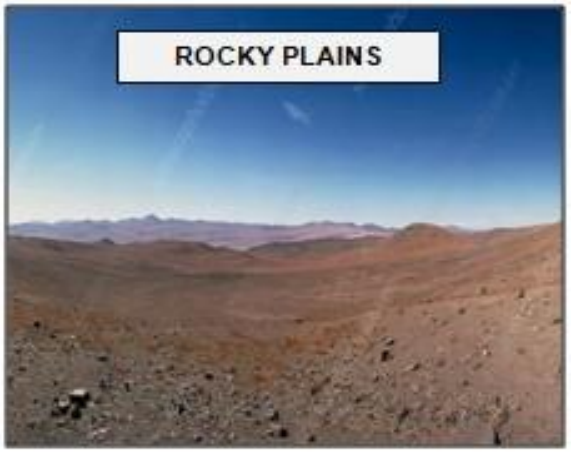
(f) **Wildlife Adaptations.** Animals have evolved various survival strategies, including nocturnal behavior and specialized physiology.

(g) **Climate Change Impacts.** Increasing aridity from climate change can disrupt ecosystems and lead to more severe droughts.

(h) **Human Interaction.** Human activities, such as agriculture and urbanization, can significantly impact desert ecosystems, potentially leading to desertification.

6. **Types of Terrain in Indian Deserts**. Indian deserts display diverse terrain types:

(a) **Sand Dunes.** Prominent in the Thar Desert, these shifting sand take various forms, including barchans and linear dunes.



(b) **Stony/Rocky Plains.** Known as "badlands," these areas have rocky surfaces with little vegetation.

(c) **Salt Flats.** The Rann of Kutch features salt crusts formed by evaporation, particularly evident in dry seasons.

(d) **Dry Riverbeds (Wadis).** These channels often remain dry but can support vegetation during rare rainfalls.

(e) **Hilly Terrain.** Rocky hills and small mountain ranges can disrupt the flat desert landscape.

(f) **Vegetated Areas**. Some regions feature scrubland and xerophytic plants that can survive in arid conditions.

(g) **Oases.** Fertile spots supported by underground water, oases are crucial for locals.

(h) **Acacia and Thorn Forests.** Areas of stunted trees and shrubs which thrive on minimal water on desert fringes.

7. **Flora and Fauna in Deserts**. The flora and fauna of Indian deserts, especially the Thar Desert, are remarkable.

8. **Flora**

(a) **Xerophytic Vegetation.** Predominant species include Ker like the Indian fig and thorny shrubs such as Acacia and Prosopis.

(b) **Grasses.** Drought-resistant grasses like Dichanthium help stabilize sand dunes.

(c) **Trees.** Hardy trees such as Khejri provide essential food and fodder.

(d) **Annual Herbs.** Many plants germinate after rains, including wild barley and various legumes.

INTERESTING FACTS

- The Rann of Kutch, located in Gujarat, is a vast salt marsh. It experiences extreme temperatures, with summer highs around 50°C (122°F) and winter lows near freezing. The region is known for its seasonal flooding and dry spells. The Rann of Kutch is renowned for the Rann Utsav, a cultural festival celebrating local crafts, music, and dance.

9. **Fauna**

(a) **Mammals.** Notable species include the Indian Desert Fox, Blackbuck, and the Camel.

(b) **Reptiles.** Adaptations abound here, with species like the saw-scaled viper and monitor lizards.

(c) **Birds.** The Greater Flamingo and various vultures are crucial scavengers in the ecosystem

(d) **Insects.** Grasshoppers and beetles thrive in low moisture conditions.

(e) **Aquatic Life.** Seasonal wetlands can host frogs and fish, particularly after monsoon rains.

DID YOU KNOW?

- A forest has many tall trees and can usually be travelled through by humans. Jungle is usually used to describe a tangled or overgrown mass of vegetation over a large area of land. A jungle usually has a tropical or humid climate and many plants on the ground between trees and larger plants. The thick vegetation on the ground can make it difficult or impossible for humans to go into or travel through a jungle.

PART II : PECULIARITIES OF MOUNTAIN TERRAIN

10. India's mountain ranges are diverse and play a significant role in the country's geography, climate, and culture. Here's an overview of the main mountain ranges and their characteristics:

Himalayas



11. **Overview**. The Himalayas are the highest mountain range in the world, stretching across five countries: India, Nepal, Bhutan, China, and Pakistan.

12. **Characteristics**.

(a) **Height**. Home to some of the world's highest peaks, including Mount Everest (8,848.86 meters).

(b) **Geology**. Composed mainly of sedimentary and metamorphic rocks, formed by the collision of the Indian and Eurasian tectonic plates.

(c) **Climate**. Varies from tropical in the foothills to alpine and tundra at higher elevations.

(d) **Biodiversity**. Rich flora and fauna, including snow leopards, red pandas, and numerous medicinal plants.

(e) **Cultural Significance**. Sacred to various religions, including Hinduism and Buddhism.

Western Ghats (Sahyadri)

13. **Overview**. A mountain range that runs parallel to the western coast of India, spanning Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.

14. **Characteristics**.

(a) **Height**. Peaks rise to around 2,695 meters (Anamudi).

(b) **Biodiversity**. Recognized as a UNESCO World Heritage Site, it is one of the eight "hottest hotspots" of biological diversity in the world.

(c) **Climate**. Receives heavy rainfall during the monsoon season, significantly influencing the climate of the western coast.

(d) **Crops**. Known for tea, coffee, and spice plantations.

Eastern Ghats

15. **Overview**. A discontinuous range of mountains along the eastern coast of India, extending from Odisha to Tamil Nadu.

16. **Characteristics**:

(a) **Height**: Generally lower than the Western Ghats, with the highest peak being Arma Konda (2,680 meters).

(b) **Biodiversity**: Less rich than the Western Ghats but still home to various flora and fauna, including several endemic species.

(c) **Mining**: Contains rich mineral deposits, including bauxite and iron ore.

Aravalli Range

17. **Overview**. One of the oldest mountain ranges in India, stretching across Rajasthan, Haryana, and Gujarat.

18. **Characteristics**.

(a) **Height**: Peaks like Guru Shikhar reach about 1,722 meters.

(b) **Geology**: Composed mainly of granite and metamorphic rocks.

(c) **Climate**: Affects local weather patterns; protects the region from the harsh desert climate of Rajasthan.



(d) **Biodiversity**: Supports various wildlife, including leopards and a range of bird species.

Vindhya Range

19. **Overview**. A chain of hills in central India, separating the northern plains from the Deccan Plateau.

20. **Characteristics**.

(a) **Height**. Peaks generally range from 300 to 700 meters.

(b) **Geology**. Comprised mainly of sedimentary rocks.

(c) **Historical Significance**: Rich in ancient history and archaeological sites, including caves and temples.

21. **Climatic Conditions**. The climatic conditions in the mountain ranges of India vary significantly due to their diverse topography, altitude, and geographical location. The ranges vary in altitude from 600 to over 8,000 meters. Lower elevations experience hot summers and mild winters. Mid-elevations have cooler temperatures with heavy rainfall in

monsoon. Higher elevations are characterized by cold, dry conditions, with significant snowfall. The monsoon season (June to September) brings heavy rainfall, especially in the eastern Himalayas. Density of vegetation varies from tropical forests in the lower ranges to alpine vegetation in the higher altitudes.These climatic variations contribute to the rich biodiversity and distinct ecosystems found in India's mountain ranges, each hosting unique flora and fauna.

22. **Flora & Fauna.** The mountains of India are rich in biodiversity, featuring a wide range of flora and fauna adapted to different climatic conditions and altitudes. Here's a look at some key characteristics of the flora and fauna found in these regions. Deodar cedar, pine, oak, and rhododendron. Snow leopard, leopard, elephant, deer species, wild boar Himalayan bear, red panda, musk deer, and various species of wild goats can be seen in mountainous terrain. Birds like Himalayan monal, griffon vulture, and various species of pheasants stay in such regions. Several species of frogs, lizards, and snakes have also adapted to these terrains. Animals like Himalayan Tahr and various other species have also adapted to high altitudes.

23 **Strategic Importance of Himalayas.** The Himalayas, often referred to as the "Roof of the World," are not only the highest mountain range on Earth but also a region of immense strategic significance for India. Spanning approximately 1,500 miles across five countries—India, Nepal, Bhutan, China, and Pakistan—the Himalayas play a crucial role in India's security, economy, and environmental stability.

(a) **Geopolitical Significance.** The Himalayas serve as a natural barrier, providing India with a strategic advantage against its northern neighbours.

(b) **Security Concerns** The rugged terrain of the Himalayas provides natural fortifications. Lends control over strategic passes and high-altitude areas can determine the success of military campaigns.

(c) **Economic Importance**. The Himalayas are rich in natural resources, which are vital for India's economic development. The region is known for its mineral wealth, including precious and semiprecious stones, and has significant potential for hydropower generation. The rivers originating from the Himalayas, such as the Ganges, Brahmaputra, and Indus, are crucial for agriculture, drinking water, and hydel energy production.

(d) **Environmental Significance**. The Himalayas play a critical role in regulating climate and water systems in the region. They act as a barrier to the southwest monsoon, ensuring that northern India receives adequate rainfall, which is vital for agriculture. However, climate change poses significant threats to this delicate ecosystem, leading to glacial melting and erratic weather patterns. India faces the challenge of managing environmental sustainability while promoting economic development. Deforestation, tourism, and industrial activities can harm the fragile Himalayan ecosystem. Protecting biodiversity and promoting conservation efforts are

essential for maintaining the region's ecological balance, which, in turn, supports livelihoods for millions of people who depend on these resources.

(e) **Cultural and Social Dimensions**. The Himalayas are not just a geographical entity; they hold immense cultural and spiritual significance for many communities in India. The region is home to various ethnic groups, languages, and traditions. Pilgrimages to sacred sites like Amarnath, Badrinath, and Kedarnath attract millions of devotees each year, making tourism a significant aspect of the local economy.

PART III : PECULIARITIES OF JUNGLE TERRAIN

24. The Jungle terrain in India mainly consists of various types of forests. The word 'forest' is usually used to describe a dense growth of trees covering a large area of land. A forest vary from dry to wet climate. However, there are tropical forests and rainforests. A forest has many tall trees and can usually be travelled through by humans. Jungle is usually used to describe a tangled or overgrown mass of vegetation over a large area of land. A jungle usually has a tropical or humid climate and many plants on the ground between trees and larger plants. The thick vegetation on the ground can make it difficult or impossible for humans to go into or travel through a jungle.

25. **Types of Forests**. India boasts a diverse range of forests due to its varied climate, topography, and soil types. Here are the main types of forests found in the country:

(a) **Tropical Evergreen Forests**: Found in regions with high rainfall, like the Western Ghats and northeastern states. Characterized by dense canopy and rich biodiversity, including species like rosewood and ebony.

(b) **Tropical Deciduous Forests**: Also known as monsoon forests, these are found in areas with moderate rainfall. Trees shed leaves in the dry season and common species include teak, sal, and bamboo.

(c) **Tropical Thorn Forests**: Found in arid and semi-arid regions like Rajasthan and parts of Gujarat. It is characterized by thorny shrubs and trees like acacia and cacti.

(d) **Montane Forests**: Located in the Himalayas and other high-altitude regions. It is divided into lower montane forests (with species like oak and pine) and alpine forests (with conifers and shrubs).

(e) **Mangrove Forests**: Found in coastal regions, especially in the Sundarbans and parts of Odisha. Characterized by salt-tolerant trees like sundari and palas,it is important for coastal protection and biodiversity.

(f) **Temperate Forests**: Found in higher altitudes, mainly in the Himalayan region. Includes coniferous forests (like deodar and fir) and broadleaf forests.

(g) **Swamp and Wetland Forests**: Found in areas with waterlogged conditions, such as in the northeastern states and parts of Kerala. It is characterized by species adapted to wet conditions.

(h) Each of these forest types supports unique ecosystems and plays a crucial role in the environmental balance, biodiversity, and livelihoods of local communities.

26. **Flora and Fauna**. The biodiversity of India's jungles/forests is among the richest in the world. The Western Ghats alone harbour over 7,000 plant species, including endemic ones like the Neelakurinji (Strobilanthes kunthiana), which blooms once every 12 years. Other significant plant species include the teak tree (Tectona grandis) and various species of orchids and ferns. Wildlife in these jungles is equally diverse. The Western Ghats, for example, are home to the endangered lion-tailed macaque (Macaca silenus) and the Malabar giant squirrel (Ratufa indica). The northeastern jungles support species like the one-horned rhinoceros (Rhinoceros unicornis) in Kaziranga National Park and the elusive clouded leopard (Neofelis nebulosa).

27. **Economic Resources and Effect on Tribes Living Near Forests.** Forests are rich in economic resources, providing various benefits to both local communities and the broader economy. These have implications for tribes living near forests.

28. **Economic Resources in Forests**

(a) **Timber and Non-Timber Products**.

(b) **Timber**. Used for construction, furniture, and paper products.

(c) **Non-timber products**. Include resin, nuts, fruits, medicinal plants, and mushrooms.

(d) **Biodiversity**. Forests are home to diverse species, offering opportunities for bioprospecting and ecotourism.

(e) **Medicinal Plants**. Many tribes have traditional knowledge of medicinal plants, which can be used for health care or commercial products.

(f) **Wildlife**. Hunting and fishing can provide food and income. Wildlife tourism can also attract visitors.

(g) **Water Resources.** Forests help in water purification and watershed management, essential for agriculture and drinking water.

(h) **Ecosystem Services**. Forests regulate climate, prevent soil erosion, and contribute to carbon sequestration, which has economic value in carbon credit markets.

29. **Impact on Tribes Living Near Forests**

(a) **Sustenance**. Many tribes depend on forest resources for their livelihoods, including food, shelter, and materials for crafts.

(b) **Cultural Significance**. Forests often hold spiritual and cultural significance for indigenous tribes, influencing their practices and identity.

(c) **Economic Opportunities**. Sustainable harvesting of forest resources can provide income while preserving ecosystems.

(d) **Land Rights and Governance**. Tribes may face challenges regarding land rights, especially with encroachment from agriculture, logging, or mining.

(e) **Conservation and Sustainability**. Tribes often play a crucial role in conservation efforts, using traditional knowledge to manage resources sustainably.

(f) **Access to Markets**. Improved access to markets can enhance income from forest products but may require support for fair trade practices.

CONCLUSION

30. India's diverse terrain — deserts, mountains and jungles, each present unique challenges and opportunities for adaptation. The Thar Desert's arid expanses, the Himalayas' towering peaks, and the lush rainforests of the Western Ghats and northeastern regions illustrate the country's ecological richness. Human adaptation to these environments has led to the development of distinct cultural practices and lifestyles, highlighting the resilience and ingenuity of India's diverse populations.

SUMMARY

- **India's Diverse Terrain.** India has varied terrains including deserts, mountains, and forests, each with distinct climates and ecosystems.
- **Desert Terrain.** The Thar Desert, spanning northwestern India, is characterized by extreme temperatures, low rainfall, and arid conditions.
- **Types of Deserts.** Deserts are classified into hot deserts (e.g., Thar Desert) and cold deserts (e.g., Ladakh), each with unique climatic features and vegetation.
- **Flora and Fauna in Deserts.** Deserts support drought-resistant plants like cacti and acacia. Animals such as camels, desert foxes, and reptiles have adapted to the harsh, dry environment.
- **Mountain Terrain**. India's mountains, including the Himalayas, Western Ghats, and Aravallis, are vital for biodiversity, climate, and cultural significance.
- **Flora and Fauna in Mountains.** The mountains host a rich variety of species, such as snow leopards, red pandas, and high-altitude plants like rhododendrons.
- **Strategic Importance of the Himalayas.** The Himalayas act as a natural border, provide key resources, and influence climate patterns, affecting agriculture and water systems.
- **Forest Terrain in India.** India's forests include tropical evergreen, deciduous, and mangrove forests, which are home to rich biodiversity and provide resources like timber and medicinal plants.
- **Challenges to Forests.** Deforestation, climate change, land encroachment, and human-wildlife conflict threaten forests, impacting both ecosystems and local tribes.
- **Human Adaptation and Culture.** Indigenous tribes in desert, mountain, and forest areas have developed unique cultural practices and lifestyles to adapt to their environments, though they face challenges like land rights issues and environmental degradation.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Which of the following states in India is predominantly covered by desert terrain?

(a) Rajasthan

(b) Himachal Pradesh

(c) Kerala

(d) West Bengal

Q2. What is the primary reason for the sparse population in the Thar Desert?

(a) High altitude

(b) Lack of water

(c) Extreme cold

(d) High humidity

Q3. Which mountain range in India is known for its unique biodiversity and is a UNESCO World Heritage Site?

(a) Aravalli Range

(b) Western Ghats

(c) Himalayan Range

(d) Vindhya Range

Q4. In which region of India would you find the largest expanse of tropical rainforest?

(a) Sikkim

(b) Maharashtra

(c) Andaman and Nicobar Islands

(d) Punjab

Q5. What adaptation do desert plants like cacti have to survive in arid conditions?

(a) Large leaves

(b) Thick bark

(c) Water-storing tissues

(d) Shallow roots

Q6. Which of the following animals is most commonly associated with jungle terrain in India?

(a) Camel

(b) Snow Leopard

(c) Bengal Tiger

(d) Desert Fox

Q7. The region known as 'The Roof of the World' refers to which mountain range in India?

(a) Western Ghats

(b) Himalayas

(c) Eastern Ghats

(d) Karakoram Range

Q8. Which desert is known for having the highest salt concentration in its soil?

(a) Great Rann of Kutch

(b) Thar Desert

(c) Kutch Desert

(d) Nubra Valley

Q9. Which ecosystem is characterized by high rainfall, dense canopy, and a diverse range of flora and fauna?

(a) Desert

(b) Mountain

(c) Jungle

(d) Grassland

Q10. What is a significant challenge faced by communities living in mountainous regions of India?

(a) Uranization

(b) Soil erosion

(c) Overpopulation

(d) Deforestation

Q11. Which of the following is a characteristic of desert terrain in India?

(a) High rainfall and lush vegetation

(b) Extreme temperature variations and minimal rainfall

(c) Dense forests and humid climate

(d) Cool temperatures and frequent snowfall

Q12. The Thar Desert is located primarily in which region of India?

(a) Eastern India

(b) Northern India

(c) Northwestern India

(d) Southern India

Q13. Which mountain range is home to the highest peaks in India and plays a key strategic role for the country?

(a) Western Ghats

(b) Vindhya Range

(c) Himalayas

(d) Aravalli Range

Q14. What is the main feature of the flora found in India's desert terrain?

(a) Dense trees and shrubs

(b) Drought-resistant plants like cacti and acacia

(c) Tall grasslands and wildflowers

(d) Evergreen trees and tropical plants

Q15. What major environmental challenge affects forests and jungles in India?

(a) Heavy rainfall

(b) Deforestation and habitat loss

(c) Over-farming

(d) Glacial melting

Short Answer Questions

Q1. What are the two main types of deserts, and how do they differ?

Q2. Describe one adaptation of flora found in desert environments.

Q3. What is the significance of the Himalayas in terms of biodiversity?

Q4. How do forests contribute to the livelihoods of tribal communities in India?

Q5. What are some major environmental challenges facing India's forest ecosystems?

Long Answer Type Questions

Q1. Discuss the characteristics and ecological significance of the Thar Desert.

Q2. Analyze the impact of climate on the biodiversity of the Himalayas.

Q3. Explain the role of forest ecosystems in sustaining tribal communities in India.

Q4. What are the challenges posed by climate change to India’s mountainous regions?

Q5. Describe the various types of forests in India and their ecological roles.

LIVING WITH NATURE (JD/JW)

CHAPTER II :SURVIVAL IN DESERT, MOUNTAIN, JUNGLES, PRACTICAL SURVIVAL SKILLS AND ACCLIMATISATION

"'Survival can be summed up in three words - Never Give Up."



TEACHING INSTRUCTIONS:

Periods	**:**	**02 (Two)**
Type	**:**	**Lecture, Discussion and Practical**
Year	**:**	**2nd Year JD/JW**
Conducting Officer	**:**	**JD/JW (Second year).**
Training Aids	**:**	**Class Room, Outdoor, OHP, Chalk/Markers, Laser**

Time-plan

- Introduction : 03 mins
- Part I : 13 mins
- Part II : 11 mins
- Part III : 13 mins
- Part IV : 30 mins
- Conclusion, Summary and Practice : 10 mins

INTRODUCTION

1. Deserts are defined by their extreme conditions, characterized by minimal rainfall, significant temperature variations, and often harsh terrain. Surviving in such an environment requires specialized knowledge and skills. Surviving in a jungle environment requires a unique set of skills and knowledge due to the dense vegetation, diverse wildlife, and unpredictable weather conditions. Mountains present unique challenges and opportunities for survival due to their rugged terrain, altitude, and rapidly changing weather conditions. Mountains are characterised by higher altitudes, rugged terrain, unpredictable weather with low temperatures, limited resources, and the possibility of isolation. Hypothermia, altitude sickness, High-Altitude Cerebral Edema **(HACE), High-Altitude Pulmonary Edema (HAPE), frost bites, snow blindness,** injuries from falls and navigation are major challenges. Understanding these challenges is crucial for anyone venturing into mountainous areas.



PREVIEW

The lecture will be conducted in following parts:-

(a) Part I : Survival in Deserts

(b) Part II : Survival in Mountains

(c) Part III : Survival in Jungles

(d) Part IV : Practical Survival Skills

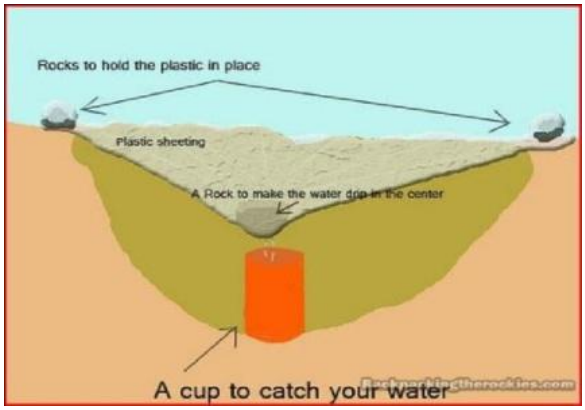
LEARNING OBJECTIVES

- Survival Skills in Desert
- Survival Skills in Mountains
- Survival Skills in Jungles
- Learn Practical Skills
- Acclimatisation Awareness

PART I : SURVIVAL IN DESERTS

2. **Water Management.**

(a) **Signs of Water**. Look for vegetation, as green plants often indicate nearby water. Animal tracks can also lead to water sources; follow them.



(b) **Dew Collection**: In the early morning, use a cloth to soak up dew from grass or other plants. Wring it into a container.

(c) **Water Rationing**. Limit water intake during the hottest parts of the day. Take small sips to stretch your supply.



(d) **Body Cooling**. Keep your body temperature down to reduce sweating. Find shade during peak sun hours.

(e) **Solar Still**. Dig a pit, place a container at the bottom, and cover it with plastic. Add some green vegetation to enhance moisture collection.

(f) **Boiling**. If you have the means, boil any collected water to kill pathogens.

3. **Health and Safety**.

(a) **Avoid Flood Zones**. Stay away from low-lying areas that may flood during rare rainstorms.

(b) **Wind Protection**. Position your shelter to minimize exposure to wind, especially during cold nights.

(c) **Identifying Edibles**. Prickly pear fruits are nutritious; just be careful of spines. Pods of Mesquite trees can be ground into flour.

4. **Temperature Regulations.**

(a) **Natural Features**. Utilize rocks, caves, or overhangs for natural shelter. They provide from the extreme heat and scorching sun.

(b) **Shade Structures**. Use branches and leaves to create a shaded area. Ensure it’s stable.

(c) **Insulation**. Use desert vegetation for insulation at night, as temperatures can drop significantly.

(d) **Tinder**. Look for dry grasses, leaves, and bark. Gather materials from the ground to avoid excess moisture. This will provide warmth at night.

(e) **Heatstroke and dehydration**. Recognise body signs (dizziness, rapid pulse, confusion) and stop immediately to cool down and hydrate.

INTERESTING FACTS

- Most people envision a desert as a sand-covered, hot, and dry region. However, there are also additional desert types. Any sizable area that receives relatively little rain annually is considered a desert. Desert regions support very few plant or animal species. There are several different definitions to describe a desert, but they are typically areas that receive extremely low amounts of rain. In a year, deserts generally receive less than 16 inches of rai

(f) **Wildlife**. Most desert animals avoid humans, but be cautious of venomous snakes and scorpions.

(g) **Sandstorms**. Seek shelter or cover your face and mouth with fabric if caught in a storm.

5. **Navigation.**

(a) **Sun Position.** The sun rises in the east and sets in the west. During the day, use the sun's position for basic direction.

(b) **Stars**. At night, the North Star (Polaris) helps in navigation if you're in the Northern Hemisphere.

(c) **Prominent Features**. Identify and remember prominent mountains, rock formations, or other landmarks to navigate effectively.

(d) **Compasses and Maps**. If you have them, use a compass to find your direction. Familiarize yourself with basic map reading.

6. **Shelter and Shade.**

(a) Utilize rocks, caves, or overhangs for natural shelter. They provide from the extreme heat and scorching sun.

(b) Use branches and leaves to create a shaded area.



(c) Use desert vegetation for insulation at night, as temperatures can drop significantly.

PART II : SURVIVAL IN MOUNTAINS

7. **Altitude Adaptation – Acclimatisation**. By definition, acclimatization is the process by which the body gradually adapts to environmental changes, including altitude, temperature, and humidity. Acclimatization helps prevent altitude sickness, heatstroke, dehydration, and other health issues, enhancing performance and safety in extreme environments. The key challenges are as under:

(a) **Reduced Oxygen**. As altitude increases, the oxygen level in the air decreases, which can lead to altitude sickness.

(b) **Temperature Drops**. Mountains can be much colder, especially as you ascend.



(c) **Increased UV Exposure**. Thinner atmosphere at high altitudes leads to stronger ultraviolet rays.

(d) **Climb Gradually**. Climb slowly, ideally ascending no more than 300-500 meters (1,000-1,600 feet) per day above 2,500 meters (8,200 feet). Rest after each increase in altitude.

(e) **Hydration**. Increased breathing rates at high altitudes can lead to dehydration. Drink plenty of fluids, preferably water, or add electrolytes.

(f) **Monitor for Altitude Sickness**. Symptoms include headache, nausea, dizziness, and fatigue. If symptoms occur, stop climbing and descend if necessary. Never ascend with worsening symptoms.

(g) **Diet**. Eat light, carbohydrate-rich meals, which are easier to digest at high altitudes.

(h) **Rest**. Allow your body time to adjust by resting periodically during ascents and avoiding strenuous activity until fully acclimatized.

8. **Weather Preparedness.**

(a) **Keep Warm**. Collect dry wood, even if wet on the surface, dry it near your body before use. Know how to start a fire with minimal resources (flint and steel, matches, lighters, or even friction methods). Use snow as insulation when necessary (e.g., digging a snow cave).

(b) **Clothing.** Layering is essential (base layer for moisture control, insulating layer for warmth, and outer shell for wind and water protection).Keep head, hands, and feet covered to minimize heat loss.

9. **Shelter and Warmth**.

(a) **Emergency Shelters**. Use materials available in the environment, such as branches, leaves, and snow (for igloos).

(b) **Natural Shelters**. Caves or overhangs can provide immediate protection from the elements.

10. **Food and Navigation**.

(a) **Natural Water Sources**. Look for streams, rivers, and lakes, often found in valleys or lower elevations.

(b) **Snow and Ice**. Melting snow and ice can provide drinking water; ensure to purify it before consumption.

(c) **Protein Sources**. Look for insects, small animals, and fish. Bugs are a great source of protein and can often be found under logs or rocks.

(d) **Reading Maps**. Understand topographic maps, including contour lines and elevation markers.

(e) **Using a Compass**. Learn to take bearings and follow azimuths to navigate through challenging terrain.

(f) **Landmarks**. Identify and use prominent natural features for navigation.

(g) **Sun and Stars**. Use the sun's position and constellations to determine direction.

11. **Health Issues in High Altitude Areas**.

(a) **Altitude Sickness**. Recognize symptoms (headache, nausea) and descend if necessary.

(b) **Cuts and Scrapes**. Clean wounds with purified water and cover with available materials.

(c) **Hypothermia Signs**. Shivering, confusion, and slurred speech. Warm the person gradually.

(d) **Frostbite Treatment**. Warm affected areas slowly; avoid direct heat sources.

(e) **High-altitude cerebral edema (HACE), High-altitude pulmonary oedema (HAPE)**

12. **Type of Clothing**. Layering is essential preferably with three layers of clothing (base layer for moisture control, insulating layer for warmth, and outer shell for wind and water protection).Keep head, hands, and feet covered to minimize heat loss.

PART III : SURVIVAL IN JUNGLES

13. **Water Management.**

(a) **Boiling.** Boil water for at least five minutes, then let it rest for another five minutes. Boiling is one of the most efficient and safest ways to purify water. It kills most bacteria, viruses, and parasites. However, boiling water contaminated with dirt or leaves can introduce heavy minerals into the water.

(b) **Filtering.** Use a cloth, like a bag or t-shirt, to filter the water. You can also add sand, stones, or charcoal to remove larger sediment.

(c) **Collect Rain Water.** Rainwater is generally pure and safe to drink, as long as it's not from a region with heavy industry. You can collect rainwater using a wide, flat object like a tarp, plant leaves, or your clothing.

(d) **Distillation.** Heat the water to create vapour, then collect the vapour in another chamber and let it condense into pure water. Contaminants are left behind in the first chamber as sediments.

(e) **Finding Water.** Look for streams, rivers, or low-lying areas. Use plants like bamboo to collect rainwater.

14. **Protection from Snakes and Insects**.

(a) **Avoidance**. Many animals avoid humans. Make noise while moving to avoid surprising them.

(b) **Safety Tips**. Wear boots and watch where you step. Use clothing and nets to protect against bites.

15. **Navigation**

(a) **Natural Indicators**. Use the position of the sun and stars. Moss tends to grow on the north side of trees in the Northern Hemisphere.

(b) **Creating a Compass**. If you have a needle, you can magnetize it by stroking it with a magnet and floating it on water to create a makeshift compass.

16. **Health Issues Which Can Be Faced**. There are several health issues that can occur in the jungle, including tropical diseases, which are infections that can be acquired in hot and humid areas:-

(a) **Malaria**. A serious, parasite-borne disease transmitted by mosquitoes. It is found in many countries, including Central and South America, sub-Saharan Africa, and South Asia.

(b) **Dengue**. A mosquito-borne disease that is increasingly prevalent in tropical and subtropical countries.

(c) **Diarrhoea**. Caused by rotavirus, this disease mainly affects young children.

(d) **Jungle Yellow Fever**. Transmitted from a mammalian host, usually a monkey, to humans via forest-living mosquitoes.

PART IV : PRACTICAL SKILLS TO ADAPT IN VARIOUS TERRAINS

17. The practical knowledge about survival techniques in various terrains and the stages and conduct of acclimatisation in High Altitude Areas and not only important and relevant but are actually live saving skills which every cadet must endeavour to adopt and learn.



Starting a fire

18. **Starting a Fire with a Hand Drill**. We are going to learn how to start a fire using the hand drill method. This technique requires only natural materials and some practice, but it's a valuable skill for survival situations.

19. **Materials Needed**

(a) **Fire Board.** A flat piece of dry wood (softwood like cedar or pine works well).



(b) **Spindle.** A straight, dry stick about 1-2 feet long and about the thickness of a pencil (softwood is preferred).

(c) **Tinder.** Dry, fine materials that easily ignite, such as dried grass, leaves, or bark.

(d) **Bow (Optional).** A bent stick with a cord (paracord or string) for easier spinning of the spindle.

(e) **Socket (Optional):** A small piece of wood or stone to hold the spindle in place and reduce friction on your hand.

Step 1: Prepare Your Materials

(a) First, we need to prepare our fire board. Make a small notch on the edge of the board, about 1/4 of the way in. This will collect the ember as we drill.

(b) Next, gather your tinder and prepare a small nest or bundle where you'll place the ember once we create it.

Step 2: Position the Fire Board. Place the fire board on a stable surface, ideally on the ground. Ensure that it's dry and free of moisture. If possible, place it on a slight incline to help with ember collection.

Step 3: Prepare the Spindle. Take your spindle and place one end into the notch on the fire board. This end will be the point of friction where we'll generate heat.

Step 4: Starting the Drill

(a) If you have a bow, wrap the cord around the spindle and hold it tightly. If not, simply use your hands. Place your non-dominant hand on top of the spindle to apply pressure while you rotate it.

(b) Begin spinning the spindle back and forth vigorously. If you're using a bow, use a smooth, consistent motion to pull the bowstring. Make sure to keep the spindle vertical.

Step 5: Generating Friction. Keep the spindle moving. The goal is to create enough friction to generate heat. After a minute or so, you should see some dark powder forming at the notch, which is a good sign.

Step 6: Collecting the Ember

(a) Continue drilling until you see smoke rising. This indicates that you're getting close! Once you see smoke, keep applying pressure and spinning until you create a small ember.

(b) Carefully remove the spindle from the fire board, and gently knock off the powder into your tinder bundle.

Step 7: Igniting the Tinder

(a) Now, take the ember from the fire board and place it into your prepared tinder nest. Gently blow on it to encourage it to ignite.

(b) As the tinder catches fire, gradually add small sticks and twigs to build your fire, ensuring that you maintain airflow.

20. **Starting a Fire with a Magnifying Glass**

Step 1: Prepare Your Tinder. First, gather your tinder. It’s important that this material is completely dry, as it will help catch the spark. Create a small nest or bundle with your tinder, making sure it's fluffy to allow for airflow.



Step 2: Find a Good Spot. Choose a location with direct sunlight. Make sure there are no obstructions blocking the sun’s rays, such as trees or buildings. The brighter the sunlight, the better.

Step 3: Position the Magnifying Glass. Hold the magnifying glass over your tinder, about 6 to 12

inches above it. Angle the lens until you find the focal point—the spot where the sunlight is most concentrated and creates the smallest, brightest dot.

Step 4: Focusing the Sunlight. Adjust the distance between the magnifying glass and the tinder until you see a small, bright point of light. This is where the sunlight is focused, and it will generate heat.

Step 5: Ignite the Tinder

(a) Keep the magnifying glass steady, and hold it in place for about 20 to 30 seconds. Watch for smoke; this means you're close to ignition. If the tinder doesn't ignite right away, adjust the position slightly and continue to focus the sunlight.

(b) Once you see smoke, you may notice a small ember forming. Be patient; it may take a moment for the tinder to catch fire.

Step 6: Encouraging the Flame

(a) Once the ember forms, gently blow on it to encourage it to ignite. Be careful not to blow too hard, as this can extinguish the ember.

(b) As the tinder ignites, start adding small kindling to build your fire. Gradually add larger sticks and logs as the flames grow.

21. **Solar Still.** A solar still is an effective method for obtaining clean water from contaminated or salty sources using the sun's heat. Here's a step-by-step guide on how to construct and use a solar still:

Step-by-Step Guide to Using a Solar Still

Materials Needed

(a) **Container**. A shallow bowl or pan to collect the water.

(b) **Plastic Sheet**, A clear plastic sheet or plastic wrap.

(c) **Weight** : A small stone or weight to hold the plastic sheet down.

(d) **Sunlight :** A sunny location with direct sunlight.

Step1. Choose a Location : Find a sunny spot where the still will receive maximum sunlight throughout the day. A flat, level area works best.

Step 2. Prepare the Container : Place the shallow container (bowl or pan) in the center of the location. This container will collect the distilled water.

Step 3. Add Water Source : Pour contaminated or salty water into the container, but do not fill it to the top. Leave some space to avoid overflow when condensation occurs.

Step 4. Cover with Plastic Sheet : Place the clear plastic sheet over the container. Make sure it is sealed tightly around the edges to prevent moisture from escaping. The plastic should be elevated slightly in the center (you can create a small peak) to allow water droplets to form and drip into the container.

Step 5. Add a Weight : Place a small stone or weight in the center of the plastic sheet. This will create a dip that encourages condensation to form and collect in the container.

Step 6. Let the Sun Work : Leave the solar still in place under the sun for several hours. As the sun heats the water, it will evaporate, condense on the underside of the plastic sheet, and drip into the container as distilled water.

Step 7. Collect the Water

(a) After several hours (or a full day), check the container for water. Carefully remove the plastic sheet, being cautious of any remaining water or condensation. The collected water should be clean and safe to drink.

(b) **Optimal Conditions.** The hotter and sunnier the day, the more effective the still will be, so check conditions beforehand.

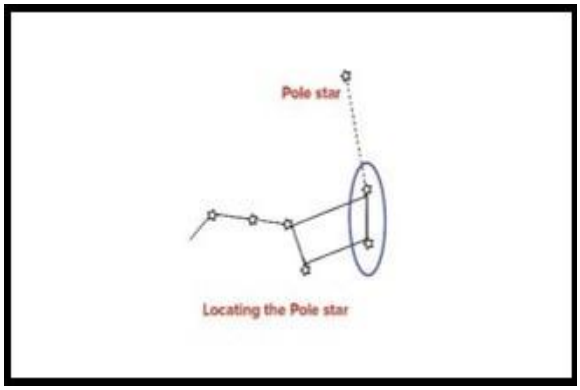
By following these steps, you can successfully create and use a solar still to obtain clean drinking water**.**

22. **Finding Polaris, the North Star, using the Ursa Major Constellation**

Step-by-Step Guide to Finding Polaris

Step1. Locate the Ursa Major - Look for the familiar shape of Ursa Major in the night sky. The most recognizable part is the Big Dipper, which consists of seven bright stars forming a ladle shape.

Step 2. Identify the 'Pointer Stars'. The two stars at the end of the Big Dipper's bowl are known as the Pointer Stars: Dubhe and Merak. These stars form a line that leads toward Polaris.



Step 3. Draw an Imaginary Line. Imagine a straight line connecting Dubhe and Merak. Extend this line outwards from the bowl of the Dipper.

Step 4. Measure the Distance. The distance between the two Pointer Stars is about five times from Merak to Dubhe along this line. Extend it in the same direction until you see a bright star.

Step 5. Find Polaris. After extending the line about five times the distance between Dubhe and Merak, you will arrive at Polaris. It is located at the end of the handle of the Little Dipper (Ursa Minor).

Step 6. Confirm Polaris.Polaris is not only bright but also unique because it remains nearly stationary in the night sky, marking true north.

23. **Step-by-Step Guide to Finding North Using Cassiopeia**

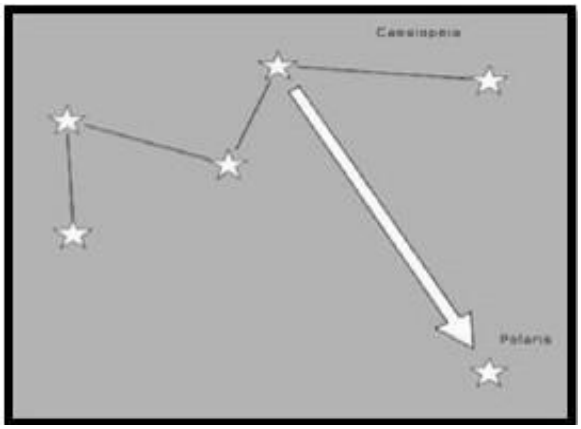
Step1. Locate Cassiopeia. Cassiopeia is easily recognized by its distinctive 'W' shape, formed by five bright stars. It is situated in the northern sky.

Step 2. Identify the 'W' Shape. Look for the 'W' or 'M' shape depending on its orientation in the sky. The three middle stars form the peaks of the 'W'.

Step 3. Find the North Star (Polaris)

(a) To find North, extend an imaginary line from the two outer stars of the 'W' (the stars at the ends of the 'W', named **Caph** and **Schedar**).

(b) Draw a straight line extending from these stars in a straight line toward the horizon.



Cassiopeia

Step 4. Measure the Angle Opposite Cassiopeia is roughly the North Star (Polaris). To approximate North, locate the point in the sky directly above the midpoint between Caph and Schedar, and then draw a line toward the horizon.

Step 5. Confirming North - Once you've identified the general direction using Cassiopeia, you can check against other constellations or landmarks. Polaris, which is part of the Little Dipper, will be a bright star close to the line you've drawn.

CONCLUSION

31. Surviving in the desert is a test of knowledge, adaptability, and resilience. Understanding the environment, finding water and food, and maintaining mental fortitude are essential. Preparation, practice, and a proactive mindset are key to thriving in this challenging landscape. Survival in a jungle requires adaptability, knowledge of the environment, and a range of practical skills. Preparation, practice, and mental fortitude are key to thriving in the wild.Surviving in mountainous environments demands a unique skill set, awareness of the natural world, and the ability to adapt to changing conditions. Preparation, knowledge, and mental resilience are key components to thriving in this challenging terrain. Knowledge of practical survival skills is a prerequisite for a leader couple with the awareness of safety measures an.

SUMMARY

- Deserts are characterized by extreme heat, cold nights, minimal rainfall, and rough terrain. Surviving in this environment requires specialized knowledge in water sourcing, shelter, and food foraging.
- Finding water involves identifying signs like vegetation or animal tracks, collecting dew in the morning, and using solar stills or boiling water for purification. Water should be conserved by rationing and keeping cool.
- Shelters can be created using natural features like rocks or caves, or by building shade structures with desert vegetation. Insulation is crucial to handle the temperature fluctuations.
- Edible desert plants, such as prickly pears and mesquite pods, provide carbohydrates, while insects and small animals can be sources of protein.
- Tinder (dry grasses, leaves) and kindling are needed for fire. Methods include friction (bow drill), flint and steel, or magnifying glasses using sunlight to ignite tinder.
- The jungle presents challenges like dense vegetation, diverse wildlife, and unpredictable weather. Survival depends on shelter-building, food foraging, water purification, and navigation skills.
- Shelters should be built from materials like leaves, vines, and branches, ensuring protection from rain, insects, and falling branches. Lean-to and A-frame shelters are popular designs.
- Water can be sourced from streams, rivers, and plants like bamboo for rainwater collection. Common edible plants include bananas and cattails, while protein can be found in insects, small animals, and fish.
- Use natural indicators like the sun, stars, and moss growth to navigate. A makeshift compass can be created using a magnetized needle and water.
- Mountains require skills for navigating rugged terrain, finding water from streams or melting snow, and managing cold temperatures. Acclimatization to altitude is essential to prevent altitude sickness, and layering clothing is necessary for warmth and protection

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the primary characteristic of a desert?

(a) High rainfall
(b) Extreme temperature variations
(c) Dense vegetation
(d) Abundant wildlife

Q2. Which method is effective for finding water in a desert?

(a) Digging deep holes
(b) Following animal tracks
(c) Looking for large bodies of water
(d) Collecting rainwater

Q3. What type of shelter is recommended in jungle survival?

(a) Igloo
(b) Lean-to
(c) Cave
(d) Tent

Q4. In jungle environments, which plant is commonly edible?

(a) Cactus
(b) Bamboo
(c) Pine
(d) Oak

Q5. What is a key consideration when building a shelter in a desert?

(a) Wind protection
(b) Aesthetics
(c) Proximity to other shelters
(d) Elevation

Q6. Which of the following is NOT a method of purifying water in deserts?

(a) Boiling
(b) Solar still
(c) Using sand and charcoal
(d) Adding salt

Q7. What is a common sign of altitude sickness?

(a) Increased appetite
(b) Nausea
(c) Increased energy
(d) Clear vision

Q8. Which survival skill is critical in mountainous terrain?

(a) Building rafts
(b) Navigating using stars and sun
(c) Swimming
(d) Cooking over an open fire

Q9. What should you do if you experience symptoms of heatstroke in a desert?

(a) Continue walking
(b) Hydrate and seek shade
(c) Build a fire
(d) Find food

Q10. In jungle survival, what is the best way to protect yourself from insects?

(a) Wear bright colors
(b) Use nets and long clothing
(c) Stay completely still
(d) Avoid all plants

Q11. Which of the following is the best indicator to find water in a desert environment?

(a) High cliffs
(b) Animal tracks
(c) Large rock formations
(d) Dry soil

Q12. What is the most common method of purifying water in the desert if you have limited resources?

(a) Boiling the water
(b) Using a solar still
(c) Filtration through cloth
(d) Using a chemical purifier

Q13. Which of the following plants can be consumed for both carbohydrates and protein in the desert?

(a) Cactus (Prickly pear)
(b) Bamboo
(c) Banana
(d) Pineapple

Q14. What is the key strategy for acclimatization when ascending to high altitudes in mountains?

(a) Drink less water to prevent dehydration
(b) Ascend quickly to avoid altitude sickness
(c) Gradually increase your altitude by no more than 300-500 meters per day
(d) Keep active and avoid resting

Q15. In a jungle environment, which of the following is the best method for starting a fire?

(a) Rubbing sticks together without tools
(b) Using flint and steel or a ferro rod
(c) Focusing sunlight using a magnifying glass
(d) Boiling water to generate steam

Short Answer Questions

Q1. What are two key survival skills needed in desert terrain?
Q2. How can you identify edible plants in the jungle?
Q3. What is the importance of acclimatization in mountainous regions?
Q4. Name one method to purify water in the jungle.
Q5. What should be prioritized when building a shelter in a jungle?

Long Answer Questions

Q1. Describe the challenges faced when trying to survive in a desert environment and the strategies that can be employed to overcome them.
Q2. Explain the essential skills required for survival in a jungle environment and how they differ from those in desert or mountain terrains. 7
Q3. Discuss the health risks associated with high altitudes and the methods for preventing and treating altitude sickness.
Q4. Describe the process of building a shelter in a mountainous environment and the considerations that must be taken into account.
Q5. Compare and contrast the survival strategies in deserts, jungles, and mountains, highlighting the unique challenges of each terrain.

MILITARY HISTORY

7

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MH I (JD/JW)

CHAPTER I : INDIA-PAKISTAN WAR, 1947-48



TEACHING INSTRUCTIONS

Period(s) : **One**

Type : **Lecture**

Year : **JD/JW (First year)**

Conducting Officer : **ANO**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart / poster.**

Time-plan:

- Introduction : 2 mins
- Part I : Historical Background : 3 mins.
- Part II : Prelude and Causes : 5 mins.
- Part III : Key Battles and Operations : 20 mins
- Part IV : Outcomes and Aftermath : 10 mins

INTRODUCTION

1. In 1947-48, newly independent India and Pakistan faced a conflict over Jammu and Kashmir. Its ruler Maharaja Hari Singh wanted independence but asked for India's help as Pakistan-backed tribesmen invaded. Indian troops defended the princely state after the Maharaja acceded to India. The conflict, lasting from 22 October 1947 to 1 January 1949, ended with a ceasefire enabled by the UN. It left a third of Jammu and Kashmir under Pakistani control and impacted the future of India-Pakistan relations.

OVERVIEW

(a) Introduction

(b) Part I : Historical Background

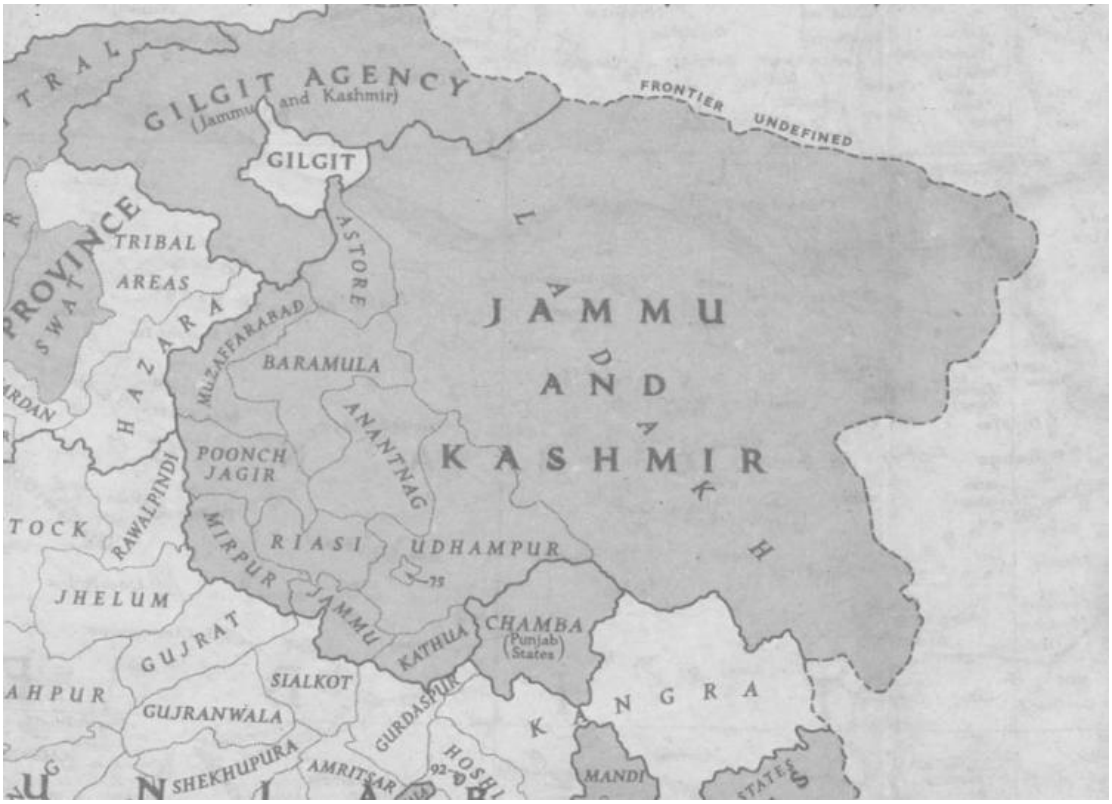
(c) Part II : Prelude and Causes

(d) Part III : Key Battles and Operations

(e) Part IV : Outcomes and Aftermath

LEARNING OBJECTIVES

- To understand the conflict's background, prelude, and cause(s).
- To gain a broad understanding about the question of Kashmir.
- To appreciate the response of the Indian armed forces to the sudden outbreak of a conflict that was critical for India's national integrity.
- To know about the conflict's key battles and heroic figures.



A British map of Jammu and Kashmir and its environment from 1946.

GEOGRAPHY

In 1947, Jammu and Kashmir covered 2,22,236 sq.km. Today, Pakistan and China respectively occupy 78,000 sq.km. and 38,000 sq.km. of this area. India claims the region fully due to its strategic location bordering Tibet, China's Xinjiang, Afghanistan, and Pakistan. Jammu and Kashmir is of high strategic importance as it shares borders with Tibet, China, Afghanistan, and Pakistan. It was part of the Silk Road that linked East Asia to Europe. It features mountain ranges like Karakoram, Greater Himalayan, and Pir Panjal, along with five major rivers between Indus in the north and Sutlej in the south.

PART I : HISTORICAL BACKGROUND

2. The 1946 Cabinet Mission Plan had proposed internal autonomy for India's provinces and princely states. By 1947, the Mountbatten Plan took this aim further by partitioning India and letting princely states decide their future. Despite being new to India, Sir Cyril Radcliffe was quick to partition India's western and eastern areas, creating Pakistan while India got its independence in August 1947. India's 565 princely states had to choose between joining India or Pakistan, or remaining independent. India's Deputy Prime Minister Sardar Vallabhbhai Patel convinced most of these states to join India. However, in Jammu and Kashmir, the Muslim League, which led the demand for Pakistan, began creating disturbances.



Sardar Patel, Jawaharlal Nehru, and Lord Mountbatten.

DIVISION OF THE BRITISH INDIAN ARMY



After the partition, the British Indian Army was divided into the Indian Army with 260,000 troops and Pakistan Army with 140,000 troops, with the British Generals Robert Lockhart and Frank Messervy ordered to head them respectively. Field Marshal Claude Auchinleck, the chief of the British Indian Army, became the Supreme Commander for both armies for administrative purposes.



Right: FM Claude Auchinleck (top) and Gen. Frank Messervy.

PART II : PRELUDE AND CAUSE

3. Even before its creation, Pakistan had planned to force Jammu and Kashmir's Maharaja to join it. Its Prime Minister Liaquat Ali Khan authorized Operation Gulmarg to incite rebellion inside the princely state and attack it externally. On 22 October 1947, parts of a 4,000-strong militia of Pashtun tribesmen armed and led by Pakistan Army invaded the state and advanced towards Srinagar. On their way, the invaders burnt, looted, and caused widespread violence in Muzaffarabad before halting at Baramulla. To save Srinagar, Maharaja Hari Singh requested India for military assistance. India could help the princely state only after it legally acceded to India. The Maharaja agreed and signed the instrument of accession on 26 October. Immediately after, India flew its troops to defend Jammu and Kashmir.


DELHI EDITION

The Hindustan Times

LARGEST CIRCULATION IN NORTHERN, NORTH-WESTERN AND CENTRAL INDIA

NEW DELHI: TUESDAY, OCTOBER 28, 1947.

PRICE TWO ANNAS

KASHMIR ACCEDES TO INDIA

Headlines of a major Indian newspaper from October 1947



Maharaja Hari Singh (left) with Sardar Vallabhbhai Patel in 1948



Indian troops landing in Jammu and Kashmir after its accession to India

MORE ON PAKISTAN'S ROLE

Despite Lord Mountbatten's objections, Pakistan backed Operation Gulmarg by organising the Pashtun tribesmen that invaded Jammu and Kashmir and supplying them arms and equipment. By October, Pakistani troops also helped capture Mirpur and trigger the coup that allowed Gilgit to secede to it from Jammu and Kashmir.

PART III : KEY BATTLES AND OPERATIONS

Initial Response

4. On 27 October 1947, the Indian Air Force (IAF), which existed before the Indian Air Force, transported Indian Army troops to the Srinagar airport. From there, some troops rushed to assist the Jammu and Kashmir State Forces (JKSF) trying to defend Baramulla from the invaders. Outnumbered by the enemy, the Indians stopped at Pattan until the IAF provided them air support to push back the enemy. Lieutenant Colonel Dewan Ranjit Rai was killed in the action.

LIEUTENANT GENERAL KODANDERA M. CARIAPPA



As part of the British Indian Army, Cariappa gave distinguished service in the Second World War. As a Lieutenant General in the 1947-48 conflict, he set up the Indian Army's Western Command and reorganized JKSF to Jammu and Kashmir Corps. In 1949, Cariappa became the Indian Army's first native Commander-in-Chief. He was honoured as a Field Marshal in 1986.

5. By 31 October, Indian Army's presence in Srinagar increased to about 3,000 troops with the 161 Brigade's arrival. Pashtun invaders, threatened by this, tried to enter Srinagar through Badgam. To counter this, Brigadier Lionel Protip Sen sent an offensive team led by Major Somnath Sharma. Though outnumbered, the team fought on until an IAF aerial attack forced the invaders to retreat. Major Sharma was killed on 3 November while defending Badgam. Another group of invaders tried to reach Srinagar's outskirts but the Indian Army intercepted them at Shalateng. They were swiftly supported by a unit of armoured vehicles led by Lieutenant Noel David. The retreating invaders were hit by IAF's aerial fire, which destroyed a major part of enemy convoys to secure Srinagar.

MAJOR SOMNATH SHARMA



Major Somnath Sharma saw distinguished service during the Second World War before he participated in the conflict of 1947-48. Defending Badgam, Major Sharma pledged not to withdraw despite being heavily outnumbered and under tremendous enemy fire. Major was killed in the action and posthumously awarded independent India's first Param Vir Chakra.

Operation Easy and Poonch Link-up

6. Following the bloodshed caused by the invaders at Baramulla, the Indian Army marched fifty kms. to secure Uri by 13 November. To prevent similar devastation at Poonch, some troops were also diverted from Uri. In a tough fight against the invaders blocking Poonch, Lieutenant Colonel Pritham Singh led from the front and entered the town on 22 November. Promoted to Brigadier, Pritham Singh then took the help of locals to lay an airstrip there, fortify the town, and protect its grains. The IAF also lifted food and arsenal, besides bombing enemy positions. For months, the fight around Poonch was heavy until Brigadier Yadunath Singh's troops moved from Jammu and linked up with Brigadier Pritham outside Poonch on 21 November 1948 during **Operation Easy**.

AIR COMMODORE MEHAR SINGH



After joining the IAF in 1936, Mehar Singh, as an Air Commodore, led the operation group that transported the first unit of Indian Army troops to Jammu and Kashmir. He was also the first pilot to land an aircraft at Poonch Airport and Leh, which earned him a Maha Vir Chakra for his role.

DHOBI RAM CHANDER



Ram Chander, a civilian washerman with the Madras Sappers, rescued Fallon following an ambush on their convoy on 18 December 1947. It earned him India's first civilian Maha Vir Chakra.

Operation Vijay and Operation Bison

7. As the Pakistan Army fortified the occupied towns of Jhangar and Naushera, Indian troops under Brigadier Mohammad Usman found it difficult to pierce enemy defences. Yet, support from Brigadier Yadunath's reinforcements and the IAF helped them retake both towns under Operation Vijay. In the action, Brigadier Usman became the seniormost Indian officer to be killed during the entire conflict of 1947-48 and was awarded Maha Vir Chakra posthumously. Until February 1948, JKSF troops headed by Major Sher Jang Thapa resisted invading forces at Skardu. However, with the enemy nearing the town, the Indian Army rushed via the Zoji La pass to secure Leh.



An IAF Dakota aircraft at Poonch

8. The Indian troops at Leh were strengthened when Air Commodore Mehar Singh miraculously airlifted reinforcements of the Gorkha Rifles, helping secure the key town in Ladakh, even as Skardu fell on 14 August 1948. In order to retake the key Zoji La pass, Madras Sappers cleared the muddy path from Baltal to Zoji La in rapid time and enabled Indian tanks led by Major General KS Thimayya to oust the invaders with a surprise assault on 1 November under **Operation Bison.**





Indian soldiers after the recapture of Zoji La; Prime Minister Nehru reviewing Indian troops at Srinagar in May 1948

PART IV : OUTCOMES AND AFTERMATH

9. As the 1947-48 conflict followed the Second World War, Prime Minister Nehru grew concerned about global peace and turned to the then new United Nations (UN) for a long-term solution to the Kashmir issue. After extensive consultations, the UN brokered a ceasefire on 1 January 1949, ending the conflict. By July, the Karachi Agreement established a Ceasefire Line (CFL) in Jammu and Kashmir, leaving a third of the region under illegal Pakistani occupation.

CONCLUSION

10. When tribesmen supported and led by Pakistan military invaded Jammu and Kashmir, Maharaja Hari Singh sought India's help while acceding to India formally. Indian forces were then sent in and they expelled the invaders by December 1948, with operations stretching from Poonch to Leh. The United Nations intervened, establishing a Ceasefire Line, but leaving a third of the state under Pakistan's control. Over time, India chose to address the issue directly with Pakistan.

SUMMARY

- When Pakistan-backed tribesmen invaded Jammu and Kashmir, its ruler Maharaja Hari Singh sought military assistance from India.
- After Jammu and Kashmir legally acceded to India, Indian troops were sent to the region.
- Indian forces, fighting from Poonch in the west to Leh in the east, pushed out the invaders by December 1948.
- The UN intervened and helped establish a Ceasefire Line, with a third of Jammu and Kashmir still being under Pakistani occupation.
- Over time, India opted to tackle the issue bilaterally with Pakistan.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is the elevation of Zojila Pass, which served as the sole link between the Valley and Ladakh?

(a) 9,500 feet (b) 11,575 feet

(c) 13,500 feet (d) 15,000 feet

Q2. Who was the ruler of Jammu and Kashmir when British colonialism ended in India?

(a) Raja Guiab Singh (b) Maharaja Ranbir Singh

(c) Maharaja Hari Singh (d) Maharaja Pratap Singh

Q3. Which ancient trade network once passed through Jammu and Kashmir?

(a) Spice Route (b) Amber Road

(c) Tea Horse Road (d) Silk Route

Q4. What event on 16 August 1946, triggered widespread communal violence in India?

(a) Jallianwala Bagh Massacre (b) Quit India Movement

(c) Cripps Mission (d) Direct Action Day

Q5. Which town in J&K was first captured by the invading forces in October 1947?

(a) Baramulla (b) Muzaffarabad

(c) Srinagar (d) Poonch

Q6. How many princely states were under British paramountcy before India's partition in 1947?

(a) 450 (b) 500

(c) 565 (d) 600

Q7. What type of tanks did the 7th Light Cavalry use during the assault at Zojila?

(a) Sherman tanks (b) r72 tanks

(c) Stuart light tanks (d) Centurion tanks

Q8. What mountain pass did the 161 Brigade traverse in February to reach Leh?

(a) Haji Pir Pass (b) Zoji La Pass

(c) Banihal Pass (d) Khardung La Pass

Q9. What operation was launched to annex Hyderabad in 1948?

(a) Operation Vijay (b) Operation Trident

(c) Operation Easy (d) Operation Polo

Q10. Who commanded the 50 Para Brigade during Operation Vijay in early 1948?

(a) Brigadier Lionel Protip Sen (b) Brigadier Yadunath Singh

(c) Brigadier Mohammed Usman (d) Major Somnath Sharma

Short Answer Questions

Q1. What challenges did the Zojila Pass face during winters and how did Maj Gen K.S. Thimayya plan to reclaim Zojila?

Q2. How did Major Sher Jung Thapa contribute to defending Skardu and what role did the RIAF play in aiding Indian forces during this conflict?

Long Answer Questions

Q1. What made Operation Bison a historic success?

Q2. What challenges did Brigadier Mohammed Usman face during the liberation of Jhangar and Naushera?

Q3. How did 1 SIKH and 1 KUMAON contribute to intercepting the invaders near Srinagar and what role did Lieutenant Noel David and the 7th Cavalry play in this operation?

MH II (JD/JW)

CHAPTER II : INDIA-PAKISTAN WAR, 1965



Indian Army Chief, Gen. J. N. Chaudhuri with other officers at the banks of Ichhogil Canal on the outskirts of Lahore during 1965 Indo-Pak war. (Ministry of Defence)

TEACHING INSTRUCTIONS

Period(s) : **01**

Type : **Lecture and discussion**

Year : **JD/JW (First Year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart / poster.**

Time-plan :

- Introduction : 2 mins.
- Part I : Historical Background : 5 mins.
- Part II : Prelude and Causes : 8 mins.
- Part III : Key Battles and Operations : 20 mins.
- Part IV : Outcomes and Aftermath : 5 mins.

INTRODUCTION

1. The India-Pakistan War of 1965 began with Pakistan's two-phase invasion of Jammu and Kashmir. Lasting from 1 to 22 September, it tested India's military resilience. Strengthened by advanced American weapons from West-led security alliances, Pakistan aimed for a swift victory to separate Jammu and Kashmir from India. Initially restrained, India countered by opening another front along the Punjab and Sialkot sectors. The conflict saw intense tank battles and aerial duels, drawing interventions from the Soviet Union and the US. The war ended with a UN-imposed ceasefire and a bilateral declaration. Its aftermath deepened distrust between India and Pakistan, while strengthening Pakistan's ties with China.

OVERVIEW

(a) Introduction

(b) Part I : Historical Background

(c) Part II : Prelude and Cause

(d) Part III : Key Battles and Operations

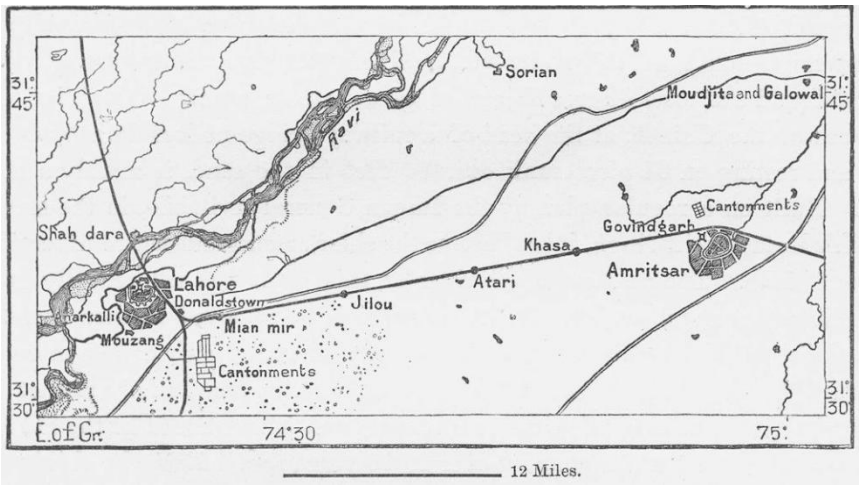
(e) Part IV : Outcomes and Aftermath

LEARNING OBJECTIVES

- To understand the conflict's background, prelude, and cause(s).
- To gain an insight into persisting Pakistani motives against India.
- To appreciate the contributions of India's armed forces in defending its western borders, from Kashmir to Kutch, against enemy offensives.
- To know about the conflict's key battles and heroic figures.

GEOGRAPHY

The fertile, agrarian region of Punjab was partitioned into two separate states in India and Pakistan in 1947. Amritsar and Lahore, two major cities in these states respectively, are only about 50 km. apart. Sialkot, another major city in Pakistan's Punjab state 130 km. north of Lahore, lies about 45 km. to the west of Jammu in India. Their locations have traditionally made these cities lucrative and prime targets for each other's military in the event of a bilateral conflict.



A 19th-century map showing the proximity between Amritsar and Lahore

PART I : HISTORICAL BACKGROUND

2. By 1965, India boosted its military with new mountain divisions and equipment, while Pakistan aligned with the West by joining the SEATO and CENTO alliances. These gave Pakistan access to advanced US weapons, including M-47 and M-48 Patton tanks, F-104 Starfighters, F-86 Sabres, and the Tench-class submarine *PNS Ghazi,* allowing it to gain a military edge. Confident in these enhancements, Pakistan's General-turned-President Muhammad Ayub Khan took the opportunity to attempt capturing Jammu and Kashmir **through a swift war.**



Clockwise from the top: PAF's Lockheed F-104 Starfighter, IAF's Dassault Mystere, India's Centurion Tank, Pakistan's M48 Patton Tank

PART II : PRELUDE AND CAUSES

3. In January 1965, Pakistani troops crossed over to Gujarat's Kutch and seized the Kanjarkot Fort's ruins. This escalated with Operation Desert Hawk in April, where Pakistan used US-supplied Patton tanks against Indian posts at Kanjarkot and Biar Bet. In response, India launched Operation Ablaze and mobilised its XI Corps, but an intervention by the UK led to a quick ceasefire. In August, Pakistan initiated Operation Gibraltar, as 30,000 troops disguised as mujahids infiltrated Jammu and Kashmir to incite rebellion. India countered by capturing the Haji Pir Pass and pushing back the enemy. Pakistan then began Operation Grand Slam to target the strategic Akhnoor Bridge on 1 September, thus aggravating the war.

BRIGADIER ZORAWAR BAKSHI AND MAJOR RANJIT SINGH DAYAL





The Haji Pir Pass was a key infiltration route from Pakistan and securing it became key to block invaders. On 26 August, Brigadier Zorawar Chand Bakshi led India's 68 Brigade to assault Pakistani defences around the pass. Major Ranjit Singh Dayal's platoon advanced, braving rain and steep climbs to capture the pass within hours. Both Bakshi and Dayal received Maha Vir Chakras for their valour.

PART III : KEY BATTLES AND OPERATIONS

Initial Response

4. As Pakistan's 12 Division advanced on Akhnoor, the Indian Army asked for air support, but even the Indian Air Force (IAF) faced Pakistani ground fire and aerial attacks. Resistance from India's AMX tanks and a change in the Pakistani Army's command delayed its progress, giving Indian forces the time to reinforce and fortify Akhnoor. On 3 September, the Indian Army countered near Jourian, supported by the IAF. Over Chumb, the IAF took down two Sabre jets. On 6 September, India opened new fronts at Lahore and Sialkot, forcing Pakistan to redirect its troops southwards.

Operation Riddle and Air Raids on Sargodha

5. India's newly raised I Corps planned to target Sialkot, while XI Corps launched **Operation Riddle** to advance on Lahore. Its key target, the Ichogil Canal near the city, was heavily defended by Pakistani forces that halted the Indian troops despite their initial progress. On 6 September, Pakistan's Air Force (PAF) struck Indian airfields, causing losses at Jamnagar and Pathankot. India replied the next day, bombing Pakistan's Sargodha airbase, destroying 11 aircraft and crippling its air operations. Indian Hawker Hunters also fended PAF Sabres over Halwara and Adampur, and flushed enemy paratroopers from the areas. The defence of Sargodha diverted significant PAF resources, altering the conflict's momentum.



A map of the war's Punjab theatre, with Lahore and Sialkot highlighted.

SQUADRON LEADER AB 'TUBBY' DEVAYYA

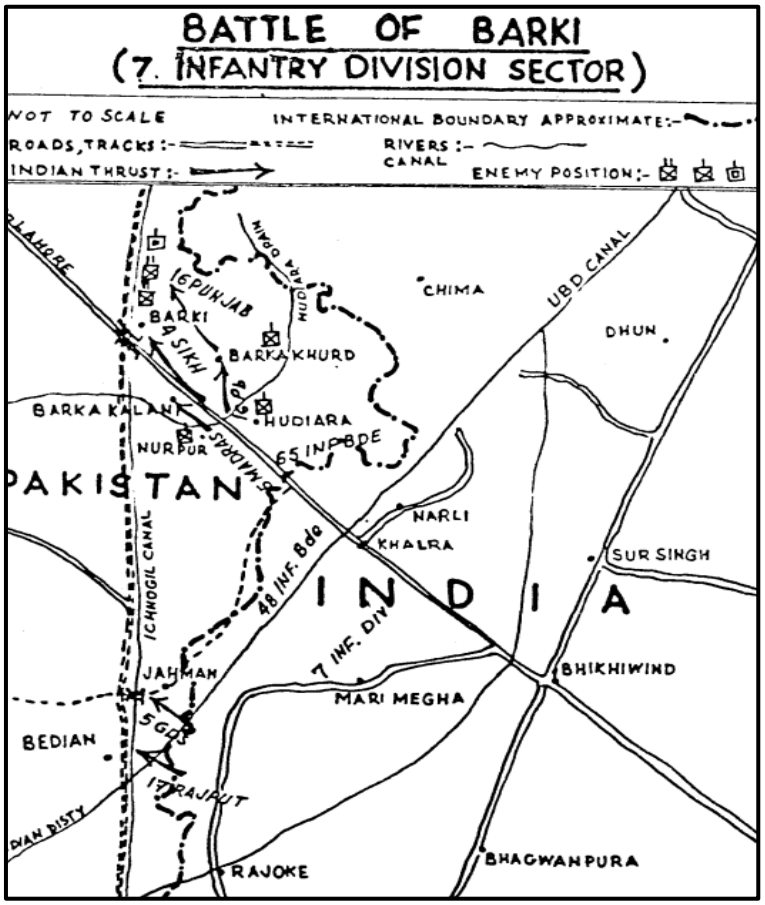


Having joined the 1 Squadron of the IAF just before the War of 1965, Squadron Leader AB Devayya was amongst the pilots raiding Sargodha. While doing so, he was seen by a PAF F-104 Starfighter, being flown by Flight Lieutenant Amjad Hussain. Despite being hit by gunfire initially, Devayya sprung back into the dogfight, tailed after Hussain, and struck the advanced US-made jet with gunfire of his own. This was the only Starfighter to be downed in the war. Unfortunately, Devayya could not eject and died in action. In 1988, he become the only posthumous Maha Vir Chakra awardee in the IAF's history.

Battle of Dera Baba Nanak and Burki

6. To enable India's planned offensive at Sialkot, 29 Brigade sought to capture a strategically crucial rail-and-road bridge across the Ravi River on the Sialkot sector's southern edge at Dera Baba Nanak. The Indian infantry offensive was restricted to the river's east by stiff resistance from a dozen Pakistani Patton tanks until the arrival of air support from the Mysteres of the IAF's 8 Squadron, which crippled the enemy tanks and forced a retreat. After a day's battle, however, the withdrawing Pakistani troops blew up the bridge on 7 September.

7. The following day, when India's 7 Division reached the outskirts of Lahore, it faced a similarly tough resistance from Pakistan Army's 1 Armoured Division at the town of Burki. However, after gaining armoured support, the boosted Indian infantry launched a counter-offensive, destroying a majority of the Pakistani tanks. Thereafter, the captured enemy trenches helped Indian troops evade the limited air support coming from the PAF and continue their charge until Burki's capture on 11 September. The town was then held through the rest of the war.



A map of the war's Punjab theatre, with Lahore and Sialkot highlighted

Battles of Khem Karan and Asal Uttar

8. Khem Karan and Asal Uttar, villages in Indian Punjab about 10 km apart, saw some of the fiercest tank battles since the Second World War. Pakistan's 1 Armoured Division advanced from Kasur to Khem Karan, but suffered losses from the IAF. This enabled India's 4 Division to halt the enemy advance at Khem Karan and regroup at Asal Uttar by 8 September. Led by Major General Gurbaksh Singh and supported by 2 Independent Armoured Brigade, the Indian forces then set an ambush at Asal Uttar using camouflaged tanks, artillery, and anti-tank guns. As the marshy terrain hindered Pakistan's Pattons and Chaffees, the Indian tanks and tank-hunting teams successfully countered the enemy's numerical strength, turning Asal Uttar into a 'graveyard of tanks'. By 11 September, residual Pakistani forces retreated, with many diverted to Sialkot amidst an IAF offensive there.

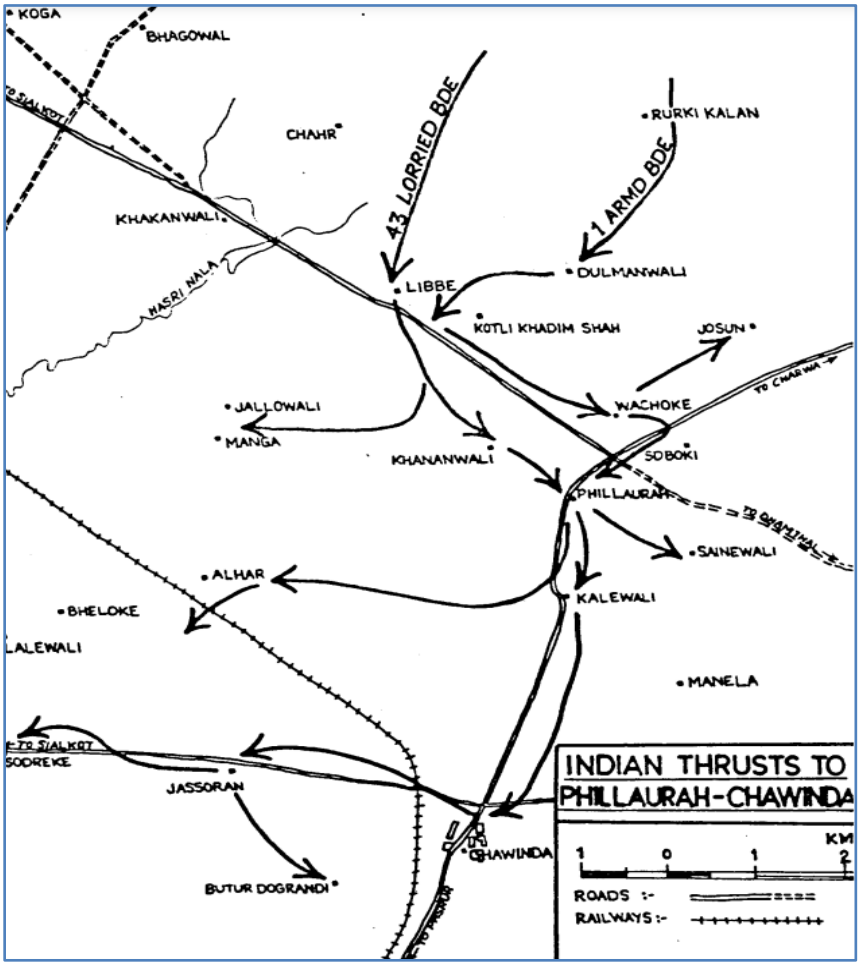
HAVILDAR ABDUL HAMID



Havildar Abdul Hamid formed part of one of the 4 Division's tank-hunting teams at the Battle of Asal Uttar in 1965. Operating a Jeep-mounted anti-tank gun, he proved to be a formidable force against the Pakistan Army's armoured assault. Hamid single-handedly knocked out a lead enemy tank on 8 September, and two more on 10 September, before being killed by enemy tank-fire while aiming for his fourth kill. He was awarded a Param Vir Chakra posthumously.

Battles of Phillora and Chawinda

9. I Corps, the Indian Army's first strike corps, was being reinforced while the war of 1965 broke out. As the Sialkot offensive began on 8 September, the three infantry divisions and one armoured division constituting the corps were under-manned or under-equipped. The terrain, including vast tracts of sugarcane fields, was also not conducive for tanks. So, the Indian advance across the international border to Phillora, a post about 25 km. from Sialkot, was slow. Yet, upon reaching, 1 Armoured Division knocked out dozens of Pakistani tanks by 11 September. Brigadier KK Singh and Lieutenant Colonel MMS Bakshi received Maha Vir Chakras for their role in securing Phillora.



10. A two-day pause before India's advance to Chawinda, however, allowed the Pakistani side to pull reinforcements from Khem Karan. Over the next six days, the villages of Chawinda and Phillora witnessed one of the largest tank battle since the Battle of Kursk during the Second World War, with over 400 tanks engaged. With a crowd of armoured thrusts and infantry clashes on the ground, attrition grew and the IAF's ability to target the enemy reduced. By the time of the ceasefire, India had destroyed 144 Pakistani tanks and captured 500 sq. km. In the action, India also lost Lieutenant Colonel AB Tarapore, who was posthumously awarded the Param Vir Chakra for his bold refusal to abandon his tank under attack.



Pakistani tanks at the Battle of Asal Uttar

FLIGHT LIEUTENANT DENZIL KEELOR

As IAF began re-engaging enemy aircrafts, Four led by Flight Lieutenant Denzil Keelor, spotted and engaged two PAF Sabres over the Sialkot sector. The enemy Sabres were expertly tailed and shot down by Keelor and his subsection leader, Flight Lieutenant Vinay Kapila. The action earned both the young pilots Vir Chakras.



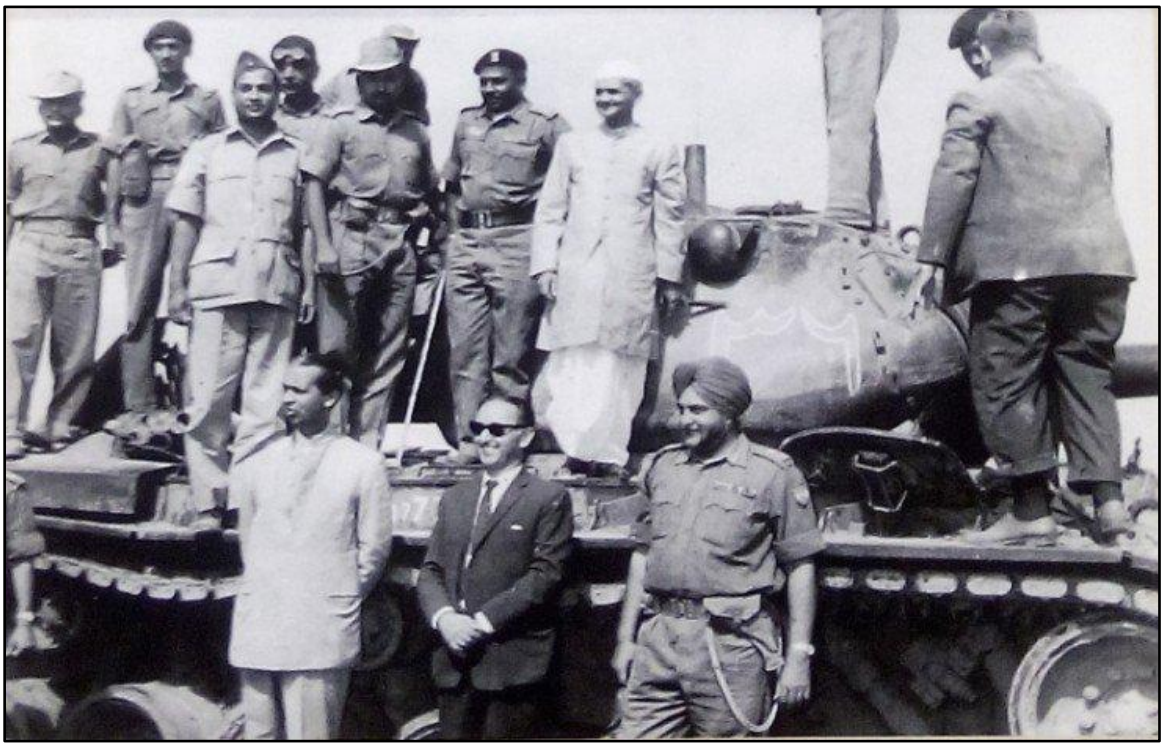
Battle of Dograi

11. As early as on 6 September, the battalion of 3 Jat had managed to cross the Ichogil Canal despite heavy PAF firing and advance towards Dograi, a village on Lahore's outskirts. However, lacking anti-tank weapons, 3 Jat had to withdraw to the bridgehead it made inside enemy territory. On the night of 21 September, the battalion made a final charge at the strategically crucial village under Lieutenant Colonel Desmond Hayde. After intense infantry combat with the Pakistani troops emerging from the enemy pillboxes fortifying the area, 3 Jat took Dograi hours before ceasefire, earning Lieutenant Colonel Hayde a Maha Vir Chakra.

MAJOR ASA RAM TYAGI



Major Asa Ram Tyagi led a platoon in an attack on Dograi, overcoming strong Pakistani attacks from pillboxes, recoilless rifles, and tanks. In spite of being wounded twice, he advanced, firing and bayoneting the enemy, even engaging tanks. Inspired, his platoon captured the town even as Major Tyagi got killed in action. He was posthumously awarded the Maha Vir Chakra.



Prime Minister Lal Bahadur Shastri with a captured enemy tank

Naval Involvement

12. In spite of a sizable numeric edge, the Indian Navy's direct involvement in the War of 1965 was limited. Since claims were being made by Indonesia on India's Nicobar Islands, much of the Indian Navy was initially directed to defend the Bay of Bengal. However, Indian maritime presence was boosted heavily along the Gujarat coast after an attack on Dwarka by the Pakistan Navy. With its only aircraft carrier, INS Vikrant, undergoing a refit, a crucial focus for India was also to keep PNS Ghazi, the subcontinent's first submarine, away from its waters.

PART IV: OUTCOMES AND AFTERMATH

13. The UN Security Council (UNSC) adopted Resolution 211, demanding a ceasefire and troop withdrawal by 22 September. Soviet Premier Alexei Kosygin, supported by the West, facilitated talks between Shastri and Ayub in Tashkent, Soviet Uzbekistan, from 4 to 10 January 1966. The Tashkent Declaration that emerged from the talks emphasised on resolving India-Pakistan disputes without force and normalizing bilateral relations through cooperation.

14. As Shastri and Ayub signed the declaration, the mood in both nations stayed gloomy. India was shocked on 11 January by the sudden demise of their Prime Minister at Tashkent. Shastri was hailed for leading India resolutely through the War of 1965. The conflict also alerted India to the needs of deploying its air power early in a conflict and of expediting the modernisation of its military equipment. To improve border security, India also raised the Border Security Force (BSF).



Ayub Khan, Lal Bahadur Shastri, and Alexei Kosygin at Tashkent

'JAI JAWAAN, JAI KISAAN'

Complimenting the bold defence of India by its armed forces in 1965, American agronomist Norman Borlaug was already promoting the cultivation of high-yield variety wheat in India. A major boost for farmers, this marked the beginning of the 'Green Revolution', set to revolutionize India's food production in under a decade and free it from relying on other nations, especially the US, for its grains supply. A proud Lal Bahadur Shastri gave the popular slogan, '*Jai Jawaan, Jai Kisaan*' (hail the soldier and the farmer), at Prayagraj in October 1965.

CONCLUSION

15. Strengthened by US weapons, Pakistan began Operation Gibraltar to infiltrate Jammu and Kashmir but was swiftly repelled by Indian forces. It then initiated Operation Grand Slam, targeting the Akhnoor Bridge, and compelling India to open fronts at Sialkot and Lahore. Fierce tank battles followed, with the Indian Air Force countering advanced enemy jets. The war ended with a UN- brokered ceasefire and the Tashkent Declaration.

SUMMARY

- Pakistan used its US-sent weapons in Kutch before launching Operation Gibraltar to invade Jammu and Kashmir, but got fast expelled by India.
- Following this, Pakistan began Operation Grand Slam to target Akhnoor Bridge, prompting India to counter by advancing on Sialkot and Lahore.
- Intense tank battles ensued, while the IAF faced advanced enemy jets.
- The war concluded with a UN-led ceasefire and the Soviet-mediated Tashkent Declaration. As the US halted military assistance to India and Pakistan, Pakistan-China and India-Soviet military ties expanded.

ASSESSMENT EXCERCISE

Multiple Choice Questions

Q1. When was the Indo-Pak war of 1965 fought?

(a) 1-22 January, 1965 (b) 1-22 May, 1965

(c) 1-22 September, 1965 (d) 1-22 December, 1965

Q2. Which areas did Pakistan target during the 1965 war?

(a) Gujarat and Maharashtra

(b) Jammu and Kashmir, and Kutch region of Gujarat

(c) Punjab and Rajasthan

(d) West Bengal and Bihar

Q3. Which countries did Pakistan align with more closely as a result of the 1965 war?

(a) United States and Canada

(b) China and the Soviet Union

(c) China and the Western bloc

(d) The Middle Eastern nations

Q4. What is the Great Rann of Kutch?

(a) A mountain range in India

(b) A massive salt marsh in Gujarat, India, bordering Pakistan

(c) A river flowing between India and Pakistan

(d) A desert in Rajasthan, India

Q5. Which Indian brigade was sent to counter Pakistan's attack during Operation Desert Hawk?

(a) 20 PARA Brigade (b) 30 Infantry Brigade

(c) 50 PARA Brigade (d) 70 Armoured Brigade

Q6. What geographical feature did India aim to secure to protect Punjab?

(a) Ichhogil Canal (b) Thar Desert

(c) Rann of Kutch (d) Chenab River

Q7. Which Indian Air Force squadron helped weaken Pakistani armour during this operation?

(a) No. 1 Squadron (b) No. 8 Squadron's Mysteres

(c) No. 15 Squadron (d) No. 18 Squadron

Q8. Which Indian Cavalry unit supported the infantry in destroying Pakistani tanks in the battle near Burki?

(a) 7 Cavalry (b) 50 PARA Cavalry

(c) 29 Cavalry (d) 18 Cavalry

Q9. Which award was Brigadier Thomas K. Theogaraj honoured with for his bravery during the 1965 War?

(a) Param Vir Chakra (b) Padma Bhushan

(c) Maha Vir Chakra (d) Ashoka Chakra

Q10. How many Pakistani tanks were destroyed during the Battle of Asal Uttar?

(a) Over 50 tanks (b) Over 75 tanks

(c) Over 100 tanks (d) Over 150 tanks

Short Answer Questions

Q1. What canal did 3 JAT cross during the 1965 war, and what was their objective?

Q2. What was the goal of India's strategy during Operation Riddle?

Q3. How did India counter the Pakistani offensive in Chhamb?

Long Answer Questions

Q1. What were the key causes and events leading up to the Indo-Pak War of 1965, and how did the geopolitical and historical background influence the conflict?

Q2. Examine India's strategy during Operation Riddle and the air raids on Sargodha.

Q3. How did these actions contribute to the broader goals of the 1965 war?

Q4. What did the Tashkent Declaration aim to achieve after the 1965 war?

MH III (JD/JW)

CHAPTER-III : INDIA-PAKISTAN WAR, 1971



Troops of the 23 Punjab celebrating atop a damaged Pakistani tank at Longewala

TEACHING INSTRUCTIONS:

Period(s) : **One**

Type : **Lecture**

Year : **JD/JW (First Year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart/ poster.**

Time-plan:

- Introduction : 2 mins.
- Part I : Historical Background : 5 mins.
- Part II : Prelude and Causes : 5 mins.
- Part III : Key Battles and Operations : 25 mins.
- Part IV : Outcomes and Aftermath : 3 mins.

INRODUCTION

1. The India-Pakistani War of 1971 got catalysed by Pakistani efforts to crush the liberation movement of the Bengali populace in their eastern half (East Pakistan), which led to a major humanitarian crisis and infiltrations along India's eastern borders. The conflict began with Pakistan's strikes on Indian airbases, prompting India to launch a full-scale intervention aiding the Bengali Mukti Bahini resistance. The war was also fought at the western border between India and Pakistan, with India achieving decisive victories on both fronts, after crippled Pakistan's naval capabilities. The war lasted between 3 and 16 December 1971, ending with Bangladesh's creation. It affirmed India's strategic and operational supremacy.

OVERVIEW

(a) Introduction

(b) Part I : Historical Background

(c) Part II : Prelude and Cause

(d) Part III : Key Battles and Operations

(e) Part IV : Outcomes and Aftermath

LEARNING OBJECTIVES

- To understand the conflict's background, prelude, and cause(s).
- To gain a broad understanding about the problem of East Pakistan.
- To appreciate the Indian armed forces' actions at the western and eastern theatres of a brief but highly complex and wide-reaching war.
- To know about the conflict's key battles and heroic achievements.

GEOGRAPHY

In East Pakistan, the Indian Army faced significant obstacles due to the terrain of the Ganges-Brahmaputra delta, formed by the rivers Meghna, Padma, and Jamuna. Hampering troop mobility and logistics, the swampy, flooded territory restricted heavy weapons deployment, as dense forests made reconnaissance difficult. Poor road networks forced reliance on airlifts and waterborne transport. Seasonal monsoons further disrupted operations and complicated strategies.

In West Pakistan, diverse landscapes, including Punjab's fertile plains, Sindh's deserts, and Northwest Frontier's rugged mountains, posed logistical hurdles for troop movement. The Indus River floodplains created natural barriers, while extreme climate variations and poor infrastructure, especially inadequate roads and bridges, further complicated military movements and supply lines.

PART I : HISTORICAL BACKGROUND

2. After the Partition of India, the resultant country of Pakistan was geographically divided into two halves, West Pakistan, on the west of India, and East Pakistan, which was the eastern half of the former British-era province of Bengal. Despite a shared religious identity, East Pakistan was not only territorially far-flung from the west (separated by 1,600

km. of India in between), but was also culturally different, as a majority of its population was Bengali-speaking people, with their distinct ways of life. This distinction was also owed to East Pakistan's location at the Ganges-Brahmaputra delta, which is prone to floods, droughts, and cyclones. The systemic overlooking of East Pakistan by government's dominated by West Pakistanis became normal, leading to rising local discontent in the east.

3. Following the resignation of General Ayub Khan, Pakistan held an election in 1970. East Bengal voted enthusiastically and as a result, the Awami League of Sheikh Mujibur Rahman, a popular Bengali leader, ended up winning the majority in Pakistan's National Assembly. Fearing a loss of control, West Pakistani leaders rejected the election mandate, prevented the Awami League government's formation, and ensured Mujib's arrest. This sparked widespread protest and a call for a separate national identity in East Pakistan. Reacting, the Pakistan Army, directed by the military dictatorship of General Yahya Khan, stepped in to crush the movement.

MUKTI BAHINI

Mukti Bahini (liberation army), was instrumental in the liberation movement of East Pakistan's Bengalis. Formed in response to Pakistan's brutal crackdown, it included Bangladeshi military personnel, paramilitary forces, and civilians, organized into the Niyomito Bahini (regular army) and Gano Bahini (people's army). Employing guerrilla tactics such as ambushes and sabotage, the Mukti Bahini disrupted Pakistani supply lines and communication, weakening their control over East Pakistan.They launched key actions like **Operation Jackpot** and **Operation Kilo Flight,** which contributed significantly to the war's outcome. Their determination, and the Indian Armed Forces' assistance, led to Bangladesh's liberation and independence.



Mukti Bahini guerrillas on boats

PART II : PRELUDE AND CAUSE

4. On 25 March 1971, beginning with a brutal crackdown on students at Dacca University, the Pakistan Army launched **Operation Searchlight** to silence voices of protest, including intellectuals, professionals, and opposition leaders, and take over key towns by force. By late-1971, up to three million people were killed and 10 million people were displaced as a result. Most of the refugees escaping this persecution arrived in India, putting enormous pressure on India's own security and resources. Pakistan forces in pursuit also crossed over to India's territory sporadically. In November, Indian Prime Minister Indira Gandhi's bid to convince the UK, US, France, and West Germany to step-in was unsuccessful. As tensions mounted, India began to anticipate large-scale aggression from Pakistan.

INDIA-SOVIET TREATY OF PEACE, FRIENDSHIP, AND COOPERATION, 1971

The India-Soviet Treaty of Peace, Friendship, and Cooperation, was signed on 9 August 1971, marking a key shift in India's foreign policy, as it formally moved closer to the Soviet Union strategically in the Cold War. The treaty established cooperation in political, economic, and military areas, and played a major role during the War of 1971 by providing India with crucial diplomatic and military support. Lasting for 20 years and renewed in 1991, it symbolized long-term relations between India and Russia, contributing to regional stability and peace.



Indian PM Indira Gandhi and Soviet Premier Leonid Brezhnev in August 1971

PART III: KEY BATTLES AND OPERATIONS

Battle of Garibpur

5. Even before the War of 1971, Battle of Garibpur marked an early victory for the Indian Army and Mukti Bahini in the Boyra salient of East Pakistan. Pakistan used Garibpur as a launchpad for artillery raids into India. On 20 November, 14 Punjab and 45 Cavalry launched a counter-attack, but a premature engagement followed. On the following day, under Lieutenant Colonel RK Singh, four Indian companies and tanks recaptured Garibpur after fierce fighting. Major DS Narang fielded PT-76 amphibious tanks, knocking out Pakistan's US-made M24 Chaffee tanks before being killed in action. He earned a posthumous Maha Vir Chakra. On November 22, the first aerial combat of the war occurred over Boyra, where the Indian Air Force (IAF) destroyed three Pakistani Sabre aircraft without loss.



Enemy Chaffees captured by 45 Cavalry

WESTERN THEATRE

Defence of Poonch

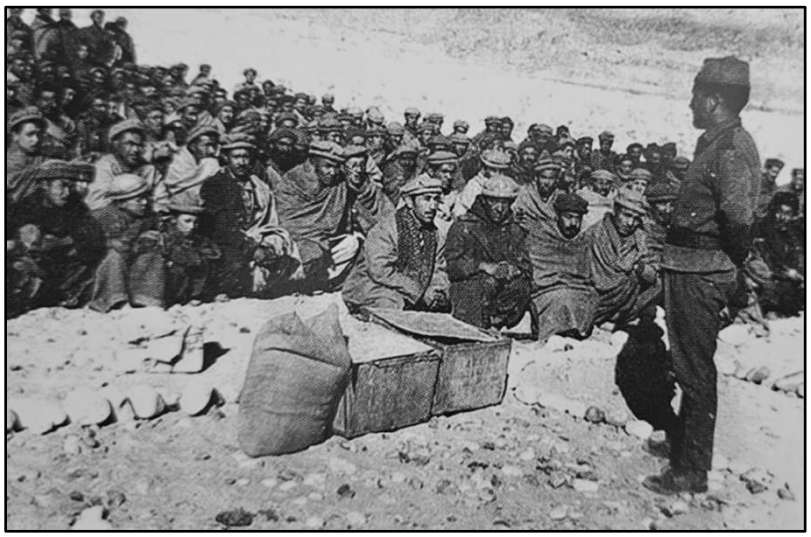
6. In November 1971, Pakistan mobilized troops in the Poonch sector, prompting India's 93 Infantry Brigade to defend critical positions, including Picquets 405, 406, and 406A, which were held by 6 Sikh Regiment. On 3 December, intense shelling from across strategically vital Chand Tekri feature led to the capture of an Indian helipad in the area despite fierce resistance. Reinforcements from 8 Jat Regiment helped mount a counter-attack, and by 6 December, the helipad was regained and placed under the 6 Sikh again. Further enemy offenses launched until 9 December were effectively repelled. Meanwhile, the Indian Army fortified its defences in the sector, strengthening its communication lines and intensifying its artillery fire. The sustained resilience of Indian forces made the enemy retreat.

Battles of Thanpir and Turtuk

7. While the offensive on Poonch was on, a Pakistani attack against the small unit of 93 Infantry Brigade guarding the Thanpir post on 4 December led to its fall, further endangered

Poonch, along with Rajouri, Mandi, and the vital Kalai Bridge on the Poonch River. On 5 December, the Indian forces launched a multi-flank counter-offensive, with the Border Security Force (BSF) threatening the enemy from the east and Para Commandos climbing the Nagali Spur on the west. The surprise forced Pakistani troops to retreat, leaving their arms behind and allowing India to regain Thanpir and fully secure Poonch in a major early success.

8. Meanwhile, securing the strategically key Partapur sector in Ladakh, near the Shyok and Nubra valleys, was critical to preventing a Pakistan-China link through the Karakoram Pass. To ensure this, 3 Infantry Division and Ladakh Scouts under Major Chewang Rinchen began a coordinated operation on 8 December. The Indian forces secured key points like V Picquet and Point 18402. Two days later, Major Rinchen's troops advanced on the Chalunka village and repelled Pakistani troops from there. By 14 December, they similarly ejected the Gilgit Scouts from the Turtuk village. For the action, which saw Indian troops secure over 800 sq. km. Major Rinchen, along with Colonel Udai Singh, received Maha Vir Chakras.



Major Rinchen addressing the inhabitants of Turtuk after the operation

Battle of Basantar

9. On 4 December, 16 Madras Regiment set up a bridge on the Basantar River, enabling 17 Poona Horse tanks to advance. Despite heavy enemy fire, troops of India's 16 Madras defended this bridge for three nights. Meanwhile, Indian forces advanced on the Barapind-Sikandarpur-Lalial area, captured the Supwal Ditch, and mounted further pressure on Pakistani tanks. On 16 December, 3 Grenadiers repelled multiple enemy assaults with artillery and tank support to bring relief to 16 Madras. In the action, which kept the enemy on the backfoot, India knocked down 48 Patton tanks. Young Second Lieutenant Arun Khetarpal destroyed five enemy tanks while not abandoning his own, being awarded a posthumous Param Vir Chakra. The Pakistani forces faced high attrition and demoralisation, failing to make any headway in the riverine area until the war's end.



Lt. Col. Hanut Singh (third from left) with his tank crew

FIELD MARSHAL SAM HFJ MANEKSHAW

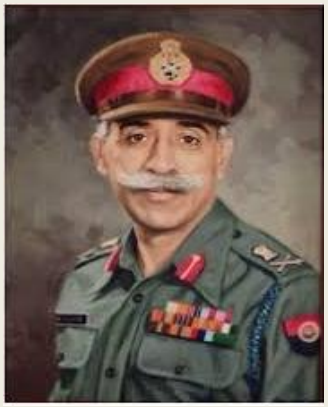


Field Marshal Sam Manekshaw, also known as 'Sam Bahadur', was one of the most distinguished Indian Army officers. He participated in significant conflicts such as the Second World War, followed by the India-Pakistan Wars of 1947-48 and 1965. As Chief of the Army Staff between 1969 and 1973, his exceptional leadership and strategic brilliance guided India to a decisive victory over Pakistan and the liberation of the Bangladeshi people in 1971. He was the first Indian military officer to be promoted to Field Marshal. Field Marshal Manekshaw received the Padma Bhushan in 1968 and the Padma Vibhushan in 1972 for his exceptional service and continued relevance.

Battle of Dera Baba Nanak

10. Tasked to defend Gurdaspur, the 86 Infantry Brigade faced an armoured and infantry attack by Pakistan at Dera Baba Nanak on 3-4 December. After initially forced to vacate Kasowal, the Indian troops launched a spirited counter-offensive on 5 December, attacking a fortified enclave east of the key bridge at Dera Baba Nanak and managing to push the enemy back despite heavy fire. While taking out an enemy machine gun, Captain Devinder Singh was killed and awarded the Maha Vir Chakra posthumously. Effective coordination of infantry, armour, and artillery ensured the fall of Dera Baba Nanak by 6 December, with Lieutenant Colonel NS Sandhu and Brigadier KG Shankar also receiving Maha Vir Chakras.

BRIGADIER KRISHNASWAMI GOWRI SHANKAR



Commanding an infantry brigade defending Dera Baba Nanak on the Western Front, Brigadier Krishnaswami Gowri Shankar was tasked with capturing a heavily fortified enemy position. Demonstrating bold planning and steadfast leadership, he directed operations under intense enemy fire, while inspiring his troops consistently. His adaptability ensured the momentum and success of the attack. For outstanding leadership and determination, he received a Maha Vir Chakra. Brigadier Shankar went on to retire as a Lieutenant General.

Battles of Burj-Fatehpuri and Sehra Bulge

11. On 3-4 December, a Pakistani brigade seized the Fatehpur and Bhago-Kamo areas, prompting the troops of India's 15 Maratha Light Infantry and 66 Armoured Regiment to counter-attack and reclaim the Tur and Burj areas on 5 December, killing over 50 enemy soldiers. On 11-12 December, 8 Sikh Light Infantry retook the heavily fortified Fatehpur post despite suffering heavy casualties. Lieutenant Colonel Pathak earning the Maha Vir Chakra for his leadership during the action. Simultaneously, on 6 December, India's 48 Infantry Brigade managed to capture the tactically vital Sehra Bulge in Pakistan, repelling tank-led counter-attacks on Khem Karan until 16 December. The Indian troops firmly safeguarded the Harike Barrage on the Indian side of Punjab, inflicting heavy losses on the enemy.

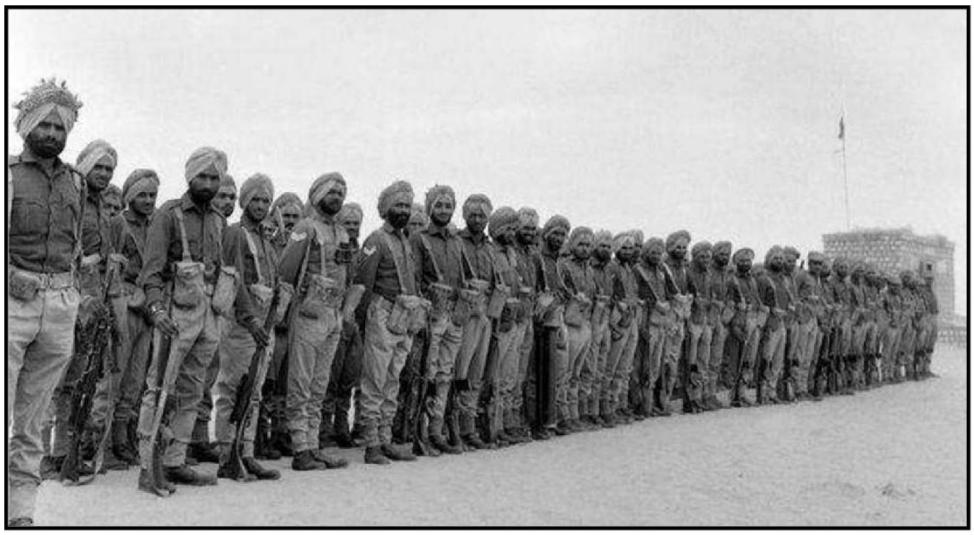


Gen. Manekshaw interacting with his troops after the capture of Sehra

Battle of Longewala

12. Initially a BSF post, the Longewala border post in the Thar Desert was taken over in November 1971 by a company of the 23 Punjab Regiment under Major Kuldip Singh Chandpuri, in anticipation of a full-scale war. The Indian force was small and had limited weaponry. On December 5, a large contingent of Pakistani tanks approached the area, with the objective of capturing parts of the Jaisalmer district and advancing to Jodhpur. In an extraordinary effort, Major Chandpuri's troops defended the post, using anti-tank weapons, machine guns, and small arms to fend off a much larger armoured force through the night, as air support from the IAF could only arrive at dawn. After Hawker Hunters of the IAF's 122

Squadron arrived over Longewala, they joined ground troops to destroy multiple of enemy tanks, neutralise dozens of troops. and force their retreat.



Troops of the A Company of 23 Punjab.

EASTERN THEATRE

Battle of Jessore

13. In early December, Indian troops led by the 9 Infantry Division and supported by the Mukti Bahini, launched a coordinated advance on the town of Jessore in East Pakistan. Facing strong enemy resistance and navigating narrow streets, the Indian forces advanced methodically using guerrilla tactics. By 3 December, their progress compelled Pakistani forces to fall back. Nearby posts at Durga Barkati and Charbari were cleared by 4 December despite heavy fog, making way for an entry into Jessore. As a section of the Indian troops fought Pakistani forces on the town's outskirts, the 32 Brigade captured the Chaugacha-Jessore Road and pierce into the fortified Jessore cantonment by 7 December.



Map of modern Bangladesh with the key locations in tact

Battles of Darsana and Jhenaidah

14. Defended by a Pakistani battalion with tanks, mortars, and guns, Darsana was vital for securing the Hardinge Bridge, which in turn was a gateway to key routes inside East Pakistan. On the night of 2-3 December, after Indian troops of 22 Rajput pierced through enemy defences and reached Akandabaria, they made an advance on enemy bunkers at Darsana. The 5/1 Gorkha Rifles, with armoured support, opened an assault from an adjacent direction, as an Indian Engineer unit cleared a minefield to make way for the tanks. The coordinated campaign helped secure Darsana after neutralising the Pakistan Army's capabilities at the post.

15. On December 5, troops of the 4 Mountain Division were tasked to capture the towns of Jhenaidah and Magura to secure access to vital highways and ferry sites on the Madhumati and Padma Rivers. While a unit blocked off 57 Infantry Brigade of the Pakistan Army, another established a bridgehead across the Chitra River to facilitate the advance of artillery. After closing in on Jhenaidah, India's troops launched a surprise attack on the Pakistani defences in the town on 6 December and captured the town by the following day at a heavy cost for the enemy. By 8 December, 62 Mountain Brigade captured Magura by advancing via Naldanga. Brigadier Anthony was awarded a Maha Vir Chakra leading the effort.

Battle of Madhumati River

16. From Magura, the 62 Mountain Brigade advanced towards Faridpur, reaching the Madhumati River's west bank by 9 December. Joined by the 7 Mountain Brigade, the Indian forces managed to fend off heavy enemy resistance and cross the river by 14 December, establishing roadblocks around Kamarkhali to isolate the Pakistani troops. When the Pakistanis' attempts to break through failed, they surrendered. The surrender at Kamarkhali was substantial, including about 3,000 enemy troops and the General Officer Commanding of the 9 Pakistan Infantry Division. On December 16, after clearing the far side of the river, Indian forces resumed their advance towards Faridpur.





[An Indian tank rolling to Khulna, near Jessore (left); Indian troops crossing River Madhumati]

Capture of Chittagong and Bogra

17. India's 83 Mountain Brigade was, meanwhile, tasked with capturing the major eastern city of Chittagong. Starting the operation from Sitakund on 13 December, they secured Sitalpur and Nazirhat with minimal resistance by 15 December and advanced to Bulako. By the following day, they forced the Pakistani troops around Chittagong and in the city's cantonment to surrender after some resistance. The 8 Bihar Regiment was then assigned to uphold law and order in the area.

18. Bogra was a key communication hub in East Pakistan, serving as the tactical headquarters of the Pakistan Army's 16 Infantry Division. The fortified town was well-connected by rail, road, and air to Dacca and other towns. The Indian Army made an advance on it on 14 December, with 5/11 Gorkhas and 6 Guards, aided by armoured columns assaulting Bogra from the north and the east. Supported by IAF strikes, the Indian tanks penetrated the town without much resistance, but the infantry faced a stiff challenge in close quarters combat on the streets. It took armoured, air, and infantry attacks until 17 December to secure the town.



Locals celebrate the liberation of Chittagong by Indian forces

Battle of Sylhet

19. After Pakistani forces blew up the Meghna River bridgehead to prevent Indian troops from crossing it, a remarkable heli-bridge (chain of helicopters) was flown to airlift hundreds of Indian troops and supplies to the strategically vital town of Sylhet. On the night of 13 December, the airlifted 4/5 Gorkha Rifles assaulted the Sylhet railway station and chased away fleeing Pakistani troops to the north bank of the Surma River. Another unit comprising 5/5 Gorkha Rifles and Mukti Bahini guerrillas cleared nearby villages like Sarighat and Chandghat of the enemy. The Gorkha troops then captured key infrastructure in the town, including a gas supply hub and a radio station, before converging on the cantonment. By 17 December, 6,400 enemy troops surrendered, despite being 20 times the Indian force.



Indian Army officers at Sylhet railway station after its capture

Battles of Mainamati and Jamalpur

20. On 4 December, the Indian Army prepared to target the Lalmai Hills area. Its 61 Mountain Brigade moved ahead north and captured villages like Rajapur and Jafargunj by 7 December, establishing blockades. On the backfoot, the Pakistan Army redirected its troops from Lalmai and the nearby town of Comilla towards the old town of Mainamati. This permitted Indian troops to capture Comilla without much resistance and advance on Mainamati. After putting up some resistance against a renewed assault by the 61 Mountain Brigade, Pakistani troops began to retreat from Mainamati, causing its fall by 9 December. Fm there, the Indians reached the Meghna River and secured certain some tactical points on its bank.

21. Meanwhile, 6 Sikh Light Infantry, 1 Maratha Light Infantry, and 13 Guards had launched an assault on the garrison town of Jamalpur. The Maratha troops faced heavy resistance with gun and artillery fire, suffering losses in a counter-ambush. However, they continued to push on, and after being reinforced by the remaining ground troops and IAF air support, the enemy troops, especially the 31 Baluch, suffered severe losses and even eventually surrendered on 11 December. In the capture of Jamalpur, over 300 Pakistani soldiers were killed and 379 captured



Pakistani troops laying down their arms at Mainamati

INDIAN AIR FORCE'S INVOLVEMENT

Western Theatre

22. Pakistan Air Force (PAF) launched **Operation Chengiz Khan** with daytime strikes on 11 Indian military targets, including airbases and radar installations in Punjab, Jammu and Kashmir, and Rajasthan. In reply, the IAF began operations at midnight, targeting enemy Sabre fighters and expanding to massive airstrikes on enemy targets the next morning. In one such action, on 8 December, Hawker Hunters from Pathankot struck the Pakistani airbase at Murid, destroying five jets. The IAF's focus in the western theatre was largely defensive, while in the east, it aimed to neutralise PAF's capabilities. On the west,

the Battle of Longewala was a notable achievement, where six Hunters from Jaisalmer destroyed or damaged over 50 Pakistani tanks on 5 December.

Eastern Theatre

23. The IAF's role in the east was led by Eastern Air Command and some units from the Central Air Command. The PAF had limited resources in East Pakistan, meanwhile, with just one major airbase at Tejgaon with a few F-86 Sabre jets fully operational when the war broke out. Further, its satellite and monitoring bases were also inadequately equipped. The IAF launched its initial raids in the eastern theatre with Hunters, MiG-21 fighters, and Canberra bombers against enemy air- and army bases. Transport and helicopter fleets, including Dakotas, Antonov An-12s, and C-119 Packets, supported the Indian Army's offensive on the ground.

Tangail Airdrop

24. The Tangail Airdrop was a landmark operation on 11 December. 2 Parachute Regiment, under Lieutenant Colonel Kulwant Singh Pannu, targeted Tangail near the intersection of the Ganga and Jamna Rivers to block the retreating 93 Infantry Brigade of Pakistan Army from reaching Dacca. Over 750 Indian paratroopers were airlifted from West Bengal in six An-12s, 22 Dakotas, and 20 Packets. They successfully captured the Poongli bridge on the Jamalpur-Tangail road in four hours, cutting off the enemy brigade's route. By 12 December, 2 Para joined the Maratha Light Infantry to ambush Pakistani troops. The IAF provided extensive bombing aid. Pakistani Brigadier AQ Khan was captured with 26 other officers. The action allowed 2 Para to become the first Indian force to march into Dacca.



The airdrop over Tangail.

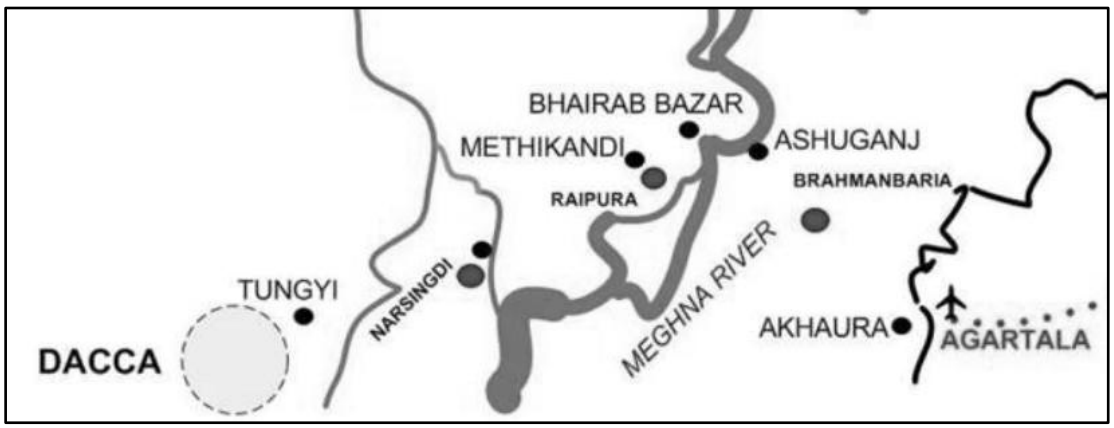
Heli-borne Operations

25. IAF conducted its first large-scale heli-borne operations in this war, ensuring rapid troop movement across East Pakistan's riverine terrain. With air supremacy gained early in the east, these missions operated safely and with commendable results. From 7 to 13 December, the 105 and 110 Helicopter Units, comprising 14 Mil Mi-4 helicopters, were involved in two crucial operations. Between 7 and 9 December, as part of the **Sylhet Heli-lift**, 12 helicopters airlifted 254 troops of the 4/5 Gorkha and 400 kg. of equipment to Sylhet dodging heavy enemy fire. The mission, which saw Indian helicopters fly in intervals of a few minutes, helped the Indian Army surprise Pakistan's 313 Brigade and capture Sylhet. Then, after realising that the Pakistani 27 Brigade had blown up the bridge on the Meghna River, 15 Indian helicopters shifted to lifting troops of the 311 Mountain Brigade (along with thousands of kg. of equipment daily) from Brahmanbaria to Raipura and Narsingdi between 9 and 13 December with over 200 sorties. This allowed Indian troops to circumvent an enemy stronghold in Ashuganj, capture Narsingdi and Bhairab Bazar, and make a swift advance westward to Dacca. This was known as **Operation Cactus Lilly or the Meghna Heli-bridge**. For leading these actions, Group Captain Chandan Singh was awarded the Maha Vir Chakra.

MAJOR GENERAL SAGAT SINGH



The son of a First World War veteran, Major General Sagat Singh began his military career during the Second World War as part of the Bikaner State Forces. After seeing action in the liberation of Goa and the War of 1965, he ascended to lead the IV Corps during the War of 1971. Known for his command of heli-borne missions and logistics, he played a crucial role in conceptualising the Meghna Heli Bridge, leading to Dacca's capture. He was widely regarded for his strategic acumen, going on to be honoured with a Padma Bhushan.



A map of the areas involved in India's heli-borne operations



IAF Mi-4 helicopters forming the Meghna Heli-bridge

INDIAN NAVY'S INVOLVEMENT

26. In November 1971, India established INS Dwarka near Karachi to prepare for retaliating against Pakistan's anticipated aggression. A Task Group, comprising Vidyut Class missile boats, as well as Arnala and Veer Class corvettes, planned to attack Karachi. On 4 December, a day after Pakistan attacked Indian airbases, the Task Force, called '25 Killer Squadron' and led by Commander Babru Bhan Yadav, advanced towards Karachi. Engaging the surprised Pakistan Navy, *INS Nirghat* sank the destroyer *PNS Khaibar*, as *INS Nipat* sank a merchant vessel and damaged *PNS Shah Jahan*. *INS Veer* then destroyed the minesweeper, *PNS Muhafiz*. While withdrawing, an Indian missile boat also bombed a part of the Karachi port. In spite of a risky delay in the return of *INS Kiltan*, the daring action, codenamed **Operation Trident**, proved to be a major Indian success in the early days of the war. The squadron regrouped at Saurashtra by 5 December.

27. Operation Trident's success, marked by the sinking of three Pakistani ships, highlighted India's naval strength. It showed the utilities of resource optimization, contingency planning, and timing in inflicting a severe early setback on Pakistan Navy during the war. Commander Yadav received the Maha Vir Chakra for his leadership. Encouraged, India launched **Operation Python** on December 8 to strike Karachi's naval defences even further. The operation's element of surprise proved the effectiveness of high-risk decision-making led by Admiral SM Nanda.



An Arnala Class corvette

CAPTAIN MAHENDRA NATH MULLA



Having joined the Indian Navy in 1948 and seen extensive service, Captain Mahendra Nath Mulla was commanding *INS Khukri*, a frigate, when it was hit by torpedoes from an enemy submarine off the Diu coast on 9 December 1971. With exceptional valour, Captain Mulla refused to abandon ship, leading the massive rescue effort that followed while prioritising his crew. He even gave his own life-saving gear to an evacuating sailor. He was last seen going down with the frigate and received a posthumous Maha Vir Chakra.

PART IV : OUTCOMES AND AFTERMATH

28. The conflict ended when the capture of Dacca by the Indian troops forced the Pakistan Army to surrender on 16 December 1971. It marked a decisive and monumental military victory for India, whereby it managed to ensure the liberation of an entire half of its enemy's territory. The war led to the replacement of East Pakistan by Bangladesh on the global map, bringing honour to the countless Bengali and Indian lives lost for the cause. The war humbled Pakistan militarily and diplomatically, with the Simla Agreement that followed in 1972 replacing the 1949 Ceasefire Line in Jammu and Kashmir formalised the Line of Control.



Lt. Gen. AAK Niazi (centre) signing the instrument of surrender on 16 December 1971 before Lt. Gen. JS Aurora of India

29. In an act of benevolence, India also released 93,000 Pakistani prisoners of war along with about 15,000 sq. km. of captured enemy territory. The war brought several vital lessons for India, highlighting the importance of sufficient military preparedness; coordinated military strategies and their timely implementation; fighting a conflict in support of a just cause; strategically well-thought international alliances; and decisive political will, as shown by the Indira Gandhi government.

CONCLUSION

The War of 1971 followed a prolonged military suppression of East Pakistan's Bengali population, which caused a significant refugee crisis for neighbouring India. The was began with Pakistani airstrikes on India, prompting Indian forces to respond decisively against West and East Pakistan. The Indian armed forces showing exceptional strategy, firmness,

and readiness. Despite challenges of terrain and enemy resistance, India advanced swiftly to capture Dacca, forcing a surrender in under two weeks, and enabling the creation of Bangladesh.

SUMMARY

- The India-Pakistan War of 1971 was triggered by the persecution of East Pakistan's Bengalis, creating a refugee crisis on India's borders. and escalated with Pakistani airstrikes against Indian military targets.
- After Pakistan's airstrikes against Indian airbases, India launched a swift and strategic response across two theatres.
- Overcoming Pakistani resistance and the harsh terrain of East Pakistan, Indian troops advancing rapidly to Dacca, forced a surrender, and led to the creation of Bangladesh.
- The conflict highlighted India's military preparedness, while crippling the military capabilities of Pakistan to prevent another major war until 1999.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What was the main cause of the India-Pakistan War of 1971?

(a) Border disputes (b) Economic sanctions

(c) Bangladesh Liberation movement (d) Nuclear tensions

Q2. When did Pakistan surrender in the 1971 war?

(a) December 10, 1971 (b) December 16, 1971

(c) December 20, 1971 (d) December 25, 1971

Q3. Which Indian naval operation targeted Karachi Harbour?

(a) Operation Cactus (b) Operation Meghna

(c) Operation Trident (d) Operation Vijay

Q4. How long did the India-Pakistan War of 1971 last?

(a) 10 days (b) 13 days

(c) 20 days (d) 30 days

Q5. What was the result of the India-Pakistan War of 1971?

(a) Annexation of Kashmir (b) Creation of Bangladesh

(c) Ceasefire agreement (d) Withdrawal of Indian forces

Q6. Which brigade was assigned to defend Poonch in November 1971?

(a) 86 Infantry Brigade (b) 93 Infantry Brigade

(c) 50 Parachute Brigade (d) 56 Mountain Brigade

Q7. Which Picquet was reclaimed by Indian forces during the battle?

(a) Picquet 402 (b) Picquet 404

(c) Picquet 405 (d) Picquet 406

Q8. What was Field Marshal Sam Manekshaw's key role in the 1971 India-Pakistan War?

(a) Leading the Navy during Operation Trident

(b) Masterminding the Meghna River crossing

(c) Commanding the Army as Chief of the Army Staff

(d) Commanding IV Corps in the Eastern Sector

Q9. Where did the Battle of Basantar take place during the India-Pakistan War of 1971?

(a) Siachen Glacier
(b) Shakargarh sector
(c) Turtuk sector
(d) Ladakh region

Q10. How many Patton tanks were destroyed by Indian forces in the Battle of Basantar?

(a) 38
(b) 42
(c) 48
(d) 50

Short Answer Questions

Q1. What was Operation Trident, and how did it succeed?

Q2. Describe the significance of the Battle of Basantar during the lndo-Pakistani War of 1971

Q3. Explain the key objectives, strategies, and outcomes of Operation Trident during the 1971 lndo-Pak War.

Long Answer Questions

Q1. Why did East Pakistan want independence, and how did the 1971 war lead to the creation of Bangladesh? Explain India's role in the war and the effect it had on the world.

Q2. Why were battles like Turtuk and Basantar important in the 1971 war? Describe the challenges, the bravery of Indian soldiers, and how these battles contributed to India's victory.

Q3. Explain the role of the Indian Navy, the challenges faced, and why it was important for the war.

MH IV (JD/JW)

CHAPTER- IV : KARGIL WAR OF 1999



India artillery men fire 155mm Bofors guns at enemy positions from a gun emplacement in Drass, Kashmir 22 June 1999

TEACHING INSTRUCTIONS

Period(s) : **One**

Type : **Lecture and discussion**

Year : **JD/JW (Second Year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart / poster**

Time-plan:

- Introduction : 02 mins.
- Part I : Historical Background : 05 mins.
- Part II : Prelude and Causes : 05 mins.
- Part III : Key Battles and Operations : 20 mins.
- Part IV : Outcomes and Aftermath : 08 mins.

INTRODUCTION

1. The 1999 Kargil War, mainly fought at high altitudes in Jammu and Kashmir, was sparked by military infiltrations by Pakistan across the Line of Control (LoC). The infiltrators aimed to cut off the highway linking Kashmir and Ladakh, isolate Siachen Glacier, and internationalize the issue of Kashmir. India responded with Operation Vijay, using mountain warfare, artillery shelling, air strikes (Operation Safed Sagar), and naval deterrence (Operation Talwar) to reclaim strategic areas in Kargil, Dras, and Mushkoh Valley. Major battles occurred at Tololing and Tiger Hills, and Points 5140 and 4875. By July, India pushed out all infiltrators.

OVERVIEW

(a) Introduction

(b) Part – I : Historical Background

(c) Part – II : Prelude and Causes

(d) Part – III : Key Battles and Operations

(e) Part – IV : Outcomes and Aftermath

LEARNING OBJECTIVES

- To understand the conflict's background, prelude, and cause(s).
- To become aware of the strategic importance of the Kargil region.
- To appreciate the perseverance of the Indian armed forces in one of the highest warzones in the world against well-prepared infiltrators.
- To know about the conflict's key battles and heroic figures.



A map of the areas held by infiltrators in the Kargil, Dras, and Mushkoh sectors

Geography

The Kargil, Dras, and Mushkoh sectors in Ladakh feature snowy peaks (that are over 16,000 feet tall, deep gorges, and narrow valleys. Strategically critical locations include Tololing, Tiger Hills (overlooking NH1A), Batalik, Mushkoh valleys, and high-altitude posts such as Points 5140 and 4875. Extreme winters (-30°C) compel the seasonal vacating of forward posts by the Indian Army. In 1999, Pakistan exploited this, infiltrating the emptied Indian posts across the porous Line of Control (LoC). Given the region's limited connectivity, Pakistan targeted NH1A, aiming to cut off India's key supply and transport route to Ladakh and Siachen. For India, the infiltrations highlighted the region's strategic vitality.

PART I : HISTORICAL BACKGROUND

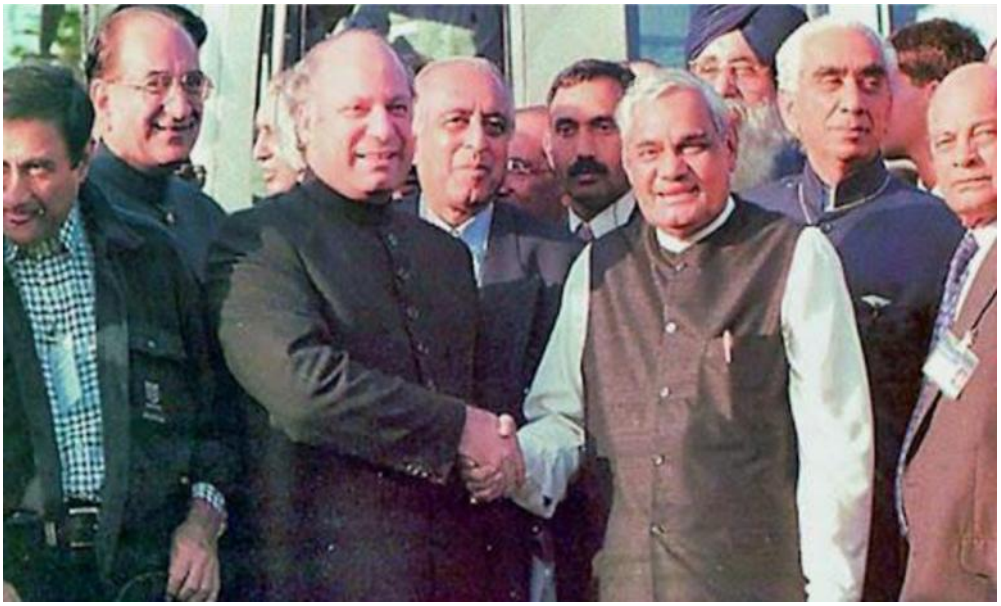
2. The Kargil War's origins trace back to Pakistan's 1947 attempt to seize Jammu and Kashmir, sparking the 1947-48 India-Pakistan conflict. Although Jammu and Kashmir legally joined India, a third of it remained under Pakistan's illegal control. Pakistan's hostility in the region persisted in the 1965 War. Despite losing ground after Bangladesh's liberation in 1971, Pakistan continued to eye the region. The 1972 Simla Agreement created the Line of Control (LoC), but could not deter the Pakistani efforts to take Jammu and Kashmir by force. By the 1980s, it adopted asymmetric warfare, arming militants to destabilize the region.

3. By becoming a key US ally during the Soviet-Afghan War, Pakistan developed strong ties with local militant groups. After that conflict, these militants and surplus arms were turned to Kashmir for separatism and terrorism. In 1990, this peaked with the massacre and exodus of Kashmiri Pandits. Seeking nuclear parity with India, Pakistan conducted nuclear tests in May 1998 following India's own tests. General Pervez Musharraf, appointed in October 1998, believed nuclear parity would help a Pakistani limited conflict with India. This led to the Kargil War.

Diplomatic and Economic Factors

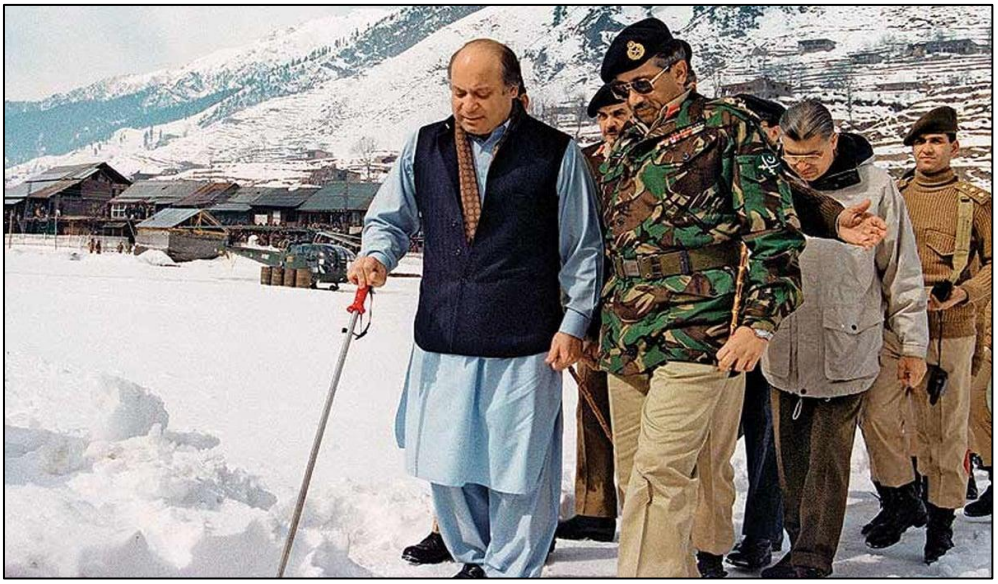
After the 1998 nuclear tensions, Indian Prime Minister Atal Bihari Vajpayee initiated a peace process with Pakistani counterpart Nawaz Sharif, resulting in the Lahore Declaration. The pact sought to resolve the Kashmir dispute, reduce nuclear risks, and enhance trade. Sharif supported this, but General Musharraf exploited it to plan an assault on Kashmir. After the Cold War, India embraced economic globalization, while Pakistan faced instability, military-civil discord, and dependence on foreign aid. The Pakistani military, which became deeply involved in economic matters, fuelled nationalist sentiments over Jammu and Kashmir to divert domestic dissatisfaction, thus re-escalating bilateral tensions.

PART II: PRELUDE AND CAUSES



Upon reaching Lahore by bus, Prime Minister Vajpayee's delegation (right) being received by Nawaz Sharif.

4. The 1999 Kargil War began with Operation Badr, a plan to capture strategic heights in the Kargil, Dras, and Mushkoh sectors. The plan was rooted in 1965's Operation Gibraltar, only being emboldened by Pakistan's new nuclear capability. Conceived after General Musharraf became Army Chief in 1998, Operation Badr was kept secret, with only top military officials informed. Pakistani troops, trained in mountain warfare and disguised as mujahideen, crossed the Line of Control (LoC) to seize Indian posts vacated during winter, igniting the conflict.



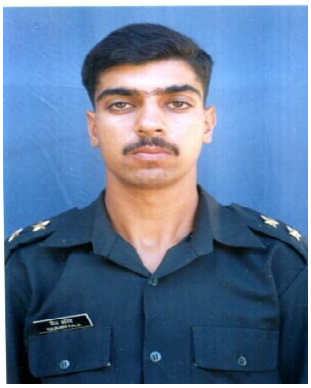
Nawaz Sharif along the LoC with Gen. Musharraf (right) in February 1999

5. Between February and May 1999, over 5,000 Pakistani Northern Light Infantry (NLI) and Special Services Group (SSG) troops seized 132 unguarded Indian posts in the Kargil-Dras area, at elevations reaching 16,000 feet. They fortified these positions with bunkers, mines, and artillery, making it Pakistan's biggest incursion in Indian territory after 1971. By targeting the posts, Pakistan aimed to dominate NH1A, India's key supply route to Ladakh and Siachen. It sought to divert Indian troops and expose Siachen, while exploit nuclear deterrence to escalate militancy and internationalize the Kashmir issue.

PART III : KEY BATTLES AND OPERATIONS

Initial Response

6. Pakistan's moves were first reported on 3 May 1999 by local shepherds in the Batalik subsector, with similar alerts following from Dras. By 6 May, 121 Brigade and the Indian Air Force (IAF) conducted reconnaissance but faced enemy fire. On 10 May, Pakistani artillery shelling destroyed a major Indian ammunition depot in Kargil, disrupting mobility on NH1A in the Kaksar sub-sector. As the scale of infiltration remained unclear, Indian patrols intensified. On 15 May, a five-man patrol led by Lieutenant Saurabh Kalia of 4 Jat Regiment from Bajrang Post was ambushed, captured, subjected to torture, and returned with bodies mutilated. In trying to secure the Bajrang Post, Lieutenant Amit Bharadwaj was killed, confirming the need for a stronger response.



Lt. Saurabh kalia

General Ved Prakash Malik

An alumnus of Defence Services Staff College, Wellington; National Defence College, New Delhi; and the University of Madras, Ved Prakash Malik joined the Indian Army in 1959. Becoming a Major General in 1990, he led 8 Mountain Division as its General Officer Commanding. (The division played a major role at Dras and Mushkoh in the Kargil War.) In 1997, while he was Vice Chief of Army Staff, General Malik was elevated to India's Chief of Army Staff. He also headed the Chiefs of Staff Committee responsible for coordination between the services from 1999 to 2000. General Malik retired in September 2000.

Operation Vijay

7. On 23 May, Indian Army launched Operation Vijay to expel Pakistani forces, with Cabinet approval. The 121 Brigade defended Mushkoh, Dras, and Kaksar, while the 70 Brigade moved to Batalik. Brigades 56, 79, and 192 later joined, backed by the 8 Mountain Division's artillery. The objectives included reclaiming Tololing and Tiger Hills to secure NH1A; Jubar Ridge in Batalik to safeguard the supply route to Siachen; Turtuk Valley near the Line of Actual Control; and Points 5140 and 4875. However, initially, enemy shelling blocked the Indian attempts to retake the Tololing and Tiger Hills between 18 and 22 May.

Operation Safed Sagar

8. Until 21 May, the Indian Air Force (IAF) focused on reconnaissance operations, using Mi-17 helicopters, and MiG-21s and Canberra aircrafts. To directly counter intruders at high altitudes, the Vajpayee government approved airpower under Operation Safed Sagar, but barred crossing the LoC. On 26 May, IAF's 9 and 51 Squadrons began strikes with MiG-21s and MiG-27s on Tololing and Tiger Hills, surprising the enemy. As ground fire grew, the IAF switched to reconnaissance sorties to adapt. By June, Jaguars and Mirage-2000s conducted precision night bombings, aiding Tololing and Point 5140's recapture. The IAF targeted logistics camps and also destroyed key enemy assets near Tiger Hill to enable the peak's retaking. Over 2,000 helicopter sorties also helped carry out logistics.

SQUADRON LEADER AJAY AHUJA

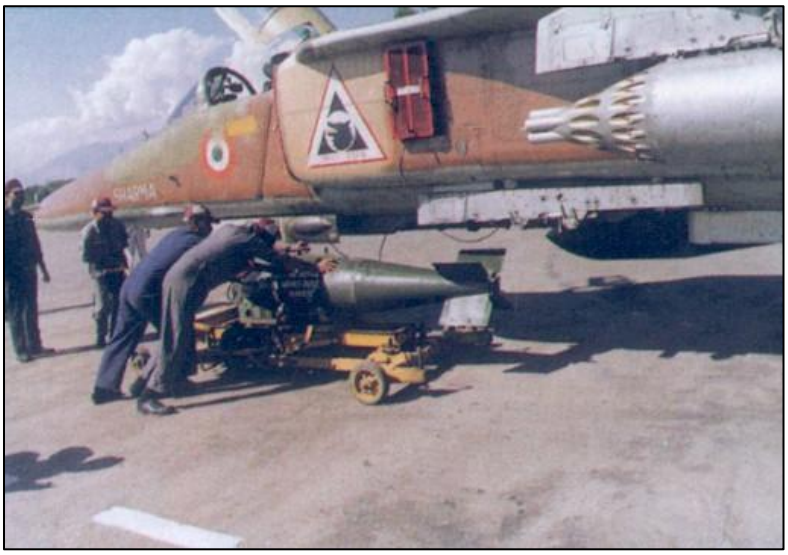


Upon receiving the news of Flight Lieutenant K. Nachiketa Rao's MiG-27 crashing due to engine failure during a raid over Batalik, Squadron Leader Ajay Ahuja was dispatched to spot the crash site. Amidst the survey, his aircraft was struck by a Stinger missile fired by the infiltrators. Following ejection, however, Squadron Leader Ahuja was captured on enemy territory and then brutally killed on 27 May.

WING COMMANDER ANIL K. SINHA



Wing Commander Anil K. Sinha survived a similar Stinger attack while flying an offensive sortie on his Mi-17 helicopter over Tololing the next day. They were the only two IAF officers to receive Vir Chakras for the Kargil War. Eventually, Flight Lieutenant Rao returned home from enemy captivity.



A MiG-27 of IAF's 9 Squadron being armed with a 1000-lb. bomb

Battles of Tololing Hill, Point 5140, and Three Pimples Complex

9. After the resistance faced by 18 Grenadiers and 1 Naga from Pakistani NLI troops at Tololing Hill in May, a fresh assault was launched by 2 Rajputana Rifles in June. Utilising launchpads created earlier, Major Vivek Gupta boldly steered his troops through a steep climb to reach the top of Tololing Hill. Enemy mortar fire was countered by Indian artillery fire. As the feature was fortified with bunkers, machine guns, and artillery, the 2 Rajputana Rifles chose to launch their final and decisive assault on the night of 12 June, capitalising on low-light conditions. After intense all-night fighting, Tololing Hill was regained the next morning, with dozens of casualties, including the loss of Major Gupta.

10. 13 Jammu and Kashmir Rifles, moved to relieve the exhausted 2 Rajputana Rifles, were tasked with capturing the remainder of Tololing Ridge, including Point 5140. After prolonged Indian artillery fire, Lieutenant Vikram Batra led a surprise attack from the peak's rear. On 20 June, following intense gunfighting, grenade bombing, and close combat, Lieutenant Batra was injured but victorious, as he radioed 'Yeh Dil Maange More' (the heart wants more) to signal the retaking of Point 5140. Meanwhile, the Three Pimples Complex on Marpola Ridge still posed a threat to NH1A. The regrouped 2 Rajputana Rifles braved enemy resistance to launched an assault on 28 June. After intense fighting, the complex was cleared on 29 June, earning Lieutenant Colonel MB Ravindranath a Vir Chakra.

Artillery Operations

11. By mid-May, Indian troops realised that strong artillery support was essential for advancing on occupied areas. Initially, 121 Brigade's artillery regiment used mortars and 105 mm guns. In June, the 8 Mountain Division's artillery brigade enhanced this with 105 mm and 120 mm guns, alongside Swedish-made 155 mm Bofors FH-77B howitzers moved from Kashmir. These howitzers, with a 35-km range and high-altitude endurance, were highly effective. By July, Grad B rockets and Pinaka multi-barrel rocket launchers were also introduced. Over 200 guns from six regiments targeted enemy positions across sectors, firing continuously. Together with the IAF bombings, this artillery fire proved vital in weakening enemy strongholds, with the Bofors howitzers playing a key role in shelling operations.



A map of the enemy-held areas between Tiger Hill (left) and Chorbat La

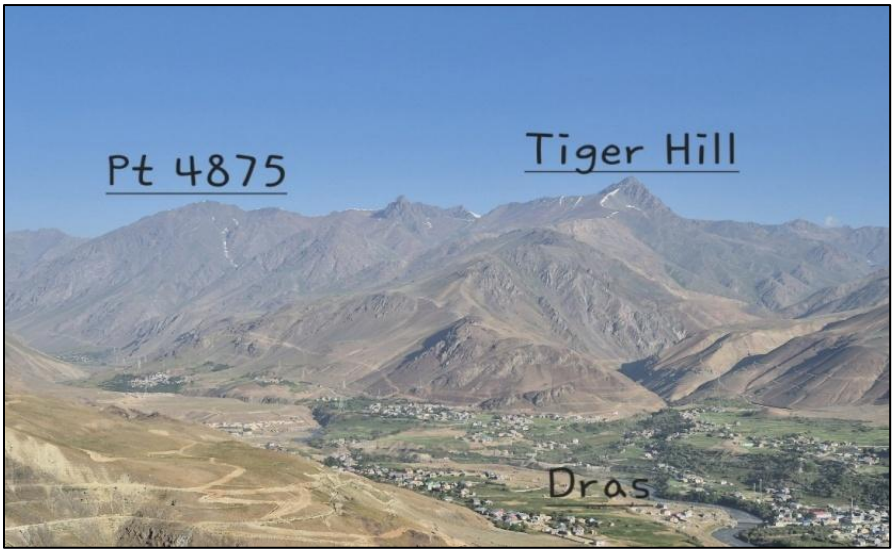


The Arty howitzers being deployed in Kargil

Battles of Point 4875 and Tiger Hill

12. After reclaiming Tololing Ridge, Major General Mohinder Puri of 8 Mountain Division targeted Point 4875 and Tiger Hill, where Pakistani forces resisted in spite of low supplies. Securing Point 4875 near NH1A became most crucial. On 2 July, the Indian troops led by Lieutenant Colonel YK Joshi began their climb. Despite heavy gunfire, progress was steady. On 7 July, Captain Vikram Batra led reinforcements from the 13 Jammu and Kashmir Rifles. He destroyed an enemy gun-nest but was killed while saving a soldier just before Point 4875's recapture. He was posthumously awarded the Param Vir Chakra.

13. Meanwhile, having begun climbing on 3 July, troops of 18 Grenadiers and 8 Sikh advanced on Tiger Hill (or Point 5060), assisted by strong artillery cover. Braving sporadic rain, they chose unconventional, steep routes to catch the NLI infiltrators off guard. Despite initial attrition due to heavy enemy fire, the Pakistani defence got divided by resilient multi-sided climbs by Indian troops. Grenadier Yogendra Singh Yadav managed to make the climb despite getting hit by enemy bullets and destroyed an enemy bunker. He went on to receive the Param Vir Chakra. After hours of close combat, the Tiger Hill was won on 8 July.



The peaks of Point 4875 and Tiger Hill

Major Rajesh Adhikari and Naik Digendra Paraswal



Having led an early effort to retake Tololing Ridge in May, Major Rajesh Singh Adhikari was part of an advance by 18 Grenadiers. After mounting a bold counterattack against enemy firing, the 28- year-old Major Adhikari was injured by machine gun fire while approaching Tololing Hill's top. Yet, he crawled up to an enemy bunker and destroyed it with a grenade before being killed by retaliatory fire. He received a Maha Vir Chakra posthumously.



Naik Digendra Kumar Paraswal was part of 2 Rajputana Rifles in its offensive on Tololing Hill. In the assault, despite being injured by bullet wound and losing his commanding officer, Major Vivek Gupta, Naik Paraswal kept firing his light machine gun at enemy bunkers. Killing dozens of enemy troops, his relentless firing allowed 2 Rajputana Rifles to advance and outshine the enemy in close combat. Naik Paraswal was awarded a Maha Vir Chakra.

Operations in Batalik

14. In the Batalik subsector, Pakistani infiltrators occupied Kukarthang, Jubar complex, Khalubar ridgeline, and Point 5203, overlooking the Leh-Batalik-Kargil Road. 12 Jammu and Kashmir Rifles, supported by 2 Parachute Regiment and Ladakh Scouts, advanced on Point 5203 on 20 June, regaining it on 11 July. The Khalubar ridgeline, vital for its closeness to the Munthadalo logistics dump, faced an assault on 30 June from 22 Grenadiers, which the enemy repelled. The task was then given to 1/11 Gorkha Rifles under Colonel Lalit Rai, which began scaling Khalubar on 2 July. Amidst heavy fire, Major Manoj Kumar Pandey destroyed four bunkers before being killed by enemy fire. Khalubar was retaken, earning Major Pandey a posthumous Param Vir Chakra.

Lieutenant Balwan Singh Panghal and Major Sonam Wangchuk





Lieutenant Balwan Singh Panghal, three months into service, led 18 Grenadiers' elite Ghatak Platoon in the Battle of Tiger Hill. On 3 July, under heavy fire, he led his team up a vertical cliff in a 12-hour climb. Injured but resolute, he fought with valour, killing four enemies and earning a Maha Vir Chakra.

On 1 June, Major Sonam Wangchuk led 40 Ladakh Scouts through tough terrain to secure Chorbat La pass in Batalik. Under heavy fire, they held position for two days before making a daring ascent before dawn. Surprising 130 intruders, they killed several and forced the rest to retreat. The action earned him the Maha Vir Chakra and the title, 'Lion of Ladakh.'

Operation Talwar

15. Amidst the war, the Indian Navy deterred Pakistan by threatening a second front at sea. Under Operation Talwar, the Eastern Naval Command secured the Bay of Bengal, as Vice Admiral Madhavendra Singh's Western Naval Command deployed warships and submarines towards the Makaran coast. Indian vessels blockaded Karachi's maritime routes, imposing economic pressure on Pakistan. Without direct engagements, the Indian Navy's threat to Karachi amply weakened Pakistan's war effort, showcasing its strategic influence during the conflict.



Unclaimed dead bodies of Pakistani troops being buried by Indian soldiers with Islamic rituals

PART IV : OUTCOMES AND AFTERMATH

INDIAN MEDIA'S RESPONSE

The Kargil War marked South Asia's first conflict highlighting media's wartime role. With military support, Indian channels gave live updates, shaping public view of the war. The media won praise for exposing Pakistan's military hand in the infiltrations by airing captured evidence. The war marked the rise of private news outlets that produced engaging coverage despite limited resources and wartime experience, establishing their significance in modern conflict reporting.

Indian Media's Response.

16. India's recapture of all Pakistani-held points in July was celebrated as 'Vijay Diwas'. India lost 524 soldiers, while Pakistan suffered 3,000-4,000 casualties. In October, the Vajpayee government returned to power with a strong majority. India cut off its ties with Pakistan and improved its defence capabilities, while Pakistan endured domestic setbacks. In August, the Sharif government avoided escalating after the IAF downed a Pakistani aircraft. By October, Sharif s attempt to dismiss General Musharraf led to a swift military coup, overthrowing his government.

CONCLUSION

17. The Kargil War began with Pakistani forces infiltrating across the LoC under Operation Badr to seize high-altitude positions. India responded with Operation Vijay, overcoming odds to reclaim these areas. Supported by the Air Force's Operation Sated Sagar and Navy's Operation Talwar, the Army's high-altitude warfare expertise and artillery fire secured victory. The war was a misadventure for Pakistan, but enhanced India's military and diplomatic standing.

SUMMARY

- The Kargil War was triggered by Pakistani troops infiltrating multiple points across the LoC in Jammu and Kashmir under Operation Badr.
- India responded with Operation Vijay to reclaim these areas.
- Indian forces showed exceptional high altitude warfare skills, supported by IAF's Operation Safed Sagar and Indian Navy's Operation Talwar.
- Artillery fire played a commendable role in securing enemy-held peaks.
- The war proved disastrous for Pakistan's political and military reputation

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Which regiment was the PVC awardee Captain Vikram Batra a member of?

(a) 18 Grenadiers (b) 40 Ladakh Scouts

(c) 13 Jammu and Kashmir Rifles (d) 2 Rajputana Rifles

Q2. Who was the Prime Minister of India during the Kargil War?

(a) Dr Manmohan Singh (b) Inder Kumar Gujral

(c) Atal Bihari Vajpayee (d) HD Deve Gowda

Q3. What was the name of the military operation conducted by India to evict the Pakistani intruders from Kargil?

(a) Operation Polo (b) Operation Vijay

(c) Operation Meghdoot (d) Operation Badr

Q4. What was the primary purpose of Operation Talwar conducted by the Indian Navy during the Kargil War?

(a) Naval blockade to cut off Pakistani supply lines

(b) Amphibious assault on Karachi

(c) Destroying Pakistani submarines in the Arabian Sea

(d) Conducting missile strikes on enemy positions

Q5. Which Indian Army General was instrumental in spearheading the recapture of Tololing Ridge during the Kargil War?

(a) Lt Gen Mohinder Puri (then Maj Gen)

(b) Lt Gen YK Joshi (then Lt Colonel)

(c) Gen VP Malik (then Chief of Army Staff)

(d) Lt Gen Amarjit Singh Kalkat (then Corps Commander)

Q6. What was the global diplomatic outcome of the Kargil War?

(a) Pakistan gained international support for Kashmir

(b) Pakistan was globally isolated and condemned

(c) Pakistan signed a peace deal with India

(d) The UN decided to intervene militarily in Kashmir

Q7. Which of the following was NOT a major challenge faced by Indian soldiers during the Kargil War?

(a) Harsh high-altitude conditions

(b) Lack of air support

(c) Well-fortified enemy positions

(d) Surprise element of the attack

Q8. General V.P. Malik was the Chief of Army Staff of India during the Kargil War. (True or false?)

(a) True (b) False

Q9. India launched a full-scale invasion of Pakistan in response to the Kargil War. (True or false?)

(a) True (b) False

Q10. True or false. The Kargil War was the first conflict in South Asia to prominently showcase the media's role in wartime coverage. (True or false?)

(a) True (b) False

Short Answer Questions

Q1. Briefly outline the key causes of the Kargii War.

Q2. Why was Major Sonam Wangchuk given the title of 'Lion of Ladakh'?

Q3. What were the international outcomes of the Kargil War?

Long Answer Questions

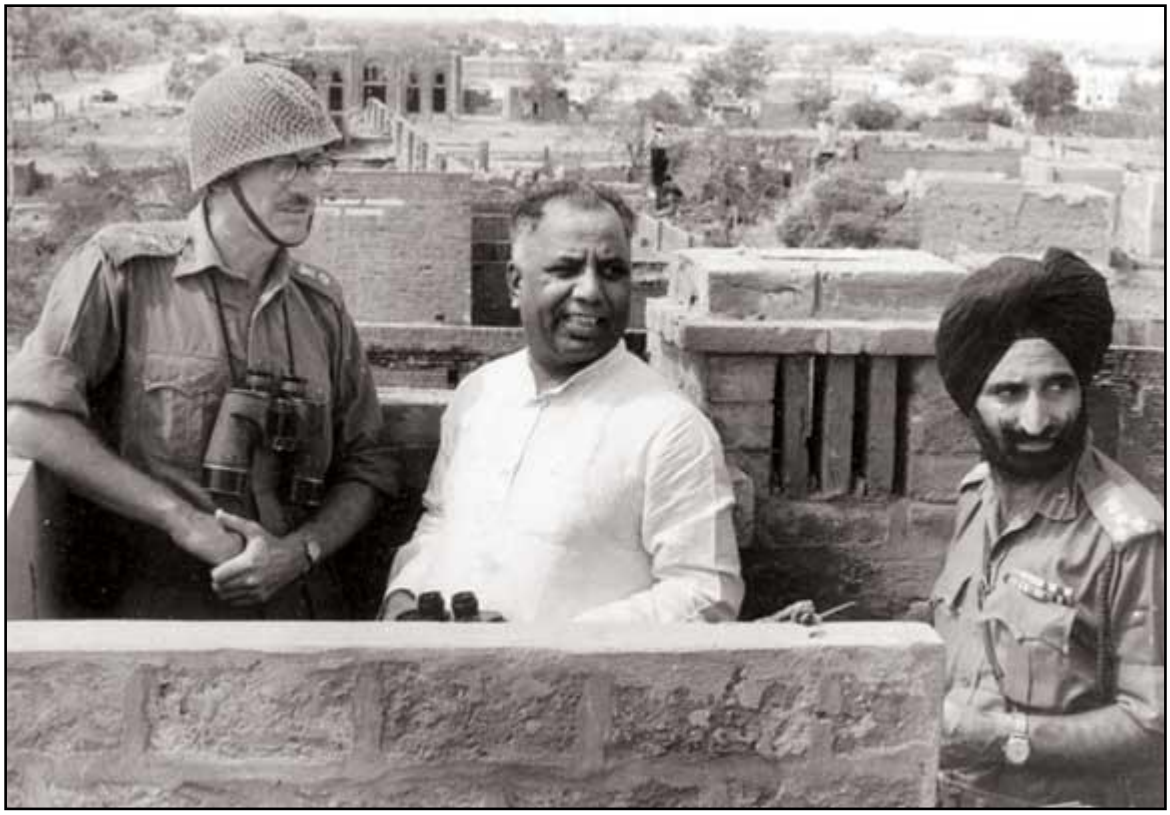
Q1. Explain the key events and strategies involved in the recapture of Tiger Hill.

Q2. Examine Captain Vikram Batra's role in the Kargil War.

Q3. Describe the operations in the Batalik subsector.

MH V (JD/JW)

CHAPTER V : MAJOR TRI-SERVICES OPERATIONS.



Lt Col Desmond Hayde, MVC, CO 3 JAT (Left) with defence minister Yashwantrao Chavan at captured pakistani town of Dograi after the Battle of Dograi in 1965 Indo-Pak war.

TEACHING INSTRUCTIONS:

Period(s) : **One**

Type : **Lecture and discussion**

Year : **JD/JW (Second year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart / poster.**

Time-plan

Introduction:	Overview	:	5 mins.
Part I	: On Land: Battle of Dograi	:	15 mins.
Part II	: In Air: Battle of Longewala	:	10 mins.
Part III	: At Sea: Operation Trident	:	10 mins.

INTRODUCTION

1. India's armed forces have set many an example of their operational abilities through their history. Yet, the Battle of Dograi, Battle of Longewala, and Operation Trident stand apart as exemplary military operations on land, in air, and at sea respectively. In all three cases, the Indian unit primarily involved was either faced with tremendous odds or achieved a feat that was witnessed until then. The Battle of Dograi saw the 3 Jat Regiment cross into enemy territory and capture the town of Dograi outside Lahore in 1965. In the Battle of Longewala, 122 Squadron of the Indian Air Force crippled a massive enemy tank advance towards Jaisalmer in 1971. Finally, with Operation Trident, again in 1971, the Indian Navy retaliated against Pakistan's aggression on India by counter-attacking its navy at Karachi.

OVERVIEW

(a) Introduction

(b) Part I : Battle of Dograi

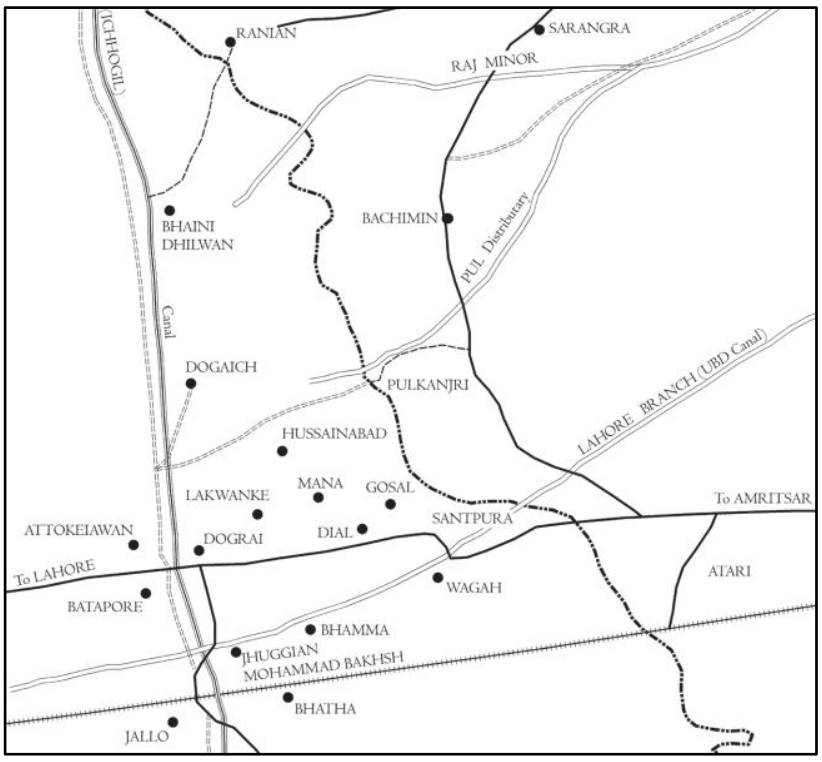
(c) Part II: Battle of Longewala

(d) Part III : Operation Trident

LEARNING OBJECTIVES

- To learn about three exemplary actions of the Indian armed forces.
- To take a detailed look at their planning, execution, and outcomes.
- To appreciate the unique aspects of each of these three actions.
- To know about each action's key challenges and their solutions.

PART I: BATTLE OF DOGRAI



Map showing Ichogil Canal and Dograi

Brief Background

2. On 1 September 1965, Pakistan began Operation Grand Slam to take Akhnoor and disrupt Indian supply routes. Although initially successful, the offensive was halted by the Indian Army and Air Force by 3 September. In further retaliation, India also initiated counter-attacks across the international border in Jammu and Kashmir and Punjab on 6 September, as sanctioned by the Lal Bahadur Shastri government. To relieve pressure in Chhamb, India targeted Lahore and Sialkot, aiming to spread Pakistan's military capabilities and secure strategic territory for post-war leverage. These moves sought to counter Pakistan's advances while positioning India advantageously in the War of 1965.

Planning

3. In Punjab, India targeted the region from Dera Baba Nanak to the Sutlej River, a fertile plain with strategic bridges over Beas River. Pakistan fortified this area along the Ichogil Canal, a defensive waterway running 5 to 14 km from the border. India's plan in the Lahore sector involved XI Corps threatening the Lahore and Sialkot sectors to spread and weaken the enemy forces. The counter-offensive by India, launched on 6 September, included advances by 15 Infantry Division along the Amritsar-Lahore area, 7 Infantry Division along the Khalra-Barki area, and 4 Mountain Division along the Khem Karan- Kasur area. This strategy aimed to divide enemy defences and assert Indian dominance across both sectors.

ISHAPORE RIFLES

Replacing the Second World War-era Lee Enfield bolt-action rifles, which were the primary arm of Indian infantrymen, the Ishapore 7.62 mm self- loading rifles were introduced before the War of 1965. Developed by Rifle Factory Ishapore (RFI) within three years, it marked a such a key advancement in the arming of Indian frontline troops that KC Banerjee, the General Manager of RFI, received a Padma Shri for his efforts. Owing to the urgency behind its development, the Ishapore Rifles were essentially inspired from the Belgian FN FAL Rifles.

Execution

4. On 6 September, India's offensive began with 54 Infantry Brigade advancing along the GT Road. 3 Jat, led by Lieutenant Colonel Desmond Hayde, captured Gosal Dial, killing 35 Pakistani troops and capturing enemy weapons, vehicles, and supplies. Despite facing air attacks and losing their second-in-command, the 3 Jat regrouped and advanced toward the Ichogil Canal outside Lahore. By noon, two companies managed to cross the canal using a damaged bridge. Pakistan launched tank and aerial counterattacks, creating intense pressure, but the Indian troops held their ground. Despite the gains, the lack of reinforcements and anti-tank weapons forced 3 Jat to retreat to Gosal Dial under Brigadier MS Rikh's orders. Lieutenant Colonel Hayde's bravery earned him a Maha Vir Chakra.

5. Thereafter, Indian troops failed to capture the fortified town of Dograi despite multiple attempts. On 13 September, the 54 Infantry Brigade was entasked with taking Dograi, adjacent to the Ichogil Canal. Prior surveillance by 3 Jat revealed strong enemy defences, including minefields, wire entanglements, and concrete pillboxes. Despite these hurdles, the final assault was launched on the night of 22 September to surprise the enemy. 3 Jat fought fiercely, clearing resistance and piercing Dograi with reinforcements. After over 24 hours of intense fighting, the Indian troops forced the enemy to retreat. The action highlighted the resilience of 3 Jat in securing a critical objective amidst the War of 1965.



Soldiers and officers of the 3 Jat with Prime Minister Lal Bahadur Shastri (middle).

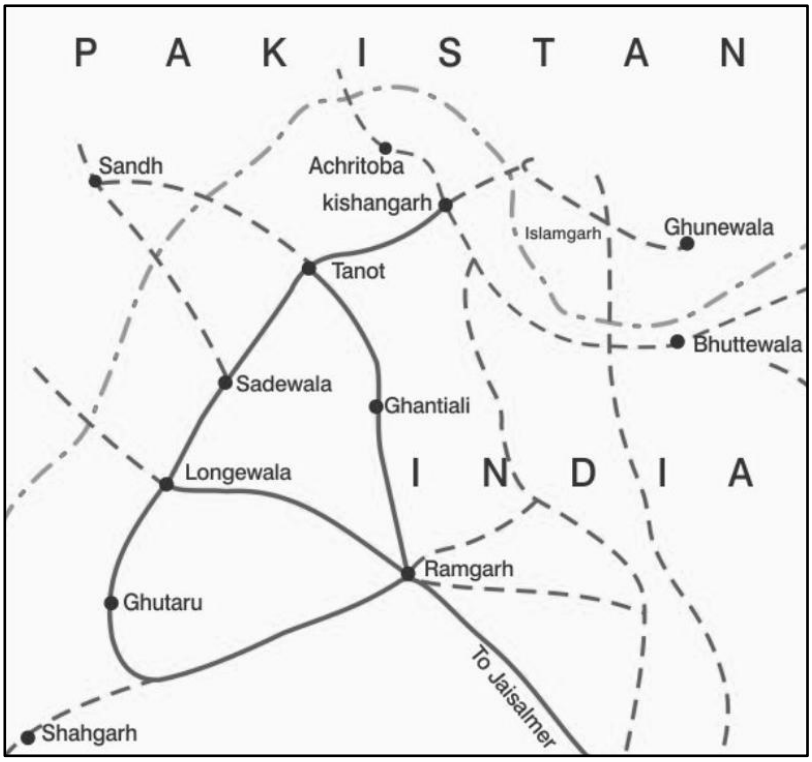
Outcome and Lessons

6. While being a landmark demonstration of the Indian Army's resilience, the Battle of Dograi came at a cost, with 58 killed and 157 wounded. Major Asa Ram Tyagi, with multiple bullet injuries, led his troops against Pakistani defences until he was fatally struck, while Captain Kapil Singh Thapa braved gunfire and mines to engage the enemy in close combat. Both officers earned posthumous Maha Vir Chakras. The battle highlighted the importance of infantry battalions, the junior leaders' ability to adapt, and rigorous training. It also flagged how determination alone cannot secure victory, as shown by the strategic withdrawal of 3 Jat under Lieutenant Colonel Hayde when reinforcements were delayed. Dograi remains a testament to bravery and tactical wisdom in the face of adversity.

PART II : IN AIR : BATTLE OF LONGEWALA

Brief Background

7. By late 1971, tensions between India and Pakistan escalated into direct military clashes, fuelled by the refugee crisis in India's east due to the persecution of Bengalis in East Pakistan. On 3 December, Pakistan launched a pre-emptive strike on Indian Air Force bases, prompting India to respond with land, sea, and air offensives the next day. As part of its plans, Pakistan initiated an ambitious attack on 4 December in the Longewala sector, seeking to advance to Jodhpur. However, the Pakistani offensive, led by its 18 Infantry Division and two armoured regiments, was repelled by a small Indian force comprising troops of 23 Punjab and the Border Security Force (BSF), along with air support from the IAF.



Map of the Rajasthan Sector in 1971

Planning

8. A border village in the Thar Desert, located in Rajasthan's Jaisalmer district, Longewala was a strategically vital gateway into western India. Initially a post of the BSF, it was reinforced by troops of 23 Punjab Regiment as bilateral tensions with Pakistan escalated in 1971. Recognizing the need for air bases in Rajasthan after the War of 1965, the airfields at Uttarlai, Jaisalmer, and Nal were built. As tensions rose, these bases were activated by September. Multiple Hawker Hunters aircraft of 122 Squadron were relocated from Jamnagar to Jaisalmer to handle air defence and close air support to the 12 Infantry Division. Additionally, an air observation post was also positioned near the 12 Division Headquarters.

HAWKER HUNTERS

The IAF acquired Hawker Hunter jet aircrafts from the UK in the 1960s. The Hawker played a key role in India's air defence during the India-Pakistani War of 1965 alongside the Folland Gnat. By the War of 1971, India possessed six Hunter squadrons, including the 122 Squadron at Jaisalmer. Armed with four 30 mm cannons, these could carry a combination of bombs and rockets on its underwing, making them versatile for both air defence and ground-attack roles. The aircraft proved crucial during the conflict, showcasing their effectiveness in varying combat scenarios and getting cementing as a key asset for IAF.

Execution

9. On the night of 4 December, Pakistan's 18 Division moved tanks and combat vehicles towards Longewala. An Indian Army patrol alerted the 23 Punjab and its Divisional Headquarters. Soon after, reinforcements from the 17 Rajputana Rifles and AMX-13 tanks of 20 Lancers arrived to resisted the enemy, slowing down the advance to Longewala. Despite intense pressure, the Indian defenders held on, with Dafadar Harbir Singh receiving a posthumous Vir Chakra for his role in the action. Meanwhile, the Divisional Headquarters contacted Wing Commander MS Bawa at the Jaisalmer airbase for urgent IAF air support. However, the Hunters at his disposal were unequipped for a night mission and had to wait until dawn.



AF Hunter Hawker.

Outcome and Lessons

10. Under Major Kuldip Singh Chandpuri, 120 soldiers of 23 Punjab and a small BSF contingent had to defend their post through the night. While outnumbered by 2,000 troops of Pakistan's 51 Infantry Brigade and 22 Armoured Regiment, Chandpuri and his troops held their ground. They inflicted heavy casualties and kept the enemy on the backfoot, with some forced to abandon their tanks. With the arrival of the Hunters from Jaisalmer at dawn, the Pakistani troops tanks were knocked out or forced to retreat. For his resoluteness, valour, and leadership in the face of such high odds, Major Chandpuri was awarded a Maha Vir Chakra.

11. 122 Squadron flew 11 sorties, crippling 17 tanks, damaging 23 more, and striking more enemy vehicles, including tank-laden trains. The Hunters continued strikes on retreating Pakistani forces, as reinforcements from Jamnagar brought the squadron's strength up to 14 aircrafts. On 6 December, 18 sorties left 37 tank wrecks near Longewala, with further missions reporting nine tanks, 32 vehicles, three artillery guns, and one armoured personnel carrier of the enemy destroyed. The IAF's assaults on the enemy continued around Jaisalmer until 9 December. Multiple members of the 122 Squadron, including its Commanding Officer Wing Commander Donald Melvyn Conquest, were awarded Vir Chakras for the effort.



Longewala after the battle in 1971

Outcome and Lessons

12. The Battle of Longewala showcased the IAF's air power, crippling Pakistan's armoured advance by destroying dozens of tanks, vehicles, and supply trains. Major Chandpuri's troops held off the enemy until air support arrived at dawn, a feat of iconic resilience. Intercepted enemy signals revealed the IAF's impact on Pakistan's morale and plans. The timely deployment of Hunters against armoured thrusts across Thar Desert demonstrated the decisive role of air power in altering land conflicts and exposed weaknesses in advanced tanks against coordinated aerial assaults. Pakistan underestimated India's aerial ability, as its tanks moved without enough air support. The IAF's strategic decision to establish further air-bases near the border further reinforced India's strategic strength.

PART III : AT SEA: OPERATION TRIDENT

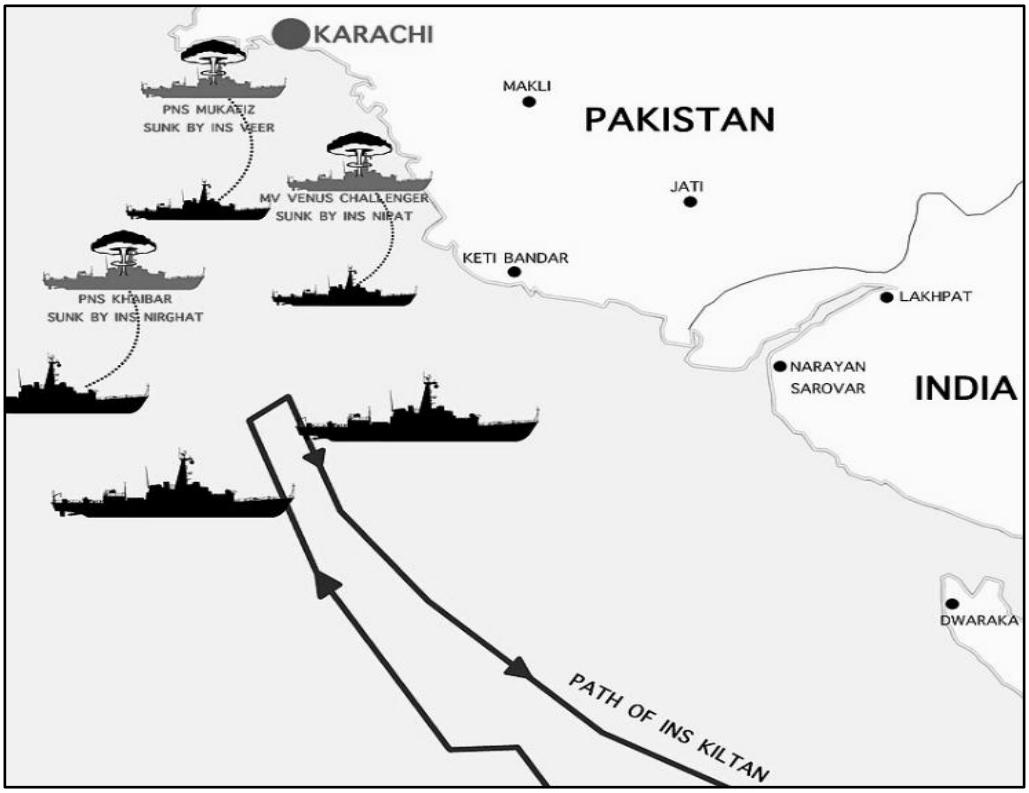
Brief Background

13. In the India-Pakistan War of 1971, under Operation Trident on 4-5 December, the Indian Navy utilized Vidyut Class Missile Boats and Arnala Class Corvettes to mount a daring assault on the Karachi port in Pakistan, disrupting the enemy's naval capabilities and maritime supply routes. As opposed to the War of 1965, where the Indian Navy's role was limited to being defensive, Operation Trident gave the maritime force an opportunity to showcase its abilities. It marked the first combat use of anti-ship missiles by India, which

dealt humiliating damage to the Pakistan Navy. This was followed by another bold attack with Operation Python.

Planning

14. In November 1971, India established INS Dwarka, a forward base in Okha, Gujarat, near Pakistan's Karachi port, home to its Naval Headquarters and fleet. Anticipating Pakistani aggression, India formed a Task Group with Vidyut missile boats and Arnala and Veer Class corvettes to strike Karachi. The plan involved Arnala corvettes halting near Karachi while Vidyut boats attacked the port and Pakistani vessels before retreating. On 3 December, Pakistan Air Force's attack on Indian airfields caused the Indian Navy to launch its response to 4 December. That day, the Task Group, under Commander Babru Bhan Yadav and 25 Killer Squadron, comprising two Arnala corvettes and three Vidyut boats, advanced towards Karachi, prepared for a decisive assault.



Map of Operation Trident

VIDYUT CLASS MISSILE BOATS

The Project 205 Moskit, known by its NATO name 'Osa', was a class of missile boats developed for the Soviet Navy in the late 1950s. India acquired nine of these Osa Class boats between 1968 and 1971 and redesignated them Vidyut Class. With a crew of 28, including four officers, a Vidyut Class boat could reach speeds of over 70 km/h. and had a firing range of 930 km. These vessels were armed with 30 mm Close-In Weapon Systems (CIWS) guns and SS-N-2 Styx anti-ship missiles, showcasing high offensive and defensive capabilities.

Execution

15. Setting sail for Karachi on 4 December, Indian Navy's Task Group reached within 70 nautical miles south of the Pakistani port without any confrontation or resistance on the way. At a pre-decided halting point, the missile boat /NS *Nirghat* engaged and sunk the first target, *PNS Khaibar,* a Pakistani destroyer, which thus became the first warship in Asia to be sunk by an anti-ship missile. Meanwhile, /NS *Nipat,* another missile boat attacked and sunk a Pakistani merchant vessel carrying ammunition and severely damaging its escort frigate, *PNS Shah Jahan.*



One of the Vidyut Class missile boats that took part in Operation Trident.

16. Minutes later, the INS Veer missile boat struck and sunk PNS Muhafiz, an enemy minesweeper. With no more Pakistani vessels in sight to target, INS Nipat was ordered to launch a missile at the Karachi port and retreat, which it did. Yet, INS Kirpan, a Khukri class corvette failed to receive the withdrawal order and took time to make its return. The delay caused it to almost get mistaken for an enemy ship and attacked. However, with the disaster avoided, Operation Trident succeeded and the Indian ships reassembled at the Saurashtra port to refuel on 5 December.

Outcome and Lessons

17. Operation Trident was a pivotal success for the Indian Navy in the 1971 War, sinking three Pakistani ships and damaging another in its first major offensive. It demonstrated India's ability to strike critical enemy assets with surprise and deal a blow to Pakistan's naval capabilities. Commander Yadav, leading the operation, earned the Maha Vir Chakra, being India's first naval officer to do so. Encouraged, Indian Navy launched Operation Python on 8 December to target Karachi's naval facilities further. The operation highlighted the utility of resource optimization, planning contingencies, and surprise tactics, striking

swiftly after Pakistan's aerial aggression. Admiral SM Nanda's high-risk decision of avenging Pakistan's 1965 raid on Dwarka with a bold offensive in 1971 proved immensely foresighted.

CONCLUSION

In 1965, during the Battle of Dograi, 3 Jat crossed the Ichogil Canal but failed to make significant advances. Later, they overcame enemy defences to secure Dograi after intense fighting. In 1971, the vastly outnumbered 23 Punjab held fort at Longewala against 2,000 Pakistani troops and tanks, until the IAF later came in to destroy enemy vehicles and inflict heavy losses. During Operation Trident, the Indian Navy struck Karachi, sinking three Pakistani vessels and targeting port facilities before executing a swift withdrawal.

SUMMARY

- In the Battle of Dograi, 3 Jat Regiment initially struggled to advance beyond the Ichogil Canal, but later captured Dograi after a day of intense combat, overcoming enemy fortifications.
- At the Battle of Longewala, a small contingent of 23 Punjab Regiment held off 2,000 Pakistani troops and tanks, until IAF air support destroyed enemy tanks and vehicles, inflicting significant losses.
- In Operation Trident, the Indian Navy Task Group sank three Pakistani vessels, damaged another, and successfully targeted Karachi's port and retreated swiftly, crippling Pakistan Navy in the 1971 War's initial hours.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What was the main objective of Operation Grand Slam launched by Pakistan?

(a) Capture the city of Amritsar

(b) Secure the Kashmir Valley

(c) Capture the town of Akhnoor to cut off Indian supply lines in Jammu and Kashmir

(d) Seize control of Siachen Glacier

Q2. Who was the commanding officer of the Jat Regiment during the Battle of Dograi?

(a) Major Shaitan Singh

(b) Lt. Col. Desmond Hayde

(c) Major Somnath Sharma

(d) Brigadier Rajinder Singh

Q3. What did the Battle of Dograi highlight about the Indian Army's capabilities?

(a) The superiority of armoured divisions

(b) The importance of infantry battalions and junior leadership

(c) The dominance of aerial support

(d) The significance of naval blockades

Q4. Which regiment reinforced the BSF post at Longewala during the 1971 War?

(a) 23 Punjab Regiment

(b) 16 Rajput Regiment

(c) 22 Grenadiers

(d) 13 Kumaon Regiment

Q5. Major Kuldip Singh Chandpuri was awarded which gallantry award for his leadership at Longewala?

(a) 100 (b) 120

(c) 150 (d) 200

Q6. Which officer from 122 Squadron was awarded a Vir Chakra for the air effort at Longewala?

(a) Wing Commander Arjan Singh

(b) Wing Commander MS Bawa

(c) Wing Commander Donald Melvyn Conquest

(d) Wing Commander JS Bhullar

Q7. Which class of missile boats did the Indian Navy use during Operation Trident?

(a) Veer Class (b) Vidyut Class

(c) Godavari Class (d) Rajput Class

Q8. Which missile boat struck and sank PNS Muhafiz, a Pakistani minesweeper?

(a) INS Nirghat (b) INS Nipat

(c) INS Veer (d) INS Kiltan

Q9. Why was Commander Yadav's Maha Vir Chakra award historically significant?

(a) He was the first naval officer to receive it

(b) He was the first officer to receive it posthumously

(c) He was the youngest officer to receive it

(d) He was the first officer to receive it during the 1965 War

Q10. Admiral SM Nanda's decision to launch Operation Trident was influenced by which past Pakistani action?

(a) Pakistan's attack on Kutch in 1965

(b) Pakistan's blockade of Indian ports in 1962

(c) Pakistan's 1965 naval raid on Dwarka

(d) Pakistan's capture of INS Vikrant in 1970

Short Answer Questions

Q1. What strategic advantage did India gain from Operation Trident in the 1971 War?

Q2. Who was the commanding officer leading the defence at Longewala, and which award did he receive for his bravery?

Q3. What was the key objective of the Indian Army's offensive in the Battle of Dograi during the 1965 War?

Long Answer Questions

Q1. Explain the key events and outcome of Operation Trident. How did it reflect the Indian Navy's strategic shift from defence to offense?

Q2. Describe the challenges faced by the Indian Army during the Battle of Dograi. How did the troops overcome these difficulties to secure victory?

Q3. How did the Indian Army and Air Force work together to defend Longewala during the 1971 War? Discuss the role of ground troops and air support in securing the victory.

MH VI (JD/JW)

CHAPTER VI: PARAMVIRCHAKRA AWARDEES



TEACHING INSTRUCTIONS:

Period(s) : **Two**

Type : **Lecture and discussion**

Year : **JD/JW (Second Year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart/ poster.**

Time-plan

- Introduction : 5 mins.
- Part I : PVC Awardees, 1947-1965 : 25 mins.
- Part II : PVC Awardees, 1966-1971 : 25 mins.
- Part III : PVC Awardees, 1972-Present : 25 mins.

INTRODUCTION

1. The Param Vir Chakra (PVC), India's highest distinction for gallantry in wartime, has long been an elusive honour and inspiration for the country's armed forces personnel. Instituted as India became a republic in 1950, it applied retrospectively from 1947 in recognition of the most exceptional military deeds. Yet, its rarity and gravity are evident in that fact that only 21 personnel have received the PVC, with only seven of the awardees surviving to share their stories. The PVCs have been awarded mainly after India's conflicts against Pakistan in 1947-48, 1965, 1971, and 1999, and against China in 1962. It was also awarded for distinct operations in 1960, 1984, and 1987. The last PVC was awarded in 1999.

OVERVIEW

(a) Introduction

(b) Part – I : PVC Awardees, 1947-1965

(c) Part – II : PVC Awardees, 1966-1971

(d) Part – III : PVC Awardees, 1972-Present

LEARNING OBJECTIVES

- To understand the gravity and vitality of the Param Vir Chakra (PVC).
- To learn about the deeds of exceptional heroism and valour committed by PVC awardees since India’s independence.
- To appreciate the qualities that makes a PVC awardees extraordinary.

WHAT AND WHY:

- The Param Vir Chakra (PVC) is the highest wartime gallantry award in India. It recognises exceptional acts of valour, daring, endurance, skill, or sacrifice by armed forces personnel during a war or conflict. Since its establishment on 26 January 1950, only 21 servicemenhave received this prestigious honour, with 14 awarded posthumously. Though instituted in 1950, it has retrospective effect from 15 August 1947. The name 'Param Vir Chakra' translates into the 'Wheel (or Cross) of the Ultimate Brave', as derived from Sanskrit. The award remains the highest symbol of extraordinary military courage in India. It is equivalent to the British Victoria Cross, US Medal of Honour, and French Legion of Honour.



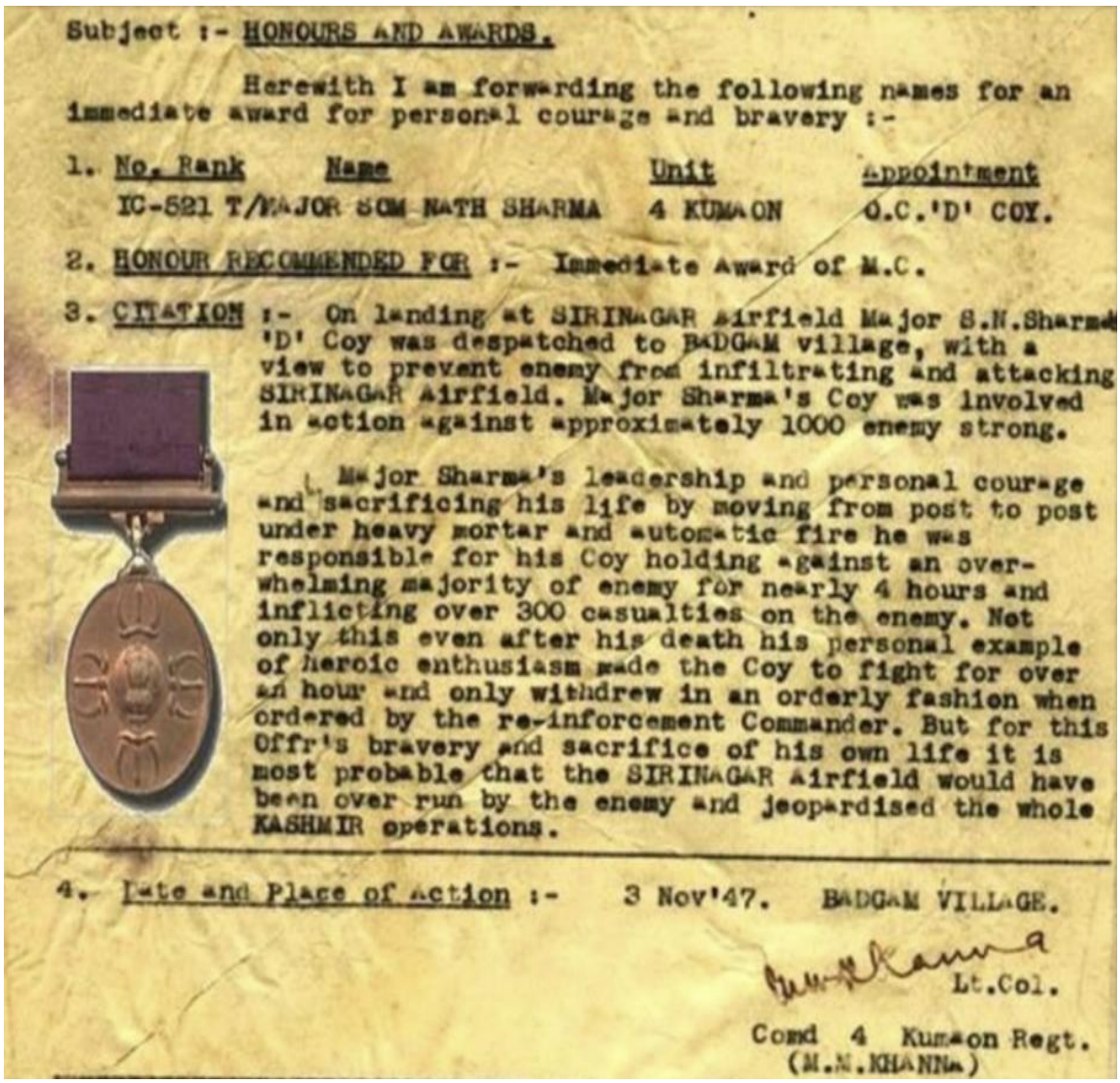
PART I: PVC Awardees, 1947-1965

Major Somnath Sharma, PVC (Posthumous)



2. **Early Life:** Somnath Sharma, born on 31 January 1923, in Kangra, Himachal Pradesh, came from a distinguished military family, including his father Major General Amarnath Sharma; his brothers Lieutenant General Surinder Nath Sharma and General Vishwa Nath Sharma; and his sister Major Kamla Tewari. Educated at Sherwood College, Nainital, he joined Prince of Wales Royal Military College, Dehradun at age ten and advanced to the Indian Military Academy.

3. **Military Career:** He was commissioned to 8 Battalion of 19 Hyderabad Regiment (4 Kumaon Regiment later) on February 22, 1942. He earned Mention-in Dispatches for his role in Arakan in the Second World War.



Subject :- HONOURS AND AWARDS.

Herewith I am forwarding the following names for an immediate award for personal courage and bravery :-

1. No. Rank	Name	Unit	Appointment
IC-521 T/MAJOR	SOM NATH SHARMA	4 KUMAON	O.C.'D' COY.

2. HONOUR RECOMMENDED FOR :- Immediate Award of M.C.

3. CITATION :- On landing at SIRINAGAR airfield Major S.N.Sharma 'D' Coy was despatched to BADGAM village, with a view to prevent enemy from infiltrating and attacking SIRINAGAR Airfield. Major Sharma's Coy was involved in action against approximately 1000 enemy strong.

Major Sharma's leadership and personal courage and sacrificing his life by moving from post to post under heavy mortar and automatic fire he was responsible for his Coy holding against an over-whelming majority of enemy for nearly 4 hours and inflicting over 300 casualties on the enemy. Not only this even after his death his personal example of heroic enthusiasm made the Coy to fight for over an hour and only withdrew in an orderly fashion when ordered by the re-inforcement Commander. But for this Offr's bravery and sacrifice of his own life it is most probable that the SIRINAGAR Airfield would have been over run by the enemy and jeopardised the whole KASHMIR operations.

4. Date and Place of Action :- 3 Nov'47. BADGAM VILLAGE.

Lt.Col.
Comd 4 Kumaon Regt.
(M.N.KHANNA)

6. **Battle of Badgam:** During the India-Pakistan Conflict of 1947-48, Major Sharma's company was sent to Badgam to counter a large force of Pashtun infiltrators on 3 November 1947. Pakistan sought to cut off Srinagar by capturing its airfield. Outnumbered and surrounded on three sides, Major Sharma motivated his men under heavy enemy fire

to fight on, even marking cloth strips to guide Indian aircrafts. Despite injuries, he continued firing and filling magazines for troops until a mortar shell caused a fatal explosion of ammunition. In his final message, he stated being 'under devastating fire' but vowed that he 'shall not withdraw an inch and will fight to the last man and round'. This severely delayed the enemy advance.

Honorary Captain Karam Singh, PVC, MM



5. **Early Life.** Karam Singh was born on 15th September 1915 in the village of Sehna, located in the Barnala district of Punjab. He was the son of Sardar Uttam Singh, a farmer. Drawn by the heroic stories of village veterans who served in World War I and inspired by his uncle's military service, Karam Singh joined the 1st Battalion of the Sikh Regiment at the age of 26. It didn't take long for him to establish himself as a brave and fearless soldier.

6. **Military Career.** In the Second World War, he showed exceptional bravery in the Burma Campaign's 'Battle of Admin Box', earning the esteemed Military Medal for his efforts.

7. **Battle of Tithwal.** In the India-Pakistan Conflict of 1947-48, on 13 October 1948, Pakistan sought to capture Richhmar Gali and enter Srinagar. Lance Naik Karam Singh, leading a company outpost, faced eight enemy attacks despite being injured and heavily outnumbered. He crawled through trenches, evacuated the wounded, and killed two enemy soldiers in close combat, forcing their retreat. For his heroism, he was awarded the Param Vir Chakra, becoming its first living recipient. Promoted to Honorary Captain, he was one the first five soldiers chosen by Prime Minister Jawaharlal Nehru to hoist India's flag after independence.

Naik Jadunath Singh, PVC (Posthumous)



8. **Early Life.** Jadunath Singh was born on 21 November 1916 in Khajuri, Shahjahanpur district, Uttar Pradesh, into a modest farming family. One of eight siblings, he attended school up to Grade Four while helping on the farm. Renowned in his community for his wrestling skills, he gained a stature for strength and grit.

9. **Military Career.** On 21 November 1941, he joined the Rajput Regimental Centre at Fatehgarh, later serving with 1 Rajput Regiment during the Second World War.

10. **Battle of Taindhar.** When Pakistan invaded Jammu and Kashmir in December 1947, 1 Rajput Regiment was tasked to defend Naushera. On 6 February 1948, Jadunath Singh, promoted Naik, and his nine men heroically resisted enemy raiders at Taindhar Ridge. Despite being wounded, Singh operated the Bren gun and held his position against

relentless attacks. With ammunition exhausted, he charged at the enemy with a bayonet, fighting valiantly. In a last counter, he was struck by bullets and killed. His sacrifice prevented his section's collapse, forced the enemy to retreat, and secured Naushera.

Second Lieutenant Rama Raghoba Rane, PVC



11. **Early Life.** Rama Raghoba Rane was born on 26 June 1918 in Chendia, Karwar district, Karnataka. His father's job led him to study across India. Inspired by Mahatma Gandhi in the 1930s, Rane participated in India's independence movement until his father sent him back to his ancestral village.

12. **Military Career.** At 22, Rane joined the British Indian Army's Bombay Engineer Regiment during Second World War on 10 July 1940. A fine recruit, he got the Commandant's Cane and was promoted to Naik. Posted to 28 Field Company in Burma, Rane's unit destroyed key assets during the Arakan Campaign, but faced an arduous retreat. He was promoted for merit to Second Lieutenant in the Corps of Engineers on 15 December 1947.

13. **Recapture of Rajouri:** During the 1947-48 India-Pakistan Conflict, Rane's unit was tasked to clear mines and roadblocks on the Naushera-Rajouri Road for armoured and infantry forces. On 8 April 1948, enemy shelling struck while they waited near tanks, killing two soldiers and wounding five, including Rane. Despite injuries, he stayed resolute, forcing the enemy to retreat. Without rest and under threat, Second Lieutenant Rane worked to clear paths until the following night. His unit used dynamite to remove large rocks, enabling tanks to advance and secure Rajouri. Earning the Param Vir Chakra for his leadership, he served the Indian Army until 1971.

Company Havildar Major Piru Singh, PVC (Posthumous)



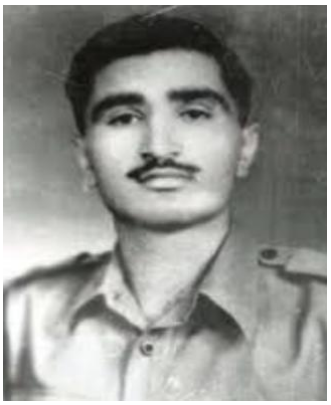
14. **Early Life.** Piru Singh Shekhawat, born on 20 May 1918 in Rampura Seri, Churu district, Rajasthan, was youngest of the eight children of Lal Singh and Tarawati Kanwar. With a childhood dream of joining the army, he succeeded through a recruitment camp and enlisted on his 18th birthday in 1936, eventually forming part of 5/1 Punjab Regiment.

15. **Military Career.** His dedication earned him a promotion to Naik and a role as instructor at the Punjab Regimental Centre in Jhelum. In May 1945, he became Company Havildar Major. After serving in Japan in the Second World War, he rejoined the Indian Army in 1947 with 6 Rajputana Rifles.

16. **Jammu and Kashmir Ops:** Amid the 1947-48 India-Pakistan Conflict, Piru Singh's company was tasked with capturing an enemy-held hill in Darapari, Tithwal sector. Facing heavy fire from five enemy trenches, the company lost half its troops quickly. Yet, despite

injuries, Singh rallied his men and attacked the first trench with gun and bayonet. Being the sole survivor, he advanced to the next trench under heavy fire. Though hit by grenades and sustaining facial injuries, he pressed on, clearing another bunker. He managed to bomb another trench before being fatally wounded.

Captain Gurbachan Singh Salaria, PVC (Posthumous)



17. **Early Life.** Gurbachan Singh Salaria was born on 29 November 1935 in Jamwal village near Shakargarh, Punjab. His family then moved to Jangal village, Gurdaspur district, Punjab. He was the son of Munshi Ram and Ohan Devi.

18. **Military Career.** He joined King George Royal Indian Military College, Bangalore in 1946, going on to attend its Jalandhar counterpart. He was part of the 9th batch of the National Defence Academy at Khadakwasla and in 1957, commissioned into 1 Gorkha Rifles.

19. **UN Action in Congo.** During the Civil War in Congo, India sent a brigade with the UN peacekeeping mission. On 5 December 1961, Captain Salaria's platoon and two Swedish armoured carriers were tasked with removing rebel barricades near Elizabethville airfield, Lubumbashi. Against 90 rebel troops, Salaria led an assault despite neck injuries from gunfire, destroying two armoured cars and killing 40 rebels to force a retreat and secure the UN Headquarters, before being fatally wounded.

Major Dhan Singh Thapa, PVC



20. **Early Life:** Dhan Singh Thapa, born on 28 April 1928 in Shimla, Himachal Pradesh to Nepali parents, was commissioned into the 8 Gorkha Rifles on 28 August 1949. Known for his cheerful and humble nature, he was also a skilled sportsman, excelling in football.

21. **Military Career:** In October 1962, during the Sino-India War, the Indian Army established posts in Ladakh, including Sirijap 1, which was crucial for defending the Chushul airfield. This post, commanded by Major Thapa, was manned by 28 soldiers from a company of 1/8 Gorkha Rifles.

22. **Sino-India War.** On 20 October, China launched a major artillery and mortar attack on Major Thapa's post, setting the area on fire and damaging communication lines. Under his leader, the Gorkha troops retaliated fiercely, causing heavy enemy casualties, while suffering many casualties of their own. Yet, under Major Thapa's consistent motivation, his company continued braving repeated enemy assaults on the post. Eventually, the Chinese had to launch a tank-supported attack to overpower the post, and capture the

surviving troops. Major Thapa was presumed killed in action and awarded a posthumous Param Vir Chakra. However, he was in Chinese captivity and was released in May 1963. Major Thapa resumed duty in India and was promoted to Lieutenant Colonel.



Lt Col Dhan Singh Thapa Receiving Param Vir Chakra From The President Of India Dr Sarvepalli Radha Krishnan

Subedar Joginder Singh, PVC (Posthumous)

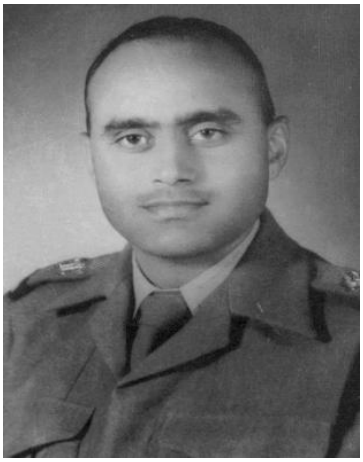


23. **Early Life.** Joginder Singh, born on 28 September 1921 in Mahla Kalan village, Punjab, joined the British Indian Army's 1 Sikh Regiment on his 15th birthday.

24. **Military Career.** He served with distinction in Burma during the Second World War and after independence, fought in Srinagar against Pakistani infiltrators in 1947-48. He valued education, passing professional exams to become a unit instructor, respected by his troops for his discipline and knack for working hard.

25. **Sino-India War:** In the Sino-India War of 1962, Subedar Joginder Singh led a platoon at Tawang in NEFA. On 23 October 1962, Chinese troops launched a three-wave attack on Bumla, each wave comprising 200 troops. Singh's platoon successfully repelled the first two waves but suffered heavy casualties by the third. Despite being injured, Singh motivated his men to fight on, using his light machine gun to cause significant damage. Undeterred by the Chinese Army's superior numbers, Singh and his men bravely charged the enemy with bayonets, killing many. Singh was killed in the action and posthumously awarded the Param Vir Chakra for exceptional commitment and devotion to duty.

Major Shaitan Singh, PVC (Posthumous)



26. **Early Life.** Shaitan Singh was born on 1 December 1924, in Banasar, Jodhpur, Rajasthan to a military family. His father, Lieutenant Colonel Hem Singh Bhati, received the 'Order of the British Empire' for bravery during the First World War. Inspired by his father, Shaitan Singh aspired to be an army officer. He attended Rajput High School and graduated from Jaswant College.

27. **Military Career.** Joining the Jodhpur Lancers of the Jodhpur State Forces after graduation, he transferred to the Kumaon Regiment after Jodhpur merged with the Indian Union in 1949. Promoted to Captain in 1955, he served in the Naga Hills before moving to Jammu and Kashmir in 1962.

28. **Battle of Rezang La.** In June 1962, the 13 Kumaon moved to Leh amid rising tensions with China. Major Singh, leading a company, was deployed at Rezang La. On 18 November 1962, China launched a two-pronged attack on Chushul's defences, targeting Gurung Hill and Major Singh's post at Rezang La. The enemy attacked in waves, and by the seventh wave, Major Singh's troops had suffered heavy casualties, but continued inflicting higher losses on the Chinese forces. Eventually, with Major Singh being badly wounded, his surviving soldiers, while under intense enemy fire, reluctantly parted away, leaving him against a boulder. For putting up the heroic stand that halted the Chinese advance to the Chushul airfield, Major Singh was awarded the Param Vir Chakra posthumously.



War Memorial at Rezang La.

Company Quarter Master Havildar Abdul Hamid, PVC (Posthumous)



29. **Early Life.** Abdul Hamid was born on 1 July 1933 in Dhamupur village, Ghazipur district, Uttar Pradesh, and had two sisters and three brothers. Due to financial difficulties, he left school after Grade Eight to join his father's tailoring shop.

30. **Military Career.** In 1953, Hamid joined the Indian Army, training at Grenadiers Regimental Centre in Nasirabad and going on to serve with the 4 Grenadiers. Posted at various places, including Agra and Jammu and Kashmir, he participated in the Sino-India War of 1962. He was appointed Company Quarter Master Havildar (CQMH) thereafter.

31. **Khem Karan Op. 1965.** After serving five years in an anti-tank section, CQHM Abdul Hamid led his battalion's recoilless rifle platoon, given his expertise in using the 106 mm rifles. During the India-Pakistan War of 1965, on 8 September 1965, the 4 Grenadiers arrived at Khem Karan in Punjab. By dawn, Pakistani tanks advancing towards the Indian position became audible. By morning, CQMH Hamid had knocked out the enemy Patton tank in the lead. On 10 September, Pakistani forces attacked Chima village in the area, deploying another regiment of Patton tanks. Amidst heavy shelling, Hamid again destroyed two advancing tanks using a jeep-mounted recoilless gun from his flanking position. However, he was soon spotted by the enemy and fatally wounded by an incoming high-explosive shell as he targeted another tank. For his exceptional anti-tank action and resistance, CQMH Hamid was posthumously awarded the Param Vir Chakra.

Lieutenant Colonel Ardeshir Burzorji Tarapore, PVC (Posthumous)

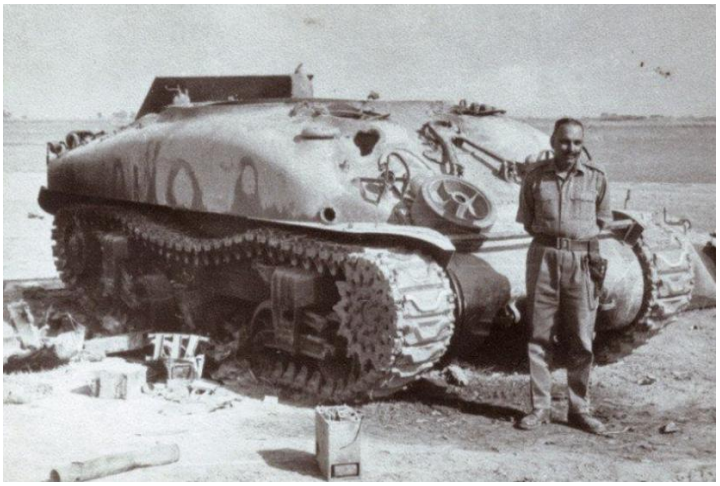


32. **Early Life.** Ardeshir Burzorji Tarapore was born on 18 August 1923 in Mumbai. He attended Sardar Dastur Boys Boarding School in Pune, completing matriculation in 1940.

33. **Military Career.** Joining the Hyderabad State Army, he trained at the Officers' Training School in Golconda. Joining 7 Hyderabad Infantry on 1 January 1942, he was transferred to 1 Hyderabad Imperial Service Lancers, serving in the Middle East during the Second World War. In 1951, he joined the Poona Horse, rising to Commanding Officer and leading his regiment in the India-Pakistan War of 1965.

34. **Battle of Chawinda.** On 11 September 1965, in the Battle of Chawinda, the 17 Poona Horse advanced on Phillora. Lieutenant Colonel Tarapore led an attack, facing enemy tanks between Phillora and Chawinda. While being wounded early, he continued to

lead his regiment in capturing Wazirwali, Jassoran, and Butur-Dograndi over the next four days. On 16 September, in aiding an infantry advance to Chawinda, Lieutenant Colonel Tarapore's tank was hit multiple times and caught fire. Yet, he fought on till his end. His regiment destroyed 60 Pakistani tanks during the six-day action. Tarapore was cremated on 17 September and posthumously awarded the Param Vir Chakra for his bold heroics.



Lieutenant Colonel AB TARAPORE standing besides destroyed Paki M4 Sherman Tank

PART II: PVC AWARDEES, 1966-1971

Lance Naik Alber Ekka, PVC (Posthumous)



35. **Early Life.** Albert Ekka was born on 27 December 1942 in Zari Village, Gumla, Bihar (now in Jharkhand). From a young age, he admired soldiers and aimed to join the Indian Army. In December 1962, he joined 14 Brigade of the Guards at age 20. A keen sportsman, he excelled in hockey, displaying agility and teamwork, which later defined his combat style.

36. **Military Career.** By 1971, he had served in the Indian Army for nine years, taking part in counter-insurgency operations in the Northeast and becoming a Lance Naik. His rigorous training and battle exposure honed his tactical skills and resilience, making him an exceptional combatant.

37. **India-Pakistan War of 1971.** During the war, the 14 Guards was tasked with capturing a heavily fortified Pakistani position at Gangasagar, facing the Bay of Bengal. On the night of 3 December, Lance Naik Albert Ekka was part of the forward company leading the charge. Despite facing intense shelling and gunfire, Ekka charged and neutralized an enemy light machine gun bunker, sustaining serious injuries. He continued to clear bunkers with exceptional courage, but sustained major injuries. When enemy fire halted the Indian advance, he managed to crawl under enemy fire, bomb another bunker, and kill the remaining enemy troops with a bayonet before succumbing to his enemies. Ekka's actions

forced the enemy to retreat, enabling the Indian advance towards Dhaka. He was posthumously awarded the Param Vir Chakra for his inspiring gallantry.

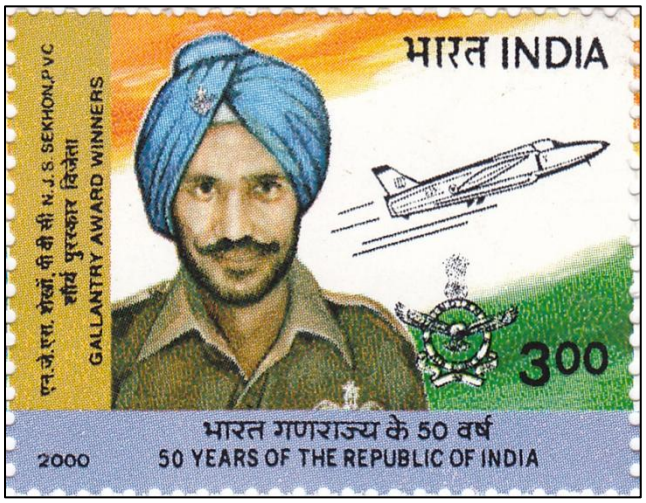
Flying Officer Nirmal Jit Singh Sekhon, PVC (Posthumous)



38. **Early Life.** Nirmal Jit Singh Sekhon was born on 17 July 1945 in Issewal, Ludhiana, Punjab, to retired (Honorary) Flight Lieutenant Trilok Singh Sekhon and Harbans Kaur. He attended Khalsa High School in Ajitsar Mohie near Ludhiana and joined Dayalbagh Engineering College in Agra in 1962.

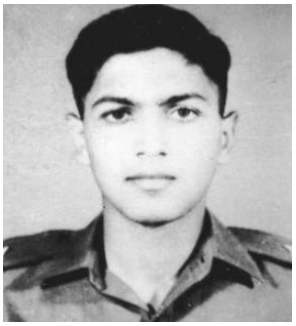
39. **Military Career.** He left his engineering course midway to join the Indian Air Force (IAF) as a fighter pilot on 4 June 1967. In October 1968, Sekhon was assigned to No. 18 Squadron, the 'Flying Bullets'.

40. **India-Pakistan War of 1971.** In the war, Flying Officer Nirmal Jit Singh Sekhon, a GNAT pilot, engaged six Pakistani F-86 Sabre jets attacking the Srinagar airfield on 14 December. Despite delays and heavy enemy fire, he bravely took off and damaged two enemy Sabres. However, he was outnumbered as more Pakistani aircrafts arrived as reinforcements. Yet, Flying Officer Sekhon continued to fight off the Pakistani aircrafts valiantly, but was eventually shot down and killed. His sustained aerial resistance forced the enemy to retreat, saving the airfield. Flying Officer Sekhon's courage and flying skills earned him a posthumous Param Vir Chakra, making him the only IAF officer to receive the award till date..



An Indian postage stamp commemorating Flying Officer Sekhon.

Second Lieutenant Arun Khetarpal, PVC (Posthumous)



41. **Early Life.** Arun Khetarpal was born on 14 October 1950 in Pune into a distinguished military family. His father Brigadier ML Khetarpal and mother Maheshwari Khetarpal instilled in him a proud military tradition. Khetarpal excelled academically and in sports at Lawrence School, Sanawar. In June 1967, he joined the National Defence Academy, becoming Squadron Cadet Captain.

42. **Military Career.** Commissioned to 17 Poona Horse on 13 June 1971, he swiftly rejoined his regiment during the India-Pakistan War of 1971. He participated in the pivotal Battle of Basantar, displaying exemplary leadership and dedication to his military duties.

43. **Battle of Basantar.** During the India-Pakistan War of 1971, the 17 Poona Horse played a crucial role at Basantar in Shakargarh Sector. Led by Lieutenant Colonel Hanut Singh, they supported the 47 Infantry Brigade in establishing a bridgehead across the Basantar River. On 15 December, the brigade captured its objective, but the Pakistani Army counter-attacked on 16 December. Resisting the assault, Second Lieutenant Arun Khetarpal destroyed an enemy recoilless gun crew and a Patton tank. He went on to knock out four enemy tanks, leading the charge in his 'Famagusta' tank. However, he was struck by enemy fire, but staunchly refused to abandon his tank, continuing to operate its main gun until being fatally hit by an enemy shell. He was cremated on 17 December. For his indomitable spirit, he was posthumously awarded the Param Vir Chakra.

Major Hoshiar Singh, PVC



44. **Early Life.** Hoshiar Singh was born on 5 May 1937 in Sisana village to Chaudhary Hira Singh, a respected farmer, and his wife Mathuri Devi. After completing schooling in his hometown and studying for a year at Jat College in Rohtak, he joined the Indian Army.

45. **Military Career.** Singh began as a soldier and became an officer in Grenadiers Regiment on 30 June 1963. His first posting was in NEFA, before he went on to see action at Rajasthan in 1971.



46. **India-Pakistan War of 1971**. In the war, Major Hoshiar Singh's 3 Grenadiers were tasked with creating a bridgehead on the Basantar River in the Shakargarh Sector. Despite facing shelling, crossfire, and counters, Singh led a company to capture Jarpal. On 17 December, the enemy launched another attack with heavy artillery support. While seriously wounded, Singh moved from trench to trench, motivating his troops. The attack was repelled, leaving 85 enemy soldiers dead. For his leadership and steadfast devotion to duty, Major Hoshiar Singh was awarded the Param Vir Chakra.

PART III : PVC AWARDEES, 1972-PRESENT

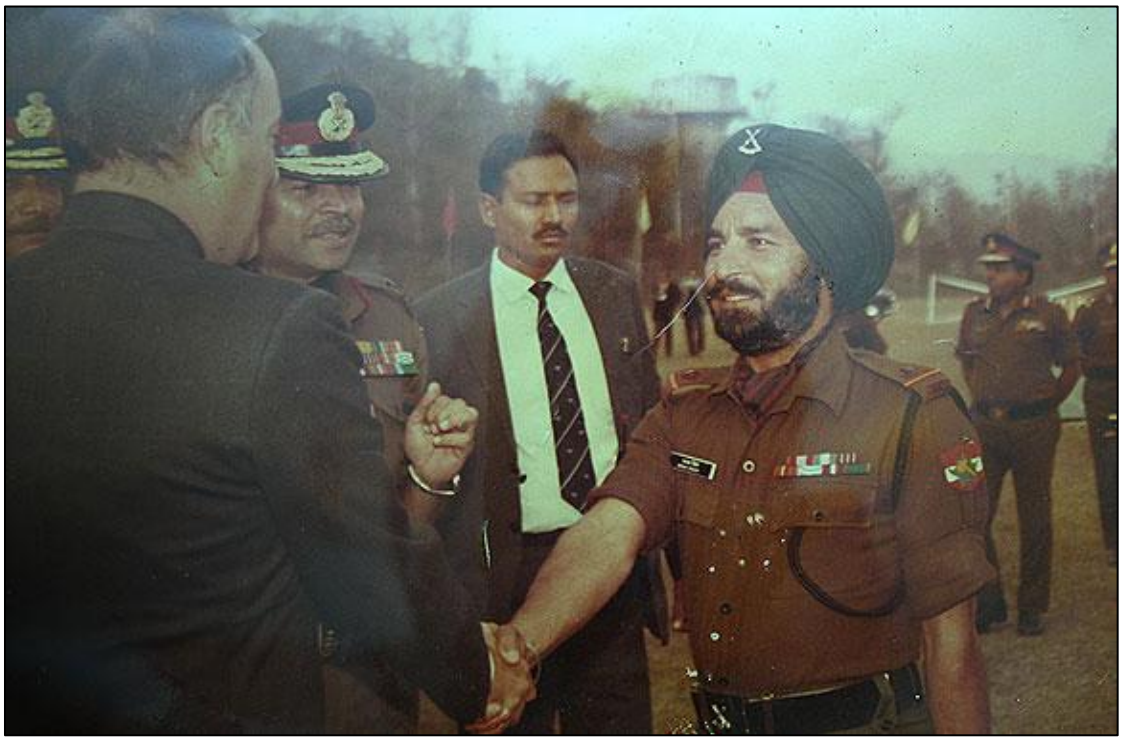
Naib Subedar Bana Singh, PVC



47. **Early Life.** Naib Subedar Bana Singh, born on 6 January 1949 in Kadyal, Jammu, is one of India's three living Param Vir Chakra awardees. Raised in an agricultural and religious family, he developed integrity and discipline early on.

48. **Military Career.** Singh joined the Indian Army on 6 January 1969 in the 8 Jammu and Kashmir Light Infantry (8 JAK LI), training at the High-Altitude Warfare School in Gulmarg and Sonamarg. He was promoted to Naib Subedar on 16 October 1985.

49. **Operations Meghdoot and Rajiv.** In 1984, JAK LI was deployed to Siachen Glacier during Operation Meghdoot. In 1987, 8 JAK LI captured a Pakistani post at 21,000 feet, given the strategic vitality of the Siachen Glacier. That year, Pakistan forcibly established its Quaid Post at Bilafond La, an area within Indian territory. As India launched Operation Rajiv to regain control, Naib Subedar Bana Singh volunteered for a task force and, in hostile weather, led his team up the steep ice wall. Despite extreme weather and hurdles, Singh and his troops reached the enemy post, using grenades to kill seven Pakistani commandos. With reinforcements, they successfully captured Quaid Post, solidifying Indian control over the area. For showing incredible valour and high- altitude warfare skills, he received the Param Vir Chakra.



Naib Subedar Bana Singh meeting Prime Minister Rajiv Gandhi.

Major Ramaswamy Parameswaran, PVC (Posthumous)

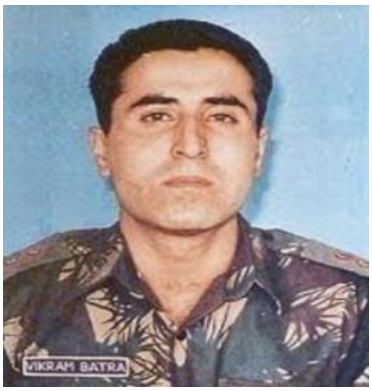


50. **Early Life.** Ramaswamy Parameswaran, born on 13 September 1946 in Mumbai, attended SIES High School and SIES College. He graduated from the Officers Training Academy (OTA), Chennai on 16 June 1972.

51. **Military Service.** He was commissioned into 15 Mahar Regiment. Parameswaran served with the regiment's 5 Battalion in Mizoram and Tripura, earning the affectionate nickname 'Parry Sahib' from his colleagues. He was chosen for Operation Pawan with 8 Mahar Regiment, one of the first units to be deployed in Sri Lanka in 1987.

52. **Operation Pawan**: On 29 July 1987, Indian troops were approved to land in Sri Lanka and repel the Lankan Tigers of Tamil Eelam (LTTE) in the Sri Lankan Civil War. Acting on a tip, on 24 November 1987, an Indian patrol headed to a point where heavy arms were expected, but was ambushed by the LTTE. Braving firing, Major Parameswaran's patrol came in to launch a counter- ambush. He flanked the militants and charged at them despite being shot in the chest. He kept directing his troops until he fell to his wounds. With reinforcements arriving, the LTTE militants retreated. In the action, six militants were killed and a large stock of arms was recovered. Major Parameswaran became the first OTA alumnus to receive the Param Vir Chakra.

Captain Vikram Batra, PVC (Posthumous)



53. **Early Life.** Vikram Batra was born on 9 September 1974, in Sandia Gaon, Palampur, Himachal Pradesh, studied at DAV Public School and Kendriya Vidyalaya in Palampur. He attended DAV College in Chandigarh, earning the Best NCC Cadet (Air Wing) award in the North Zone. Clearing the Combined Defence Services examination, he joined the Indian Military Academy, Dehradun in 1994.

54. **Military Career.** Commissioned into the 13 Jammu and Kashmir Rifles (13 JAK RIF), he was posted to Sopore, Baramulla district, Jammu and Kashmir. In April 1999, as the unit prepared for a peace posting, the Kargil War's eruption in May 1999 altered their plans due to major intrusions by Pakistani forces across the Line of Control (LoC).

55. **Operation Vijay**: In June 1999, during Operation Vijay, Lieutenant Batra's unit was deployed in Oras, Kargil, tasked to capture Point 5140 after 2 Rajputana Rifles took Tololing Top. Two companies of 13 JAK RIF under Lieutenants Batra and Sanjeev Singh Jamwal, launched a daring night attack. Despite being pinned down by machine gun fire, Lieutenant Batra led his troops to overcome the enemy resistance and capture Point 5140, famously radioing, 'Yeh Oil Maange More!' (the heart wants more) thereafter. This victory

paved the way for further successes. On 6 July 1999, Batra, promoted Captain, aimed to capture Point 4875 with his company. Despite being injured, Captain Batra continued the assault, inspiring his men. However, while attempting to save a wounded soldier, he was shot and killed by an enemy sniper hours before Point 4875's recapture. He received the Param Vir Chakra posthumously for his immense persistence, leadership, and sense of camaraderie.



Capt. Vikram Batra inspecting weapons and ammunition captures from Pakistani Soldiers

Captain Manoj Kumar Pandey, PVC (Posthumous)



56. **Early Life.** Manoj Kumar Pandey was born on 25 June 1975 in Rudha village, Sitapur district, Uttar Pradesh. A serious student, he studied in Lucknow and UP Sainik School, nurturing his dream of joining the army. Passionate for sports, especially boxing and bodybuilding, he joined the National Defence Academy and graduated in 1996.

57. **Military Career.** After training at the Indian Military Academy, he was commissioned to 1 /11 Gorkha Rifles Regiment as Second Lieutenant on 7 June 1997. Serving in Kashmir and Siachen, he received orders to move to the Batalik sector, where the first Pakistani intrusions were detected during the Kargil War of 1999.

58. **Khalubar Ridge Op**. In June-July 1999, Captain Manoj Kumar Pandey's unit was deployed in the Batalik sector of Ladakh for Operation Vijay, where Pakistani forces had intruded several kms. across the LoC. His unit, 1/11 Gorkha Rifles, with 22 Grenadiers, launched an assault targeting key enemy strongholds on the Khalubar-Padma Go Ridgeline. On the night of 2 July 1999, under heavy enemy fire, Captain Pandey led his troops towards Pahalwan Chowki, located near Khalubar at over 19,000 feet, and destroyed three enemy bunkers. Despite being hit, he continued to lead the assault, clearing another bunker before being killed by gunfire. His valour and initiative inspired his men and led to significant strategic gains, earning him the Param Vir Chakra posthumously.

Grenadier Yogendra Singh Yadav, PVC



59. **Early Life.** Yogendra S. Yadav was born on 10 May 1980 in Aurangabad Ahir, Bulandshahr district, Uttar Pradesh to Karan Singh Yadav, a veteran of the Kumaon Regiment who saw action in the Wars of 1965 and 1971. He studied at a government school in his village.

60. **Military Career.** Following his brother Jitendra who joined the Regiment of Artillery, Yadav enlisted in the 18 Grenadiers on 27 December 1996 aged 16.

61. **Capture of Tiger Hill**: In the Kargil War, Pakistani forces occupied Tiger Hill, the highest peak in Dras, Ladakh. Grenadier Yadav's unit was entasked with capturing the 'Three Bunkers' on Tiger Hill. As part of an elite Ghatak Platoon, he led the assault under heavy gunfire that killed his commander and two soldiers. He too was shot multiple times, but continued climbing. After finishing the steep climb, despite his wounds, he engaged the enemy in hand- to-hand, and dismantled their positions. His bravery inspired his team, leading to the capture of Tiger Hill and a crucial victory for India. Grenadier Yadav's determination and combat during the recapture of Tiger Hill earned him the Param Vir Chakra at the age of 19, making him its youngest recipient. He retired from service as Honourary Captain on 31 December 2021.

Rifleman Sanjay Kumar, PVC



62. **Early Life.** Sanjay Kumar was born on 3 March 1976, in Kalol Bakain, Bilaspur, Himachal Pradesh to Durga Ram and Bhag Devi. His uncle had served in the Indian Army. Initially, he worked as a taxi driver in New Delhi after completing his schooling at a government school in his village.

63. **Military Career.** Despite facing three rejections, he persisted and joined the Indian Army on 26 June 1996, being posted to 13 Jammu and Kashmir Rifles (13 JAK RIF) as a rifleman.

64. **Capture of Point 4875**. The capture of Tololing on 13 June 1999 marked a turning point in the Kargil War. The 13 JAK RIF was tasked to capture Points 5140 and 4875, key to dominating National Highway 1A linking Srinagar and Leh. On 4 July 1999, Rifleman Kumar, as the leading scout of his company, played a pivotal role in the effort to recapture Point 4875. On tough terrain, he boldly charged at enemy positions, engaging in close combat, killing three enemy soldiers, and capturing a machine gun despite sustaining severe injuries. His then fired the captured machine gun at the enemy, forcing many to retreat. This inspired his comrades to successfully capture of Flat Top feature of Point

4875. For his unfailing steadfastness, he was awarded the Param Vir Chakra. He was promoted to Subedar Major in February 2022.



Cap. Yogendra Singh Yadav, Nb. Sub. Bana Singh, and Sub. Maj. Sanjay Kumar.

ADDITIONAL HONOURS

A monthly pension is granted by the Indian government to a PVC awardee, his widow, or parents. Alongside, multiple states in India have instituted their own rewards for the awardees representing them (or their families). It has become a custom for all military officials to salute a PVC awardee in ceremonial uniform irrespective of their rank. In the 1980s, the Shipping Corporation of India (SCI) renamed 15 of its crude oil tankers after PVC awardees. In 2023, India named 21 islands of the Andaman and Nicobar Islands after them. (For instance, the 'Salaria Dweep' is named after Captain Gurbachan Singh Salaria, PVC.) The National War Memorial in New Delhi features busts of all 21 awardees.

CONCLUSION

65. The Param Vir Chakra (PVC), India's highest wartime gallantry award, has been awarded only 21 times since 1947, highlighting its rarity and prestige. It honours exceptional acts of valour and sacrifice during conflicts, with no PVC having been awarded since 1999. This recognition brings immense respect in the military and society at large to recipients, though only seven awardees have survived to witness their honour. This is indicative of the extraordinary bravery, skills, and endurance required to attain this prestigious award.

SUMMARY

- The Param Vir Chakra (PVC), instituted in 1950 and retrospectively applying from 1947, is India's highest wartime gallantry award.
- It recognizes extraordinary valour, skill, or sacrifice by armed forces personnel in conflicts, with only 21 recipients so far, 14 posthumously.
- Translating to 'Wheel of the Ultimate Brave' from Sanskrit, the PVC symbolizes unmatched courage and is equivalent to the British Victoria Cross and US Medal of Honour.
- Awards primarily honour acts in major conflicts or strategic operations, with the last PVC given in 1999.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What does the term "Param Vir Chakra"; mean in Sanskrit?

(a) Cross of Victory (b) Wheel of Ultimate Brave

(c) Medal of Honour (d) Shield of Courage

Q2. How many servicemen have received the Param Vir Chakra since its establishment?

(a) 14 (b) 21

(c) 26 (d) 18

Q3. During which battle did Major Somnath Sharma make the ultimate sacrifice?

(a) Battle ofTithwal (b) Battle of Admin Box

(c) Battle of Badgam (d) Battle of Imphal

Q4. What special honour did Karam Singh receive from Prime Minister Jawaharlal Nehru?

(a) Leading the Republic Day parade

(b) Hoisting the Indian flag for the first time after independence

(c) Receiving the Padma Bhushan

(d) Commanding the Armed Forces

Q5. During which battle did Naik Jadunath Singh achieve martyrdom?

(a) Battle of Taindhar (b) Battle of Naushera

(c) Battle of Tithwal (d) Recapture of Rajouri

Q6. What was named in CHM Piru Singh's honour by the Shipping Corporation of India?

(a) A warship (b) A crude oil tanker

(c) A cargo carrier (d) An aircraft carrier

Q7. Where did Captain Gurbachan Singh Salaria perform his final act of bravery?

(a) Congo, near Elizabethville airfield

(b) Darapari, Tithwal sector

(c) Rajouri, Jammu & Kashmir

(d) Pangong Lake, Ladakh

Q8. In which battle did Major Shaitan Singh and his company fight till the last man and bullet?

(a) Battle of Rezang La

(b) Battle of Tawang

(c) Battle of Gurung Hill

(d) Battle of Baramulla

Q9. What honour did Rama Raghoba Rane receive during his early military training?

(a) Param Vir Chakra

(b) Commandant's Cane for Best Recruit

(c) Military Medal

(d) Maha Vir Chakra

10. What significant achievement occurred during the Battle of Chawinda?

(a) Destruction of around 60 enemy tanks

(b) Construction of fortifications in Leh

(c) Establishment of supply chains in NEFA

(d) Capture of Akhaura town

Short Answer Questions

Q1. Describe Captain Vikram Batra's contribution during Operation Vijay and his iconic message.

Q2. Explain how Rifleman Sanjay Kumar neutralized enemy positions at Point 4875.

Q3. Describe Major Ramaswamy Parameswaran's actions during Operation Pawan.

Long Answer Questions

Q1. Discuss the life, military career, and heroic actions of 2nd Lieutenant Arun Khetarpal during the lndo-Pak War of 1971, highlighting his early life, key contributions during the Battle of Basantar.

Q2. Describe military career of Flying Officer Nirmal Jit Singh Sekhon, focusing on his exceptional bravery during the 1971 lndo -Pak War.

Q3. Describe 'Operation Meghdoot'.

MH VIII (JD/JW)

CHAPTER VII: INDIAN ARMED FORCES IN HADR



Indian Army undertaking flood relief work in Gujarat, August 2024

TEACHING INSTRUCTIONS:

Period(s) : **Two**

Type : **Lecture and Discussion**

Year : **JD/JW (First and Second Year)**

Training Aids : **Classroom, computer with OHP, screen, pointer staff, presentation or videos, script or book flagged or lesson plan in file, and chart / poster.**

Time-Plan

- Introduction : 5 mins.
- Part I : Legal and Institutional Framework : 5 mins.
- Part II : Historical Background : 10 mins.
- Part III : Major Domestic Operations since 2014 : 20 mins.
- Part IV : Major Overseas Operations since 2014 : 40 mins.

INTRODUCTION

1. Since India's independence, its armed forces have been vital for the country's disaster and emergency response, remaining the backbone of humanitarian and disaster relief (HADR) operations even after the establishment of the National Disaster Management Agency (NDMA) and National Disaster Response Force (NDRF) in 2005. With advanced equipment and specialist skills, they assist both domestically and internationally during crises. When requested by local, state, or central authorities, they tackle forest fires, airlift NDRF personnel or supplies, aid distressed foreign vessels, and evacuate stranded Indians. In recent years, they have also emerged as guardians of citizens during emergencies abroad.

OVERVIEW

(a) Part I: Legal and Institutional Framework

(b) Part II : Historical Background

(c) Part III : Major Domestic Operations since 2014

(d) Part IV: Major Overseas Operations since 2014

LEARNING OBJECTIVES

- To gain a broad understanding on what HADR involves.
- To trace the evolution of India's HADR activities since independence.
- To appreciate the role of India's armed forces in its HADR actions within India, as well as its ability for inter-agency coordinate.
- To know about the increasing involvement of the Indian armed forces in rescue, relief, and evacuation operations on foreign soil.



Indian Army hosting the 2024 leg of 'Sanyukt Vimochan', an annual multilateral HADR exercise.

WHAT AND WHY

- In India, "humanitarian assistance" and "disaster relief" mainly involve aiding civilians affected by natural disasters like cyclones, droughts, earthquakes, and floods, excluding conflict-related assistance except in rare instances. The Indian armed forces extensively train for HADR through drills and simulations, excelling in evacuation, rescue, and relief. Using specialised skills and tools, they can repair infrastructure, provide medical and veterinary aid, and reach remote areas. Their capabilities make them vital for India's HADR needs both domestically and abroad, helping save lives and rebuilding communities.

PART I : LEGAL AND INSTITUTIONAL FRAMEWORK

2. For its HADR, the Indian armed forces work through the Ministry of Defence under the 'Aid to Civil Authorities' (ACA) mandate, based on a colonial provision which allowed local authorities to request help from British Indian forces during emergencies. After independence, the ACA was amended in 1970, permitting local authorities to ask for the armed forces' assistance for maintaining essential services and providing urgent assistance during natural disasters. This revised mandate ensures the armed forces can step in when needed for "maintenance of essential services" and "assistance during natural calamities".



Indian Army undertaking flood relief work in Gujarat, August 2024.

3. The Disaster Management Act, 2005 established a multi-agency approach to disaster relief in India after the 2004 Indian Ocean Tsunami, but it did not define the role of the Indian armed forces, establishing the National Disaster Response Force (NDRF) instead. However, the Chief of Integrated Defence Staff (CISC) is a part of the National Executive Committee of the NDMA. On the ground, the Indian armed forces follow the Defence Services Regulations and the Manual of Indian Military Law for disaster relief. Their approach to humanitarian assistance and disaster relief (HADR) is guided by these regulations and laws.

INDIAN ARMED FORCES AND NDRF

The NDRF is the primary agency for HADR operations in India, but is staffed by personnel from CAPFs (like BSF, CRPF, and ITBP), not the Indian Army, Navy, or Air Force. Yet, it often works with the Indian armed forces for major operations. When the NDRF's capabilities or equipment prove insufficient, the armed forces step in, such as for airlifting or air evacuations. The NDRF also trains and practices with the armed forces in joint drills. For HADR operations abroad, the Indian armed forces usually become chief agency.



An IAF C-17 Globemaster transporting NDRF personnel and relief material to Turkey in 2023

PART II : HISTORICAL BACKGROUND

4. After India's independence, the armed forces became the primary responders to emergencies. During Partition in 1947, the Indian Army managed communal clashes, safeguarded migrating citizens, and established refugee camps, with the Military Evacuation Organisation setting up large shelters in Punjab and Delhi. The Assam floods of 1950 saw the Indian Army and Air Force expand their role by evacuating locals, and providing food and medical aid. Over time, they offered humanitarian assistance and disaster relief (HADR) whenever local agencies were overwhelmed. Their efforts were crucial during major floods in Uttar Pradesh (1960), West Bengal (1969), as well as following earthquakes in Kinnaur (1975), Cachar (1984), Uttarkashi (1991), and Latur (1993).

5. After the devastating 2004 tsunami that claimed over 12,000 lives in India, the Indian Army, Air Force, and Navy conducted HADR operations that included **Operation Sea Wave and Operation Madad.** They evacuated people, provided medical aid, built relief camps, cleared debris, rebuilt infrastructure, and restored power, deploying over 16,500 personnel, vehicles, aircraft, and ships. Their efforts extended to Indonesia and Maldives. In October 2005, the IAF delivered tons of supplies to earthquake-hit Pakistan. By the 201Os, the

armed forces remained integral to India's HADR tasks. During the 2013 Uttarakhand floods, **Operation Rahat** became India's largest air evacuation, saving 24,260 lives and lifting 894 tons of supply. That October, after Cyclone Phailin, the IAF rescued 84 people.



Indian Navy's HADR intervention in Sri Lanka after the 2004 Indian Ocean Tsunami.

PART III : MAJOR DOMESTIC OPERATIONS SINCE 2014

The major HADR interventions undertaken by the Indian armed forces since 2014 within Indian territory are summarised year-wise as follows:

2014

6. In July, the Indian Navy (IN) assisted with a search and rescue operation in Himachal Pradesh. In August, the Indian Air Force (IAF) provided flood relief to Uttar Pradesh and Bihar under **Operation Sarayu.** In September-October, the IAF participated in **Operations Megh Rahat and Lehar,** giving HADR services in flood-hit Jammu and Kashmir and later in Odisha and Andhra Pradesh after Cyclone Hudhud. That year, an IAF squadron of C-130J transport aircraft were made available for HADR activities of the armed forces, when needed.

2015

7. In July, IAF helicopters carried out nearly 200 sorties for rescue and relief during the Gujarat and Rajasthan floods. The IN helped with diving assistance during a search operation at a Chhattisgarh coalfield. In December, the armed forces rescued 23,000 people and delivered over 280 tons of supplies during Chennai floods. INS Dhanvantari held health camps in Andaman and Nicobar Islands multiple times, as IN conducted **Exercise Jal Shakti** to simulate HADR activities for natural disasters in the region.

8. In April, IN helicopters evacuated people and provided medical relief during a temple fire in Kerala. Days later, they conducted a similar operation for a fire at an SEZ in Andhra Pradesh. In June, IN aircraft transported critical patients from Lakshadweep to the mainland. The Indian Army and IAF carried out flood relief in Assam and Rajasthan. In

November, the Army went in for rescue after a train derailment in Kanpur. In September, the civil-military **Exercises Prakampana and Sahayata** for super cyclones and earthquakes respectively were held.

2017

9. In April, the IAF carried rescue and relief operations during floods in Jammu and Kashmir. In May, they helped during Cyclone Vardha in the Andaman and Nicobar Islands. Over the next three months, the IAF assisted the NDRF's relief efforts during floods in Rajasthan, Gujarat, and Bihar. In July, the IN restored communication in Mumbai after floods. In November, during Cyclone Ocki, the IN launched **Operation Sahayam** and rescued 136 fishermen.



A rescued fisherman being examined under Operation Sahayam, 2017

2018

10. 10. In March, the Indian Army and IAF held an HADR operation for forest fires in Tamil Nadu. By June, they rescued over 1,100 civilians in flood-hit Manipur and Tripura. In August, Operation Madad, a key tri-services effort, saved over 16,000 people in flood-hit Kerala. From September to December, IN provided relief in cyclone-hit areas of Andhra Pradesh and Tamil Nadu. In December, the armed forces also rescued workers from a cyclone-struck oil rig in the Bay of Bengal, trapped coal miners in Meghalaya, and snow-blocked tourists in Sikkim.

2019

11. In May, IN relief teams arrived in Odisha after Cyclone Fani. They were also deployed in Mumbai during July floods and launched **Operation Varsha Rahat,** deploying 44 HADR teams across Maharashtra, Goa, and Karnataka in August. IN helicopters rescued people from a capsized boat along Andhra Pradesh in September. In November, Indian and US armed forces held **Exercise Tiger Triumph,** a bilateral HADR exercise in Vishakhapatnam (Andhra Pradesh).



[An Indian Army rescue boat being loaded for airlifting by the IAF in 2019]

2020 and 2021

12. In 2020, India's armed forces were largely engaged in HADR efforts abroad, especially for Covid-19 relief. In April 2021, as pandemic restrictions lifted, IAF aircrafts undertook fire-fighting in Manipur, Mizoram, and Uttarakhand. The IAF then airlifted over 2,100 of NDRF personnel for relief work in areas affected by Cyclone Tauktae and Vyaas. Between July and November, IAF and IN teams provided flood relief in Maharashtra, Madhya Pradesh, Gujarat, Uttarakhand, Kerala, Uttar Pradesh, Andhra Pradesh, and Tamil Nadu.

VACCINE MAITRI PROGRAM DURING COVID-19

During the Covid-19 pandemic, India began sending its vaccines overseas in January 2021, just a week into its own vaccine program. The Vaccine Maitri program aimed to aid neighbouring states like Bhutan, Bangladesh, Maldives, and Myanmar. During the pandemic, it was among the largest humanitarian missions. The Indian armed forces managed logistics, shipping and airlifting over 300 million vaccine doses to 101 nations, also donating vaccines in bulk.

13. In March, the IAF conducted multiple flights over the Sariska Tiger Reserve in Rajasthan to extinguish a forest fire. By August, Indian Army and IAF rescued over 2,900 civilians during flood relief efforts in Assam, Gujarat, Maharashtra, Andhra Pradesh, Rajasthan, Madhya Pradesh, and Uttar Pradesh. In August, IAF rescued 35 lives after an avalanche in Uttarakhand. Flood relief operations were then held in Karnataka and Rajasthan in December. Between October to December, Vishakhapatnam hosted the 2022 led of **Exercise Tiger Triumph.**

2023

14. In a year marked by critical emergencies, the Indian Army rescued over 8,500 people during flood relief operations across 13 states, with 6,989 rescues in Punjab alone. They aided avalanche victims in Sikkim and restored services in Gujarat after Cyclone Biporjoy. IN supported fire-fighting and search actions in Kerala, and assisted distressed fishing vessels in Gujarat and Tamil Nadu. IAF played a key role too, rescuing over 200 people from snow-blocked Ladakh in February and availing flood relief in Himachal Pradesh, Punjab, Maharashtra, Sikkim, and Telangana. In November, an IAF mission in Uttarakhand rescued 41 workers from a collapsed tunnel and evacuated them to AIIMS-Rishikesh.



IAF involved in relief work at flood-hit Himachal Pradesh in 2023

15. The Indian Army conducted significant HADR interventions, including flood relief in Manipur (May), landslides in Kerala and Uttarakhand (July), and Gujarat floods (August), rescuing 29,972 civilians. In April, the IAF used Bambi Buckets to fight forest fires in Tamil Nadu and Uttarakhand, and rescued two stranded American tourists in Sirmaur in May. IN relief teams assisted in Karnataka and Wayanad (Kerala) after July's landslides. From June to July, the IAF airlifted relief material and NDRF personnel to Manipur during Cyclone Remal; aided flood relief in Assam, Manipur, and Uttarakhand; and participated in fire-fighting. In September, they airlifted NDRF personnel to Tripura and Andhra Pradesh, while IN evacuated 773 people during Andhra Pradesh floods. In October, the IAF supported Cyclone Dana relief in Odisha.

PART IV: MAJOR OVERSEAS OPERATIONS SINCE 2014

16. In December 2014, the IN airlifted 374 tons and shipped over 2,000 tons of water to Maldives **under Operation Neer** after a major water shortage. In April 2015, IAF launched **Operation Maitri** after an earthquake in Nepal, lifting over 5,000 civilians and 780 casualties, including foreign citizens. In May, INS Saryu represented IN at the **ASEAN**

Disaster Relief Exercise (DIREX) in Malaysia. In August, IAF lifted over 100 tons of materials to flood-hit Myanmar. **Operation Neer** resumed in December, as IN took 2,400 more tons of water to Maldives.

17. In 2017, IN rescued Bangladeshi fishermen during Cyclone Mora and, with the IAF, sent 875 tons of relief to Dhaka for Rohingya refugees. By November, HADR flights reached Myanmar, and IN hosted an HADR exercise involving Bangladesh, Maldives, Myanmar, and Sri Lanka. In 2018, Indian Army medical teams aided tsunami-hit Indonesia in **Operation Samudra Maitri,** as IN saved 192 lives during Mozambique's Cyclone Idai via **Operation Sahayata.** In 2020, INS Airavat took cyclone relief to Madagascar with **Operation Vanilla,** followed by 600 tons of flood aid. **Mission Sagar II and** III extended such aid to Africa, Vietnam, and Cambodia. By 2021, India strengthened HADR agreements with Myanmar, Singapore, QUAD, and BIMSTEC states.

18. By January 2022, the IN provided medical aid to Mozambique, Comoros, Seychelles, and Maldives. In April-May, IN and IAF sent essentials to Sri Lanka during its economic crisis. In February 2023, 300 tons of relief material were sent to Turkey and Syria after an earthquake with **Operation Dost.** In May, IN ships supplied aid to Myanmar during Cyclone Mocha with **Operation Karuna,** and in a unique action, an IN aircraft aided China in locating a sinking vessel. In October, the IAF launched **Operation Ajay** to take relief to Egypt for Palestinian areas. After Cyclone Hidaya in May 2024, IN and IAF brought aid to Tanzania and Kenya too. By September, under **Operation Sadbhav,** they also supplied 100 tons of relief materials to Myanmar, Laos, and Vietnam.



The Indian Navy delivering medical supplies to Sri Lanka, 2022



IAF bringing back Indian nationals from eastern Europe under Operation Ganga, March 2022

EVACUATIONS OF INDIAN NATIONALS OVERSEAS

In the last decade, the Indian armed forces have been actively evacuating Indian nationals stranded overseas during crises. In 2015, **Operation Raahat** saw the IAF swiftly rescue 4,600 Indians from war-torn Yemen. In April 2016, **Operation Sankat Mochan** had the IAF airlifting dozens of Indians from South Sudan during a civil war. As an early response to Covid-19 pandemic, the IN launched Operation Samudra Setu, bringing 3,992 Indians home from Maldives, Sri Lanka, and Iran by July 2020.

After the Taliban took over Afghanistan in 2021, the IAF evacuated Indians under **Operation Dev Shakti.** During the Russia-Ukrainian War in 2022, India launched **Operation Ganga,** with 14 IAF flights rescuing thousands of Indians. In April 2023, IAF and IN evacuated about 4,000 Indians from Sudan under **Operation Kaveri.** Following the Israel-Palestine conflict in 2023, the IAF evacuated over 1,300 Indians and 20 Nepali nationals from Israel under **Operation Ajay** by February 2024.

CONCLUSION

19. India's HADR operations originated from the pre-independence 'Aid to Civil Authorities' (ACA) mandate. Post-1947, the armed forces became the primary disaster relief agency, excelling in relief, evacuations, and search and rescue operations. Following the NDRF's establishment in 2005 as the main HADR body, the armed forces continued collaboration through drills and operations. They support the NDRF across emergency-hit regions, leveraging expertise and advanced equipment to save lives. Recently, they have also evacuated Indians from overseas during crises, highlighting their global role.

SUMMARY

- India's HADR activities trace back to the pre-independence 'Aid to Civil Authorities' (ACA) mandate, with the armed forces becoming key relief providers post-independence.
- The establishment of the NOMA in 2005 made the NDRF the primary HADR responder, though its collaborations with the armed forces for drills and operations also became routine.
- The Indian armed forces remain vital in disaster relief, evacuations, aid delivery and such tasks, given their advanced skills and equipment.
- In recent years, the Indian Air Force and Navy have actively evacuated Indian and friendly nationals from foreign countries during scenarios of natural or political crises, reflecting their growing global role in HADR.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What does HADR stands for?

(a) Health Assistance and Development Relief.

(b) Humanitarian Assistance and Disaster Relief.

((c) Humanitarian Action and Disaster Recovery.

d) Humanitarian Aid and Disaster Resource.

Q2. National Disaster Response Force (NDRF) does not include personnel's from:

(a) BSF (b) CRPF

(c) Armed Forces (d) ITBP

Q3. Which branch of the Indian Armed Forces coordinates disaster relief operations?

(a) Indian Army (b) Indian Navy

(c) Indian Air Force (d) All of the above

Q4. Which of the following organisations have consistently contributed to humanitarian assistance and disaster relief (HADR) in India, both before and after the establishment of the National Disaster Management Agency (NDMA) and National Disaster Response Force (NDRF) in 2005?

(a) Indian Armed Forces

(b) State Government Departments

(c) Local NGO's

(d) United Nations Disaster Relief Teams

Q5. Which organization was created in 2005 to improve disaster management in India?

(a) Indian Navy

(b) National Disaster Management Agency (NDMA)

(c) Indian Airforce

(d) State Police

Q6. Which operations were launched by the Indian Armed Forces after the 2004 tsunami?

(a) Operation Vijay and Operation Meghdoot

(b) Operation Sea Wave and Operation Madad

(c) Operation Flood and Operation Smile

(d) Operation Safed Sagar and Operation Trident

Q7. What was the aim of India's Vaccine Maitri program during the COVID -19 pandemic?

(a) To conduct vaccine trials

(b) To assist neighbouring countries with vaccine supply

(c) To set up vaccination centres in India

(d) To manufacture vaccines for private companies

Q8. Which operation was carried out by the Indian Navy to provide water to the Maldives during a shortage in 2014?

(a) Operation Maitri

(b) Operation Neer

(c) Operation Vijay

(d) Operation Flood

Short Answer Questions

Q1. What operation did INS Airavat conduct in Madagascar in January 2020?

Q2. Why are the Indian armed forces considered key providers of humanitarian assistance and disaster relief, both in India and abroad?

Q3. What was the purpose of Operation Samudra Setu in 2020?

Long Answer Questions

Q1. How have the Indian armed forces contributed to disaster relief despite the creation of the NOMA and NDRF in 2005?

Q2. Discuss the significance of the Indian Armed Forces role in domestic HADR operation, including specific examples of recent disaster responses.

Q3. How did the Indian armed forces contribute to disaster relief, pandemic support, and international humanitarian efforts between 2020 and 2023?

SOCIAL SERVICE & COMMUNITY DEVELOPMENT (SSCD)

8

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SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/ JW)

CHAPTER SSCD I : NEED, AIM, OBJECTIVES & AGENCIES, AND CONTRIBUTION OF YOUTH IN THE SOCIETY

"The best way to find yourself is to lose yourself in the service of others."

Mahatma Gandhi



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TEACHING INSTRUCTIONS

Period : **One (01)**
Type : **Lecture**
Year : **1st Year JD/ JW**
Conducting Officer : **Associate NCC Officer**
Training Aids : **OHP, Screen, Pointer Staff, Presentation, Script or Book Flagged or Lesson Plan in File.**

Time Plan

- Introduction : 05 mins
- Part I : 05 mins
- Part II : 10 mins
- Part III : 05 mins
- Part IV : 10 mins
- Conclusion : 05 min

INTRODUCTION

1. Social welfare helps people in need, like the poor, the disabled, young, and elderly. Social services support these individuals and groups. Governments, organisations, and individuals provide these services, which are crucial for building stronger communities. Many groups work together to provide social services, including government agencies, NGOs, community leaders, and schools. In India, the National Cadet Corps (NCC) plays a significant role in social service and community development through its Social Service and Community Development (SSCD) program.



LEARNING OBJECTIVES

- Basic understanding of the concept of social service & community
- Analyse the need of SSCD
- Understand the importance of youth in society
- Understand the role of NCC in SSCD

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Definition, Objective and Need of Social Service

(b) Part II : Causes and Impact of Social Problems on Society

(c) Part III : Contribution of Youth in Society

(d) Part IV : Role of NCC in SSCD

INTERESTING FACTS

- India has a large volunteer base, an estimated 100 million volunteers, making it one of the largest volunteer bases in the world.
- Mr. Kailash Satyarthi, a Nobel Peace Prize winner, has led campaigns against child labour.

PART I : DEFINITION, OBJECTIVE AND NEED OF SOCIAL SERVICE

Definition

2. The term 'Social Service' is defined broadly as the voluntary or professional provision of assistance, support, and care to individuals, groups, or communities in need. It aims to promote their well-being, dignity, and quality of life. It covers a wide range of activities, including charity work, community development, advocacy, counselling, and education. It is guided by principles of empathy, compassion, and social justice and seeks to address social, economic, and environmental challenges.

Objective

3. The objective of social service is to improve the quality of life of individuals, groups, and communities in need, promoting their well-being, dignity, and self-sufficiency, while addressing social, economic, and environmental challenges and fostering social justice and equality.

4. **Concept of Social Service.** Social service refers to the act of providing assistance, support, and care to individuals, groups, or communities in need. It involves a selfless commitment to improving the quality of life for others, often without expecting anything in return. Social service can take many forms, including volunteering, community development, advocacy, and charity work.

5. **Analysing the Need of Social Service.** The need for social service arises from various social, economic, and environmental challenges that affect individuals, groups, and communities, including:-

(a) Poverty and economic inequality.

(b) Social injustice and discrimination.

(c) Health disparities and inadequate healthcare.

(d) Education and literacy gaps.

(e) Environmental degradation and disasters.

(f) Natural calamities and emergencies.

(g) Mental health issues and emotional distress.

(h) Social isolation and loneliness.

(j) Human rights violations.

(k) Community development and empowerment needs.

6. Social service helps address these challenges by providing support, assistance, and care to those in need, promoting their well-being, dignity, and quality of life.



7. **Community Development.** Community development refers to the process of improving the quality of life for individuals and groups within a community. It involves identifying and addressing social, economic, and environmental needs and working collaboratively with community members, organisations, and stakeholder groups to create positive change. Community development can encompass a wide range of activities, such as:-

(a) Building community infrastructure, such as parks, community centres, and healthcare facilities.

(b) Providing education and job training programs to enhance economic opportunities.

(c) Promoting social justice and equality by addressing issues such as poverty, racism, and discrimination.

(d) Fostering community engagement and participation through volunteer opportunities, community events, and public meetings.

(e) Supporting local businesses and entrepreneurship to stimulate economic growth.

8. The ultimate goal of community development is to empower communities to take ownership of their own development and to create a more just, equitable, and sustainable society for all.

9. **Need of Social and Community Participation.**

(a) **Promoting a Sense of Belonging.** Participating in social and community activities promotes a deep sense of belonging among individuals. When people engage with others who share common interests or goals, they feel connected to a larger community or group.

(b) **Building Strong Social Connections.** Social and community participation serves as a ground for building strong social connections. It is through these

interactions that individuals form relationships with neighbours, peers, and fellow community members. This connection provides a foundation for emotional support while also facilitating opportunities for growth, collaboration, and shared moments, leading to a more fulfilling and meaningful life.

(c) **Supporting Diversity.** Participating in community activities helps bridge cultural and social divides. This promotes equality by breaking down barriers and promoting a sense of unity among diverse groups.

(d) **Increasing Personal Well-being.** Participating in social and community activities has a wide impact on personal well-being. It can reduce stress, boost self-esteem, and improve overall mental health. When individuals contribute their time and effort to causes they care about, they derive a sense of purpose and fulfilment.

(e) **Impact on Individuals.** Social and community participation has a wide impact on individuals, hence a wide range of benefits. Psychologically, it provides a sense of belonging and purpose, reducing feelings of isolation and enhancing overall mental well-being.

DID YOU KNOW?

- NCC's social service initiatives promote community engagement and participation, helping to build stronger, more cohesive communities.
- Initiatives such as the Companies Act, 2013, require companies to spend a portion of their profits on corporate social responsibility (CSR) initiatives.

PART II : CAUSES AND IMPACT OF SOCIAL PROBLEMS ON SOCIETY

10. **Evaluating the Causes and Impact of Social Problems on the Well-Being of Society/Community.** This part involves analysing the complex interplay of factors that contribute to these issues. Here's a comprehensive evaluation:-

(a) **Causes of Social Problems.**

- **Poverty and Economic Inequality.** Limited access to resources, education, and job opportunities can lead to poverty, which in turn contributes to various social problems.
- **Regressive Social and Cultural Practices.** Discriminatory attitudes, biases, and cultural norms can perpetuate social problems like racism, chauvinism etc.
- **Lack of Education and Awareness.** Limited knowledge and understanding of social issues can contribute to their persistence and exacerbation.
- **Environmental Factors.** Environmental degradation, climate change, and natural disasters can have devastating impacts on communities and contribute to social problems.

(b) **Impact of Social Problems on Society/Community.**

- **Physical and Mental Health Issues.** Social problems like poverty, violence, and discrimination can lead to physical and mental health issues, including anxiety, depression, and substance abuse.
- **Social Isolation and Fragmentation.** Social problems can lead to social isolation, fragmentation, and erosion of community cohesion.
- **Economic Consequences.** Social problems can have significant economic consequences, including reduced productivity, increased healthcare costs, and decreased economic growth.
- **Perpetuation of Inequality.** Social problems can perpetuate inequality, reinforcing existing power dynamics and limiting opportunities for marginalised groups.

(c) **Evaluation.** Evaluating the causes and impact of social problems on the well-being of society/community requires a comprehensive and moderated approach. It involves:-

- **Identifying the Root Causes.** Understanding the underlying factors that contribute to social problems.
- **Assessing the Impact.** Evaluating the effects of social problems on individuals, communities, and society as a whole.
- **Developing Effective Solutions.** Creating and implementing evidence-based solutions that address the root causes of social problems.
- **Monitoring and Evaluating Progress.** Continuously monitoring and evaluating the effectiveness of solutions and making adjustments as needed.

11. **Types of Social Services**.The various types of social services that can be undertaken are as mentioned under:-

(a) **Health and Medical Services**. Providing medical care, health education, and health promotion to individuals and communities. For example, family welfare, medical care, family planning, and nutrition.

(b) **Education and Literacy Services**. Offering educational programs, literacy training, and vocational training to individuals, especially those from disadvantaged backgrounds.

(c) **Food and Nutrition Services**. Providing food, nutrition counselling, and meal programs to individuals and families in need.

(d) **Housing and Shelter Services**. Offering housing assistance, shelter, and support services to homeless individuals and families. Old age support systems, provision of water and cooking fuel, roads, electricity, and sanitation.

(e) **Counselling and Mental Health Services**. Providing counselling, therapy, and mental health services to individuals, families, and groups, as also social assistance, social security, and care and protection.

(f) **Youth Development Services**. Offering programs and services that promote youth development, including after-school programs, mentorship, employment, and leadership development.

(g) **Disaster Relief and Response Services**. Providing emergency response, relief, and recovery services to individuals and communities affected by disasters.

(h) **Environmental Conservation Services**. Promoting environmental conservation, sustainability, and education to individuals and communities.

(j) **Community Development Services**. Supporting community development initiatives, including community engagement, capacity building, and economic development.

(k) **Advocacy and Support Services**. Providing advocacy, support, and empowerment services to marginalised and vulnerable populations, including women, children, and individuals with disabilities.

(l) **Rehabilitation Services**. Offering rehabilitation services, including physical therapy, occupational therapy, and speech therapy, to individuals with disabilities.

(m) **Family and Child Welfare Services**. Providing services that promote family and child welfare, including child protection, foster care, and adoption services.

(n) **Recreation, Sports and Social Activities**. Recreation, sports, and social activities enrich individuals' well-being. Engaging in leisure pursuits fosters personal growth, social connections, and community cohesion.

PART III : CONTRIBUTION OF YOUTH IN SOCIETY

12. Youth, typically defined as individuals between 15 and 29 years of age, play a vital role in shaping society's present and future. They bring energy, ideas, and innovation, driving progress and change. Youth promote human rights, equality, and sustainability, inspiring others. By participating in education, work, and politics, they boost economic growth and community development. Empowering youth builds leaders, solves global issues, and creates a brighter future.

13. India’s total population is approximately 1.3 billion, with youth constituting around 34%, which is the country’s greatest asset. This demographic advantage presents opportunities for economic growth, social progress, and cultural enrichment. The youth form a significant portion of the labour force, contributing actively to a nation's economy. Their innovative ideas and entrepreneurial spirit lead to the creation of new industries, businesses, and job opportunities. Start-ups, often founded by young individuals, drive economic growth and bring about technological advancements.

Contribution of Youth

14. Youth play a crucial role in social service, contributing in various impactful ways. Here are some ways youth can contribute to social service:-

(a) **Volunteering**. Many young people engage in volunteer work, offering their time and skills to support local charities, non-profits, and community organisations.

(b) **Social Change and Support.** Youth have consistently led social movements, fighting for justice, equality, and human rights. Their courage to challenge norms helps address issues like inequality, corruption, and discrimination. Through campaigns and social media, they raise awareness about climate change, mental health, and social justice.

(c) **Innovative Solutions**. Young individuals bring new ideas and innovative solutions to societal challenges, using technology and creativity. They start businesses, create jobs, and boost economic growth.

(d) **Community Engagement**. Through initiatives like community clean-ups, food drives, and mentorship programs, youth actively participate in improving their neighbourhoods. Some examples are:-

- **Disaster Relief.** Youth participate in rescue operations, fundraising, and rehabilitation efforts.
- **Education.** Young volunteers teach underprivileged children, promoting literacy.
- **Healthcare.** Youth engage in health awareness campaigns, medical volunteering, and healthcare advocacy.
- **Environmental Conservation.** Young individuals participate in eco-friendly initiatives, promoting sustainability.

(e) **Leadership Development.** Many young people take on leadership roles in youth organisations, helping to shape policies and programs that benefit their communities. Youth involvement in politics and governance is essential for a dynamic democracy. As future leaders, they bring fresh perspectives to policymaking and governance. Their active participation in student unions, community organisations, and political parties prepares them to take on leadership roles and address pressing societal issues with innovative solutions.

(f) **Peer Support.** Youth often connect with their peers in ways that foster understanding and support, creating safe spaces for discussions on sensitive issues.

(g) **Fundraising.** They frequently organise and participate in fundraising events to support various causes, demonstrating their commitment to social change.

(h) **Civic Participation.** Youth civic participation is vital for creating a fair and equal society. By engaging in civic activities, young people develop essential skills,

build confidence, and become active contributors to their communities. This participation can take various forms, including volunteering, voting, and advocating for social causes, which allows youth to influence decision-making on important social issues.

15. The agencies/stakeholders involved in the conduct of Social Service and Community Development (SSCD) other than the Youth and the NCC cadets are as mentioned:-

(a) **Government Agencies**. Various government agencies, such as the Ministry of Social Justice and Empowerment, Ministry of Health and Family Welfare, and Ministry of Education, collaborate with the NCC to implement SSCD activities.

(b) **Non-Governmental Organisations (NGOs)**. NGOs, such as the Red Cross, Lions Club, and Rotary Club, partner with the NCC to conduct SSCD activities.

(c) **Community Leaders**. Community leaders, such as village elders and panchayat members, play a crucial role in identifying community needs and mobilising resources for SSCD activities.

(d) **Local Authorities**. Local authorities, such as district administrators, police officials, and healthcare workers, provide support and resources for SSCD activities.

(e) **Educational Institutions**. Educational institutions, such as schools and colleges, participate in SSCD activities and provide resources, such as volunteers and infrastructure.

(f) **Youth Organisations**. Youth organisations, such as Nehru Yuva Kendra Sangathan and the Bharat Scouts and Guides, collaborate with the NCC to conduct SSCD activities.

(g) **Corporate Sector**. The corporate sector, through their corporate social responsibility (CSR) initiatives, provides resources and support for SSCD activities.

PART IV : ROLE OF NCC IN SSCD ACTIVITIES

16. Youth constitute the most creative segment of any society. Their role and contribution are vital to all societies with wide social, cultural, and other demographic diversities. Youth make up about 34% of India's total population, and we cannot ignore their role and contribution to social welfare and nation-building. The NCC cadets come from every corner of India; hence, we must use this huge potential of eager, helpful, energetic, educated, and talented cadets to achieve our aim of imbibing values and skills among the weaker sections of our society, thereby fostering their self-sufficiency and confidence.



Pandit Jawaharlal Nehru, First Prime Minister of India, in one of the social service camp of NCC

Activities by NCC through SSCD

17. NCC plays a major role in the upliftment and improvement of the society either through direct involvement or by spreading awareness among people through campaigns and other programs. NCC contributes to society's development in various ways. NCC cadets, individually or in a group, make significant contribution in this field through their selfless service. NCC cadets play a significant role in spreading awareness about social evils and their prevention. Here are some ways they contribute:-



Nukkad Natak on 'Beti Bachao Beti Padhao'

(a) **Organising Awareness Campaigns.**

- **Rallies and Marches.** NCC cadets participate in rallies and marches to raise awareness about social evils such as dowry, child labour, and domestic violence.
- **Seminars and Workshops.** NCC cadets organise seminars and workshops, including Nukkad Natak, to educate people about social evils and their prevention.
- **Pamphlet and Brochure Distribution**. NCC cadets distribute pamphlets and brochures to spread awareness about social evils and their prevention.

(b) **Community Engagement.**

- **Interacting with Local Communities.** NCC cadets interact with local communities to understand their problems and concerns.
- **Collaborating with NGOs**. NCC cadets collaborate with NGOs and other organisations to amplify their impact.
- **Organising Community Service Projects**. NCC cadets organise community service projects such as cleaning campaigns, tree plantation drives, and blood donation camps.



Blood Donation by Cadets in Jammu

(c) **Leadership and Role Modelling.**

- **Setting an Example**. NCC cadets set an example by demonstrating good values and behaviour.

- **Mentoring Younger Cadets**. Senior NCC cadets mentor younger cadets and guide them in their social service activities.
- **Inspiring Others to Join**. NCC cadets inspire others to join them in their social service activities.

18. **Awareness Programs**. NCC cadets also play an important role in spreading awareness among the local populace by conducting various awareness rallies on the following subjects, wherein they convey a message to society by participating in it:-

(a) Female foeticide

(b) Dowry system

(c) Population control

(d) HIV/AIDS

(e) Health and hygiene

(f) Child abuse and trafficking

(g) Drug abuse and trafficking

(h) Promoting rational thinking

19. **Assistance to Civil Administration.**

(a) Render service to people ravaged by floods, cyclones, famine, and earthquakes.

(b) Assist in Traffic control during various events.

DID YOU KNOW?

➢ **Awareness helps in:-**

- Deeper understanding of the issue, inspiring individuals to take meaningful action and drive positive change.
- Mobilising a larger audience and attracting more volunteers, donors, or advocates.
- Motivating individuals to participate and support a cause they previously had little knowledge about.
- Generating widespread public support and collective action, leading to policy changes or social impact.

20. **Other Activities**.

(a) Assist in health care and blood donation.

(b) Active participation in tree plantation.

(c) Celebrate and observe important national days.

(d) Actively participate in spreading government welfare schemes.





Tree Plantation Drive by NCC Cadets

HIGHER ORDER THINKING SKILLS (HOTS)

- **You notice that a nearby orphanage lacks educational resources. Make a plan to provide educational support to the children, incorporating NCC values and community involvement.**
- **What skills have you developed through NCC social service activities?**

CONCLUSION

21. SSCD activities are a cornerstone of NCC, promoting welfare and well-being through selfless commitment. Community development enhances quality of life by addressing social, economic, and environmental needs through collaborative efforts. India faces numerous social problems, including population growth, poverty, unemployment, casteism, communalism, and youth tensions.

22. By integrating SSCD into its framework, the NCC inspires cadets to become active agents of change. By volunteering, raising awareness, and engaging with communities, NCC cadets can help develop solutions to promote social justice. Empowering youth through SSCD fosters positive change, addressing root causes and mitigating impacts. The NCC's community-focused approach cultivates responsible citizens, equipping them to drive sustainable development and social harmony.

SUMMARY

- SSCD activities undertaken by NCC encompass a wide range of activities aimed at promoting the welfare and well-being of individuals, communities, and society as a whole.
- Community development is a crucial aspect of SSCD, involving the process of improving the quality of life for individuals and groups within a community.
- This is achieved by identifying and addressing social, economic, and environmental needs and working collaboratively with all stakeholders to create positive change.
- India faces numerous social problems, including population growth, casteism, poverty, unemployment, and environmental degradation. These issues disturb the social order and hinder the smooth functioning of social institutions.
- To address these problems, it is essential to identify their causes and understand their impact on society.
- The youth and NCC are key stakeholders in addressing social problems and creating a more equitable and just society.
- By leveraging their collective strengths, they can make a significant impact in addressing social problems, such as poverty, education, healthcare, and environmental conservation.
- They can create positive change, promote social justice, and build a better future for themselves and their communities.
- NCC, as a disciplined youth force, can play a vital role in addressing social problems. It provides a platform to participate in community service projects, social awareness programs, and training and education initiatives.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Selfless work done for the good of one's community, society, and nation is called:-

(a) Upliftment of Poverty (b) Leadership

(c) Social Service (d) None of the above

Q2. The activity of blood donation contributes to saving someone's life:-

(a) True (b) False

(c) Not true at all (d) None of the above

Q3. Poor literacy rate is one of the major problems of Indian Society:-

(a) True (b) False

(c) Not true at all (d) None of the above

Q4. The types of social service are:-

(a) Education (b) Social assistance

(c) Both (a) and (b) (d) None of the above

Q.5. What does NGO stand for?

(a) Named Government Organisation

(b) Non-Government Organisation

(c) Not Governed Organisation

(d) None of the above

Q6. Providing emergency response, relief, and recovery services to individuals and communities affected by disasters is a social service undertaken by the NCC cadets:-

(a) False (b) True

(c) Certainly False (d) None of the above

Q7. Which of the following is NOT a role in the conduct of social service activities?

(a) Tree Plantation (b) Statue Cleaning

(c) Crime Prevention (d) Awareness Programs

Q8. What is the importance of social awareness in promoting social service and community development?

(a) It promotes economic growth.

(b) It addresses social problems and promotes community development.

(c) It provides charity to the poor.

(d) It raises awareness about social issues.

Q9. What is the role of the National Cadet Corps (NCC) in promoting social service and community development?

(a) To provide military training

(b) To promote social service and community development among youth

(c) To provide charity to the poor

(d) To promote political awareness

Q10. Which of the following is a social problem addressed in the SSCD module?

(a) Poverty (b) Illiteracy

(c) Unemployment (d) All of the above

Q11. Who are the key stakeholders in addressing social problems and promoting SSCD?

(a) Government (b) NGOs

(c) Youth and NCC (d) All of the above

Q12. When a particular social phenomenon disturbs the social order and hinders the smooth working of social institutions, it comes to be identified as a:-

(a) Community Development (b) Community Organisation

(c) Social Problem (d) None of the above

Q13. Which of the following is a role in the conduct of social service activities?

(a) Tree Plantation (b) Statue Cleaning

(c) Awareness Programs (d) All of the above

Q14. The objective of social service is to improve the quality of life of individuals, groups, and communities in need, promoting their well-being, dignity, self-sufficiency, and:-

(a) Quality of life of individuals (b) Quality of life of communities

(c) Both (a) & (b) (d) Only (b)

Q15. What is the full form of SSCD?

(a) Social Service and Community Development

(b) Social Status and Community Development

(c) Social Service Causing Development

(d) Social Support and Cultural Development

Short Answer Questions

Q1 What do you mean by SSCD?

Q2 Write a short note on any one social problem.

Q3 How does an NCC cadet assist the civil administration during disaster management?

Q4 Define social service.

Q5 Name any one method to conduct social service.

Long Answer Questions

Q1 What all SSCD activities are taken by the NCC cadets?

Q2 What do you understand by the term social welfare? Why is it important?

Q3 What do you understand by community development?

Q4 Highlight the contribution of NCC in the social services field.

Q5 How, as a Senior Under Officer (SUO), will you plan for an awareness program?

SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/ JW)

CHAPTER SSCD II : SSCD ACTIVITIES

"Every road, path, office, home, hut, stream, and particle of air around us can and must be kept clean."

Former President, Dr. Pranab Mukherjee



TEACHING INSTRUCTIONS

Period : **Three (03)**

Type : **Lecture**

Year : **1st Year & 2nd Year JD/JW**

Conducting Officer : **Associate NCC Officer**

Training Aids : **Script or Lesson Plan; OHP, Screen, Pointer Staff, Presentation, Board, and Markers/Chalk.**

Time Plan

- Introduction : 05 Mins (1st Year)
- Part I : 35 Mins
- Part II : 20 Mins (2nd Year)
- Part III : 20 Mins
- Part IV : 35 Mins (2nd Year)
- Conclusion : 05 Mins

INTRODUCTION

1. The Indian government has launched several initiatives to uplift the population, including Swachh Bharat Mission, which aims to make India open defecation-free by constructing over 100 million household toilets, resulting in significant health improvements, economic benefits, and environmental conservation. Certain other government initiatives include Puneet Sagar Abhiyan, a nationwide campaign to clean seashores, rivers, and other water bodies of plastic waste; and Mission Indradhanush, focusing on immunising children and pregnant women against seven vaccine-preventable diseases. Our government has also launched several transformative schemes to boost economic growth, digitalisation, and social welfare. Aadhaar provides a unique identity to residents, while the BHIM App enables seamless digital transactions. Start-Up India and Make in India initiatives foster entrepreneurship and manufacturing, respectively. Skill India aims to upskill youth, enhancing employability. MUDRA Bank offers financial assistance to micro and small enterprises. These schemes have collectively impacted millions of citizens.



LEARNING OBJECTIVES

- Basic understanding of concept of Swachh Bharat Abhiyan
- Know about Puneet Sagar Abhiyan
- Know about Mission Indradhanush
- Knowing about government schemes benifiting the citizens

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Swachh Bharat Abhiyan

(b) Part II : Puneet Sagar Abhiyan

(c) Part III : Mission Indradhanush

(D) Part IV : Other Government Schemes

INTERESTING FACTS

- Around 110 million+ household toilets have been built since 2nd October 2019.
- More than 5 lakh villages have been made ODF, i.e., Open Defecation Free, under the Swachh Bharat campaign.
- Social workers face challenges but find fulfilment.

PART I : SWACHH BHARAT ABHIYAN

2. **What is Swachh Bharat Abhiyan.** With an aim to make India clean, this Abhiyan was launched by Prime Minister Narendra Modi on the 2nd of October, 2014, at Rajghat, New Delhi. The objective was to provide sanitation facilities to every family, including toilets, solid and liquid waste disposal systems, village cleanliness, and safe and adequate drinking water.

3. **Objectives of Swachh Bharat Abhiyan**. The campaign of Swachh Bharat launched by the government of India is aimed at accomplishing various goals and fulfilling the vision and mission of "Clean India" by the 2nd of October 2019, which was the 150th birth anniversary of the great leader Mahatma Gandhi. Following are some important objectives of the Swachh Bharat Abhiyan:-

(a) To eradicate the system of open defecation in India.

(b) To convert the insanitary toilets into pour-flush toilets.

(c) To remove the system of manual scavenging.

(d) To raise awareness of healthy sanitation practices by bringing about behavioural changes in people.

(e) To link people with the programs of sanitation and public health in order to generate public awareness.

(f) To build up the urban local bodies strong in order to design, execute, and operate all systems related to cleanliness.

(g) To completely start the scientific processing, disposals reuse and recycling the municipal solid waste.

(h) To provide the required environment for the private sector to participate in the capital expenditure for all the operations and maintenance costs related to the clean campaign.

DID YOU KNOW?

- The Clean India Movement campaign is the biggest step taken ever as a cleanliness drive to date. On the day of the campaign launch, around 3 million government employees, including students from schools and colleges, participated in the event to make it popular and make the common public aware of it.
- This event was organised at Rajghat on the October 2, 2014, in the presence of 1500 people. This event was flagged off by PM Modi.
- On the same day, President Pranab Mukherjee fluffed off a"Swachh Bharat Run" at Rashtrapati Bhawan.

4. **The Campaign Focuses on**:-

(a) Construction of toilets and sanitation facilities

(b) Solid waste management and disposal

(c) Cleaning of public spaces and infrastructure

(d) Promotion of hygiene and sanitation practices

(e) Community engagement and awareness campaigns

"A clean environment is essential for human health and well-being"

"Cleanliness is next to godliness"

5. **Impact of Swachh Bharat Abhiyan.** Swachh Bharat Abhiyan has made significant progress, with the following:-

(a) Over 10 crore toilets have been constructed nationwide.

(b) Over 5 lakh villages have been declared open defecation free.

(c) There has been a significant improvement in solid waste management.

(d) Increased access to sanitation and hygiene facilities exists.

(e) Enhanced awareness and behavioural change regarding cleanliness and hygiene.

6. Overall, Swachh Bharat Abhiyan has been a significant step towards promoting cleanliness and hygiene in India. While challenges remain, the mission has made notable progress in improving sanitation and hygiene across the country.

PART II : PUNEET SAGAR ABHIYAN

Puneet Sagar Abhiyan

7. Puneet Sagar Abhiyan is a cleanliness drive initiative aimed at cleaning up the country's beaches, coastal areas, and inland water bodies. NCC and the United Nations Environment Programme (UNEP) signed a Memorandum of Understanding (MoU) in New Delhi on September 22, 2022, to tackle the issue of plastic pollution and achieve the universal goal of cleaning of water bodies through 'Puneet Sagar Abhiyan' and 'Tide Turners Plastic Challenge program'. The MoU was signed between DG NCC and UNEP representatives in the presence of Raksha Mantri, Raksha Rajya Mantri, Defence Secretary, and other senior officials of the Ministry of Defence and UNEP representatives. The program focuses on:-



(a) Promoting cleanliness and environmental awareness

(b) Engaging citizens, especially youth, in cleanliness drives

(c) Collaborating with government agencies, NGOs, and local communities

(d) Conducting regular clean-up operations and awareness campaigns

8. **Salient Aspects of Puneet Sagar Abhiyan.**

(a) On December 1, 2021, the NCC launched 'Puneet Sagar Abhiyan,' initially for one month, to clean seashores of plastic and other waste material and increase awareness about the importance of keeping our seas free from plastic waste.

(b) It aims to propagate the message of importance of 'clean seashores/beaches' amongst the local population and future generations.

(c) It was subsequently extended as a pan-India, round-the-year campaign to cover rivers and other water bodies as well.

(d) The NCC mobilised its cadets to collect plastics and other waste materials. The campaign gained tremendous momentum, acceptance, and participation following its launch.

(e) Different ministries and organisations have extended their support to the NCC's noble cause.

(f) Since the launch of 'Puneet Sagar Abhiyan,' over 100 tonnes of plastic waste have been collected from nearly 1,900 locations by more than 12 lakh NCC cadets, alumni, and volunteers, impacting 1.5 crore people. Of the approximately 100 tonnes of collected plastic waste, more than 60 tonnes have been handed over for recycling.



NCC Cadets in Odisha Cleaning Sea Shore Under Puneet Sagar Abhiyan



Cleaning of Beaches by the Cadets of Gujarat DTE

(g) Following the growing support and success of the campaign, the UNEP, through their 'Tide Turners Plastic Challenge Program, decided to join hands with NCC, with the aim of leveraging the youth organisation's strengths.

(h) The UN body has the mandate and knowledge base for addressing various issues relating to the environment, including plastic pollution. They even have programs for engaging youth.

(j) The aim of the MoU between DG NCC and UNEP is to synergise and collate efforts towards engaging youth for promoting clean water bodies.

9. **Objectives**. The objectives of the Puneet Sagar Abhiyan are as mentioned:-



(a) Clean India's coastline and inland water bodies.

(b) Reduce plastic pollution and promote sustainable practices.

(c) Encourage citizens to take responsibility for the environment conservation.

(d) Support the Swachh Bharat Abhiyan and other government initiatives.

10. **Activities**. The activities included in the Puneet Sagar Abhiyan are:-

(a) Beach cleanups and coastal area cleaning

(b) Inland water body cleaning (rivers, lakes, and ponds)

(c) Awareness campaigns and educational programs

(d) Community engagement and volunteer participation

11. **Impact of Puneet Sagar Abhiyan**.

(a) Significant reduction in marine pollution.

(b) Increased awareness among citizens about the importance of cleanliness and conservation of the marine environment.

(c) Encouraged community participation in cleaning up the coastline and water bodies.

(d) Fostered a sense of responsibility among citizens to protect the marine environment.

12. Overall, Puneet Sagar Abhiyan is an initiative that aims to promote cleanliness and conservation of the marine environment and to encourage community participation in protecting the country's coastline and water bodies.

PILLARS OF INDIA'S CLIMATE CHANGE RESOLVE

- India will take its non-fossil energy capacity to 500 GW by 2030.
- India will meet 50 percent of its energy requirements from renewable energy by 2030.
- India will reduce the total projected carbon emissions by one billion tonnes from now till 2030.
- By 2030, India will reduce the carbon intensity of its economy by more than 45 percent.
- By 2070 India will achieve the target of Net Zero.

HIGHER ORDER THINKING SKILLS (HOTS)

- **You are a member of a team tasked with implementing the Puneet Sagar Abhiyan in your village to rejuvenate and conserve water bodies. However, you notice that the local community is hesitant to participate due to a lack of awareness about its benefits. What would you do to raise awareness and encourage community participation?**

PART III : MISSION INDRADHANUSH – ENSURE FULL IMMUNISATION

13. With an aim to strengthen and improve upon the immunisation program, the Indian government, as a part of its health mission, launched Mission Indradhanush in 2014. This scheme aimed to achieve full immunisation coverage for all children and pregnant women at a rapid pace.

14. The immunisation program in India was introduced in 1978 as the 'Expanded Programme of Immunisation' (EPI) by the Ministry of Health and Family Welfare, Government of India. In 1985, the program was modified as the 'Universal Immunisation Program' (UIP) under the National Health Mission (NHM) since 2005. Despite being operational for many years, UIP has been able to fully immunise only 65% of children in the first year of their lives.



15. **Mission Indradhanush** is a health mission of the Government of India. It was launched by Union Health Minister J. P. Nadda on 25 December 2014. The scheme sought to drive towards 90% full immunisation coverage of India and sustain the same by the year 2022. Nationally, people are getting vaccinated against eight diseases that can be prevented with vaccines: Diphtheria, Whooping cough, Tetanus, Polio, Measles, Hepatitis B, Tuberculosis (BCG), and Meningitis and Pneumonia caused by Haemophilus influenza type B. In some states and districts, people are also getting vaccinated against rotavirus diarrhoea and Japanese encephalitis.

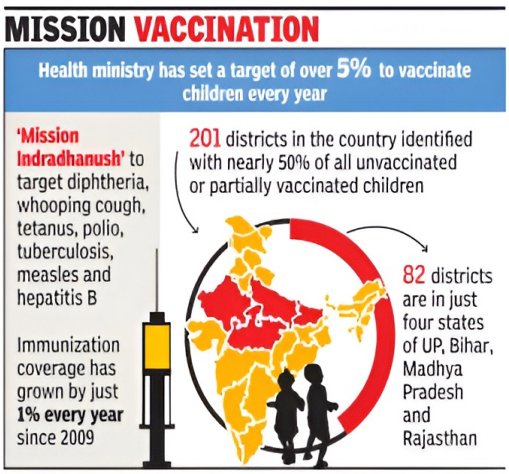
16. **Objectives of Mission Indradhanush**. The objectives of Mission Indradhanush are as mentioned under:-

(a) To strengthen and re-energise the immunisation program.

(b) To achieve full immunisation coverage for all children and pregnant women.

(c) To focus on urban and rural areas with low immunisation cov erage.

(d) To provide immunisation services to all unvaccinated and partially vaccinated children and pregnant women.



17. **Key Components of Mission Indradhanush**.

(a) **Immunisation Drives**. Conducting immunisation drives in select districts and cities with low immunisation coverage.

(b) **Micro-Planning**. Preparing micro-plans for each district and city to ensure that all unvaccinated and partially vaccinated children and pregnant women are covered.

(c) **Mobilisation**. Mobilising frontline workers, such as ASHAs and Anganwadi workers, to promote immunisation and provide immunisation services.

(d) **Monitoring and Evaluation**. Regularly monitoring and evaluating the progress of the mission to identify areas for improvement.

18. **Impact of Mission Indradhanush**.

(a) **Increased Immunisation Coverage**. Mission Indradhanush has resulted in a significant increase in immunisation coverage, with over 3.5 crore children and 90 lakh pregnant women immunised.

(b) **Reduction in Vaccine-Preventable Diseases**. The mission has led to a reduction in vaccine-preventable diseases, such as measles, rubella, and diphtheria.

(c) **Improved Health Outcomes**. Mission Indradhanush has contributed to improved health outcomes, including a reduction in infant mortality rates and an increase in life expectancy.

19. Overall, Mission Indradhanush has been a successful initiative in strengthening and re-energising the immunisation program in India and has made significant contributions to improving health outcomes and reducing vaccine-preventable diseases.

20. **Intensified Mission Indradhanush (IMI).** Intensified Mission Indradhanush (IMI) is a government initiative aimed at boosting immunisation coverage in low-performing districts. It was launched in 2017 as an extension of the Mission Indradhanush program.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Mission Indradhanush aims to immunise all children under the age of 2 years against eight vaccine-preventable diseases. However, some parents in rural areas are hesitant to get their children vaccinated due to misconceptions about vaccines. What methods would you suggest to your teacher to address these misconceptions and increase vaccine uptake in rural areas?**

PART IV : OTHER GOVERNMENT SCHEMES

21. The Indian government has launched several initiatives to promote digital transformation, economic growth, and skill development. **Digital India Initiatives** include Aadhaar, a unique identity program that has enabled the government to save approximately INR 90,000 crore by eliminating duplicate and fake identities. The BHIM app, a digital payment platform, has facilitated cashless transactions, while the DigiDhan initiative has promoted digital payments and a cashless economy.

22. **Economic Growth Initiatives** include Make in India, which aims to promote manufacturing and entrepreneurship in the country. The Startup India initiative provides funding and support to startups, while the Standup India initiative promotes entrepreneurship among women and SC/ST communities.

23. **Skill Development Initiatives** include Skill India, which aims to train over 40 crore people in different skills by 2022. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY) provides skill training and certification to youth, while the National Skill Development Mission promotes skill development and entrepreneurship. A few of these government initiatives are as discussed under.

Aadhaar

24. Aadhaar Card is a document that acts as a proof of identity and address proof for residents of India.

25. The Unique Identification Authority of India (UIDAI) is a government agency responsible for issuing a unique 12-digit identification number to Indian residents. This number serves as proof of identity and address, valid across the country. The Aadhaar card, issued by the UIDAI, contains verified demographic and biometric data of resident Indian citizens. Aadhaar isn't meant to replace

Documents Needed for Making Aadhaar
(Not to be asked in exams, only for info)
You need to submit the following documents for the Aadhaar Card application.

Type of Proof	Supporting Documents
Identity proof	Voter ID, PAN card, ration card, passport, driving license, etc.
Address proof	Ration card, bank passbook, Utility bills, Insurance documents, arms license, etc.
Birth proof	Birth certificate, PAN card, passport, marksheet issued by college and university. SSC certificate, etc.
Relationship proof	PDS card, pension card, passport, MNREGA job card, birth certificate, etc.

existing IDs like PAN cards, passports, or driving licenses. However, it can be used as a single, universal identification document. Banks, financial institutions, and telecom companies can also use Aadhaar for Know-Your-Customer (KYC) verification and profile management. The initiative, launched in 2009, aims to provide a digital identity to every citizen, promoting inclusivity, efficiency, and transparency in public services.

26. **Key Features of Aadhaar**.

(a) **Uniqueness**. Through demographic and biometric deduplication, Aadhaar verifies an individual's identity by cross-checking their information with existing records in the UIDAI database.

(b) **Portability**. Aadhaar enables nationwide portability, allowing authentication from anywhere online. This facilitates seamless mobility for millions of Indians who migrate within the country.

(c) **Random Number**. Aadhaar numbers are randomly generated and do not contain any intelligent or sensitive information. The enrolment process requires minimal demographic and biometric data, excluding details like caste, religion, income, and health.

(d) **Scalable Technology Architecture**. The UID architecture is open, scalable, and centrally managed. It enables online authentication from anywhere in the country, with the capacity to handle 100 million authentications daily.

(e) **Open-Source Technologies**. Open-source architecture precludes dependence on specific computer hardware, specific storage, specific OS, specific database vendor, or any specific vendor technologies to scale.

27. **Benefits of Aadhaar**.

(a) **Simplified Governance**. Aadhaar enables efficient delivery of public services, such as subsidies, pensions, and scholarships.

(b) **Financial Inclusion**. Aadhaar promotes financial inclusion by providing citizens with a unique identity, enabling them to access banking services.

(c) **Transparency and Accountability**. Aadhaar reduces corruption and leakages in public services, ensuring that benefits reach the intended beneficiaries.

28. **E-Aadhaar.**

(a) The digital version of an Aadhaar Card is called an e-Aadhaar Card. A downloadable duplicate of this card is available on the UIDAI website in PDF format. To access it, simply enter your Aadhaar password to initiate the download.

(b) The e-Aadhaar is equally valid as the original printed Aadhaar card. Additionally, there is also an mAadhaar version designed for mobile devices.

29. In conclusion, Aadhaar has revolutionised the way citizens interact with the government, promoting transparency, efficiency, and inclusivity. As a unique digital identity, Aadhaar has empowered citizens, especially the marginalised, to access various public services and benefits.

HIGHER ORDER THINKING SKILLS (HOTS)

- **You are a member of a school committee tasked with creating awareness about Aadhaar among students and parents. What methods would you use to educate them about its benefits and importance?**

BHIM Application

30. The **BHIM** (**Bharat Interface for Money**) Application (App) is a mobile payment app launched by the Indian government on December 30, 2016. It was developed by the National Payments Corporation of India (NPCI); BHIM enables users to make cashless transactions directly through their banks using the Unified Payments Interface (UPI). The app supports all UPI-enabled Indian banks, allowing instant money transfers between over 170 banks. It is compatible with all mobile devices.

31. **Operation.** BHIM enables users to send and receive money using UPI addresses, QR codes, or account numbers. Unlike mobile wallets, BHIM doesn't store money; instead, it facilitates instant bank-to-bank transfers. Transactions are available 24/7, including weekends and holidays. Additionally, BHIM supports digital payments through Aadhaar authentication. To expand its reach, BHIM will be integrated with the Open Network for Digital Commerce (ONDC), aiming to compete with dominant players like PhonePe and Google Pay.

INTERESTING FACTS (BHIM APP)

- One digital payment application for all bank accounts.
- Money remains in your bank account, so you earn interest.
- No charges from using the BHIM application infrastructure, minimal Unified Payment Interface (UPI) charges from banks for making transactions.
- Simple, secure, and light.
- The BHIM framework *99# works without the internet.
- Transaction from ₹ 1/- to ₹ 40,000/-
- Daily transaction limit of ₹ 1,00,000/-

Make in India

32. **Make in India** is a government initiative aimed at promoting India as a manufacturing hub. It encourages companies to design, make, and assemble products in India, offering incentives for investments in manufacturing. The initiative focuses on creating a business-friendly environment, modern infrastructure, and opening up new sectors to foreign investment. Targeting 25 key sectors, Make in India seeks to generate jobs, enhance skills, and establish India as a global export hub for design and manufacturing.



33. **Objectives.** The program was launched in September 2014 with the following objectives:-

(a) Boost manufacturing sector growth by 12-14% annually.

(b) Create 100 million new jobs in manufacturing sector by 2022.

(c) Increase manufacturing's share of GDP to 25% by 2022 (later revised to 20% by 2025).

(d) Develop skills among urban poor and rural migrants for inclusive growth.

(e) Enhance domestic value addition and technological depth in manufacturing.

(f) Achieve environmentally sustainable growth.

(g) Strengthen the global competitiveness of India's manufacturing sector.

34. **Four Pillars of the Make in India Initiative.**

(a) **New Processes**. The government is implementing various reforms to create possibilities for getting Foreign Direct Investment (FDI) and foster business partnerships.

(b) **New Infrastructure**. Infrastructure is integral to the growth of any industry. Developing industrial corridors and smart cities with cutting-edge technology and high-speed communication is crucial for its growth.

(c) **New Sectors**. 'Make in India' has identified 25 key sectors to promote, providing detailed information through an interactive web portal.

(d) **New Mindset**. The government in India has always been seen as a regulator and not a facilitator. This initiative intends to change the mindset by bringing a paradigm shift in the way the government interacts with various industries.

35. **Advantages Accrued**. India has emerged as a global industrial hub and a top investment destination, thanks to significant initiatives, policy changes, and reforms. Key advantages include:-

(a) **Rapid Economic Growth**. India's economy is amongst the fastest-growing ones in the world.

(b) **Demographic Advantage**. With 356 million persons and 10 to 24-year-olds, the largest youth population is being addressed.

(c) **Favourable Policies**. Major FDI policy reforms have been made in the sectors, such as defence, pensions, construction development, pharmaceuticals, broadcasting, and civil aviation.

36. **Supporting Schemes of Make in India.** Several schemes were launched to support the Make in India programme:-

(a) **Skill India.** The mission seeks to equip 10 million Indians each year with skills across diverse sectors. Upskilling the nation's large workforce is essential to the success of the 'Make in India' initiative, especially considering that only 2% of India's population currently receives formal skill training.

(b) **Startup India**. The main idea behind this program is to build an ecosystem that promotes the growth of startups, driving sustainable economic growth, and creating large-scale employment.

(c) **Digital India.** This aims to transform India into a knowledge-based and digitally empowered economy.

(d) **Pradhan Mantri Jan Dhan Yojana (PMJDY).** The mission envisions promoting financial inclusion by providing affordable access to essential financial services, including banking savings and deposit accounts, remittances, credit, insurance, and pensions.

(e) **Smart Cities. The** Smart Cities mission aims to create 100 smart cities with the aim to transform and rejuvenate Indian cities.

(f) **Swachh Bharat Abhiyan.** This is a mission aimed at making India cleaner and promoting basic sanitation and hygiene.

(g) **Sagarmala.** This scheme aims at developing ports and promoting port-led development in the country.

(j) **International Solar Alliance (ISA).** The ISA is a coalition of 121 nations, primarily located in the sunny regions between the Tropic of Cancer and the Tropic of Capricorn. This Indian-led initiative focuses on advancing research and development in solar technologies and shaping related policies.

(k) **AGNII.** AGNII, or Accelerating Growth of New India's Innovation, was launched to push the innovation ecosystem in the country by connecting people and assisting in commercialising innovations.

(l) **AMRUT.** AMRUT is the Atal Mission for Rejuvenation and Urban Transformation. It aims to build basic public amenities and make 500 cities in India more liveable and inclusive.

Startup India

37. **Definition.** A startup refers to an entity registered in India for no more than ten years, with an annual turnover not exceeding ₹25 crore in any financial year. It focuses on the innovation, development, deployment, or commercialisation of new products and services, driven by technology and intellectual property.

38. It is a flagship initiative launched on 16 January 2016 by the Government of India to promote startup culture and build a robust ecosystem for innovation and entrepreneurship. Some key highlights of the Startup India initiative include:-

(a) There are over 1,30,000 startups recognised by the government of India as of January 2024.

(b) 50% of the startups are based in Tier 2 and Tier 3 cities.

(c) These startups are spread over 669 districts from 36 states and union territories of India.

(d) 57 regulations have been simplified for startups.

(e) The Startup India portal serves as a virtual incubation platform, enabling stakeholders in the startup ecosystem to connect, access resources, and utilise tools and templates that support them throughout their journey.

39. The government, through this initiative, aims to empower start-ups to grow through modernisation and design. The main features of Start-up India campaign are as follows:-

(a) Single Window Clearance even with the help of a mobile application.

(b) 10,000 crore INR of funds.

(c) 80% reduction in patent registration fee.

(d) Modified and friendlier bankruptcy code to ensure a 90-day exit window.

(e) Eliminating red tape.

(f) Self-certification compliance.

(g) Encourage entrepreneurship.

Skill India

40. The Skill India Mission, launched in 2015, is a government initiative that encompasses various skilling schemes and programs. Its primary aim is to equip the country's youth with the necessary skill sets to enhance their employability in relevant sectors and boost overall productivity.

41. **Skill India Objectives**. The chief objective of the Skill India Mission was to provide **market-relevant skills training** to more than 40 crore young people in the country by the year 2026. It aims at:-

(a) **Talent Development**. Creating opportunities and fostering an environment for the growth and development of youth talent.

(b) **Sectoral Development**. Revitalising traditional skill sectors that have been under development for years while identifying and prioritising new sectors for skill enhancement.

42. **Features of Skill India.** There are many features to the Skill India Mission that make it different from the previous skill development missions. The key features are:-

(a) **Youth Employability and Entrepreneurship**. The focus is on improving the employability of the youth so that they get employment and also enhance entrepreneurship among them.

(b) **Comprehensive Training**. The mission offers training, guidance, and support for all traditional types of employment like weavers, cobblers, carpenters, welders, masons, blacksmiths, nurses, etc.

(c) **Focus on Emerging Sectors**. New domains will also be emphasised, such as real estate, transportation, construction, gems, textiles, banking, jewellery designing, tourism, and other sectors where the level of skill is inadequate.

(d) **Rural Skill Development**. An important feature is the creation of a new hallmark, 'Rural India Skill.'

DID YOU KNOW?

- **Skilling is important because of the following factors.**
  - **Demographic Advantage**. In contrast to most leading economies around the globe facing the challenge of an ageing population, India, with its demographic dividend, has the potential to meet global workforce demands. However, this requires equipping the population with employable skills.
  - Skill training is only 10% in India, which is very small compared to other countries – Germany (75%), Japan (80%), and South Korea (96%).
  - **Sectoral Mobilisation**. With advancements in mechanisation boosting agricultural productivity, the sector will require fewer workers.

(e) Training programs align with global benchmarks to enable Indian youth to secure employment both domestically and internationally.

(f) Development of targeted training modules for specific age groups in areas such as communication, language, positive thinking, behavioural skills, management, and life skills.

MUDRA Bank

43. The **Micro Units Development and Refinance Agency Bank** (or **MUDRA Bank,** launched by Prime Minister Narendra Modi on April 8, 2015, is a public sector financial institution in India that provides low-cost loans to microfinance institutions and non-banking financial institutions, which in turn offer credit to Micro, Small, and Medium Enterprises (MSMEs).

44. The Pradhan Mantri MUDRA Yojana scheme established MUDRA banks to cater to small entrepreneurs. The bank prioritises responsible lending, ensuring clients avoid indebtedness.

DID YOU KNOW?

- Who is eligible to borrow from MUDRA bank?
  - Small manufacturing unit
  - Shopkeepers
  - Fruit and vegetable vendors
  - Artisans

45. Initially, MUDRA was set up as a Small Industries Development Bank of India (SIDBI) subsidiary with ₹1000 crore authorised capital. To enhance its functioning, additional capital is expected. MUDRA's role is to develop and refinance microenterprises, supporting finance institutions that lend to small businesses in manufacturing, trading, and services. It partners with banks, MFIs, and other lenders to provide microfinance support to the micro-enterprise sector nationwide.

46. **The bank will classify its clients into three categories, and the maximum permissible loan sums will be based on the category as mentioned**:-

(a) *Shishu*. Allowed loans up to INR 50,000 (US$600)

(b) *Kishor*. Allowed loans up to INR 5 lakh (US$6,000)

(c) *Tarun*. Allowed loans up to INR10 lakh (US$12,000)

47. The **Government has decided to provide additional funds of INR 1 trillion (US$12 billion) to the market and will be allocated as mentioned**:-

(a) 40% for *Shishu*

(b) 35% for *Kishor*

(c) 25% for *Tarun*

INTERESTING FACTS

- **Digilocker**. The Ministry of Electronics and Information Technology has developed this application to have access to documents stored in the cloud.
- **UMANG**. The Ministry of Electronics and Information Technology, along with the National e -Governance Division, has come up with the new -age digital governance called the Umang App. This app provides all the necessary services, from local to central, compiled in one app.
- **MyGov App**. This app to stay up to date with the recent happenings in Indian politics. It accepts the direct involvement of citizens to comment on the government's initiatives and policies.

HIGHER ORDER THINKING SKILLS (HOTS)

- **You are the leader of your school's Ecological Club. Design and propose a 6-month action plan to implement Swachh Bharat Abhiyan in your school and neighbourhood. Your plan should include:-**
  - **Aims and objectives**
  - **Strategies for waste management and segregation**
- **How do you think Mission Indradhanush will help reduce illnesses and deaths among children and pregnant women in India in the long run?**

CONCLUSION

48. NCC cadets are key drivers of India's cleanliness and environmental sustainability initiatives, particularly through the Swachh Bharat Mission and Puneet Sagar Abhiyan. These initiatives have made significant strides, constructing millions of toilets, enhancing waste management, and promoting sanitation awareness. NCC cadets also mobilise communities to clean India's coastline and water bodies, fostering environmental responsibility and community ownership.

49. The Indian government's initiatives, such as Mission Indradhanush, Aadhaar, Skill India, and Startup India, promote economic growth, financial inclusion, skill development, and entrepreneurship. These programs enhance governance, citizen engagement, and sustainable development. Despite implementation challenges, the government's commitment to transforming India into a digitally empowered nation is evident. NCC cadets' awareness and participation in these initiatives contribute significantly to societal well-being.

SUMMARY

- Swachh Bharat Abhiyan (SBA), launched by the Government of India in 2014, is a nationwide initiative aimed at promoting cleanliness and hygiene throughout the country.
- Puneet Sagar Abhiyan is a cleanliness drive initiative launched by NCC in 2021. The mission aims to clean up the country's coastline, rivers, and water bodies and to promote awareness about the importance of cleanliness and conservation of the marine environment.
- Mission Indradhanush has been instrumental in improving immunisation coverage across the country, particularly in hard-to-reach areas. It seeks to drive towards 90% full immunisation coverage in India.
- AADHAAR has provided a unique digital identity to over 1.2 billion residents, facilitating access to various public services and benefits.
- The BHIM App has promoted digital payments and financial inclusion, while Make in India has encouraged manufacturing and entrepreneurship in India.
- Skill India has focused on developing a skilled workforce. Startup India has provided a platform for entrepreneurs to launch and grow their businesses.
- Mudra Bank has provided access to credit for micro, small, and medium enterprises (MSMEs), facilitating their growth and development.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. One of the impacts of the Puneet Sagar Abhiyan is a significant reduction in marine pollution:-

(a) True (b) False

(c) May be True (d) None of the above

Q2. The Prime Minister had nominated the names of how many famous personalities from business industries, sports, and Bollywood to drive the Clean India campaign?

(a) Seven (b) Eight

(c) Eighteen (d) Nine

Q3. Puneet Sagar Abhiyan is a cleanliness drive initiative aimed at cleaning up the country's beaches, coastal areas, and inland water bodies:-

(a) True (b) False

(c) Not true at all (d) None of the above

Q4. The Swachh Bharat Abhiyan was launched by Prime Minister Narendra Modi on which date at Rajghat, New Delhi?

(a) 02nd October 2004 (b) 02nd October 2019

(c) 02nd October 2014 (d) None of the above

Q5. What does UNEP stand for?

(a) United Nations Environment Programme

(b) United National Environment Podcast

(c) United Nations Ecological Programme

(d) United Nations Educational Programme

Q6. Immunisation Programme in India was introduced in which year?

(a) 1978 (b) 1988.

(c) 2008. (d) 1989.

Q7. The objectives of the government scheme are:-

(a) To conduct exams for the students.

(b) Formulate a sports promotion plan.

(c) Both (a) & (b).

(d) To improve the quality of life.

Q8. For recruitment of soldiers below the officer rank in the armed forces, the scheme launched by the government is called:-

(a) Agniveer Scheme. (b) Beti Padao Beti Bacho Scheme.

(c) Agnipath Scheme. (d) Jan Dhan Yojna.

Q9. The purpose of the BHIM app is:-

(a) Providing loans to weaker sections

(b) Safe payments

(c) Social Service and Central Development

(d) None of the above

Q10. Which immunisation plan was launched in 2014, aiming at maximum immunisation in India?

(a) Ayushman Bharat (b) Mission Immunisation program

(c) Mission Indradhanush (d) Khelo India

Q11. The Startup India initiative was launched on:-

(a) January 16, 2019 (b) January 26, 2016

(c) January 16, 2016 (d) January 26, 2019

Q12. An initiative by the Government of India to create and encourage companies to develop, manufacture, and assemble products in India and incentivise dedicated investments into manufacturing is:-

(a) Aadhaar Scheme (b) BHIM App

(c) Make in India scheme (d) None of the Above

Q13. UPI stands for:-

(a) Unified Portal Interest (b) Universal Payment Interface

(c) United Payment Interface (d) Unified Payment Interface

Q14. Which year saw the launch of the Skill India Mission?

(a) 1995 (b) 2005

(c) 2015 (d) 2024

Q15. This aims to transform India into a knowledge-based and digitally empowered economy:-

(a) Digital India (b) MUDRA Bank

(c) Skill India (d) None of the above

Short Answer Questions

Q1. Write a short note on Intensified Mission Indradhanush.

Q2. Write a short note on Skill India.

Q3. Write a short note on MUDRA Bank.

Q4. Write a short note on Swachh Bharat Abhiyan.

Q5. In which year was Puneet Sagar Abhiyan launched?

Long Answer Questions

Q1. What are the features of Skill India?

Q2. What do you understand by Make in India?

Q3. What do you understand about My Startup in India?

Q4. What do you understand by immunisation program? What motivated the launch of Mission Indradhanush?

Q5. How is Aadhaar a Unique Identity of a Citizen of India? Explain.

SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/ JW)

CHAPTER SSCD III : GENDER SENSITIVITY AND CHILD PROTECTION

"Equality is the soul of liberty; there is, in fact, no liberty without it."





TEACHING INSTRUCTIONS

Period : **One (01)**

Type : **Lecture**

Year : **1st Year JD/ JW**

Conducting Officer : **Associate NCC Officer**

Training Aids : **Charts on gender sensitivity, child protection, and the POCSO Act, videos; pamphlets; and plays.**

Time Plan

- Introduction : 05 Min
- Part I : 15 Min
- Part II : 15 Min
- Conclusion : 05 Min

INTRODUCTION

1. **Gender sensitisation** is the process of making people aware of gender equality or the lack of it and the need to eliminate gender discrimination. It involves understanding and challenging the existing gender roles, stereotypes, and biases that are prevalent in society.

2. Child abuse constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development, or dignity. Child protection constitutes safety from all forms of child abuse. **POCSO Act**, enacted in 2012, is a step taken towards strengthening norms of child protection in India.



LEARNING OBJECTIVES

- Understanding of gender sensitivity and measures to ensure gender equality
- Understanding the Child Protection Framework and POCSO act.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Gender Sensitivity

(b) Part II: Child Protection and POCSO Act

DID YOU KNOW?

- POCSO ACT is a gender-neutral act.
- Not reporting abuse by the custodians is an offence.
- POCSO investigations must finish within three months, and trials within a year, to ensure speedy justice.

PART I : GENDER SENSITIVITY

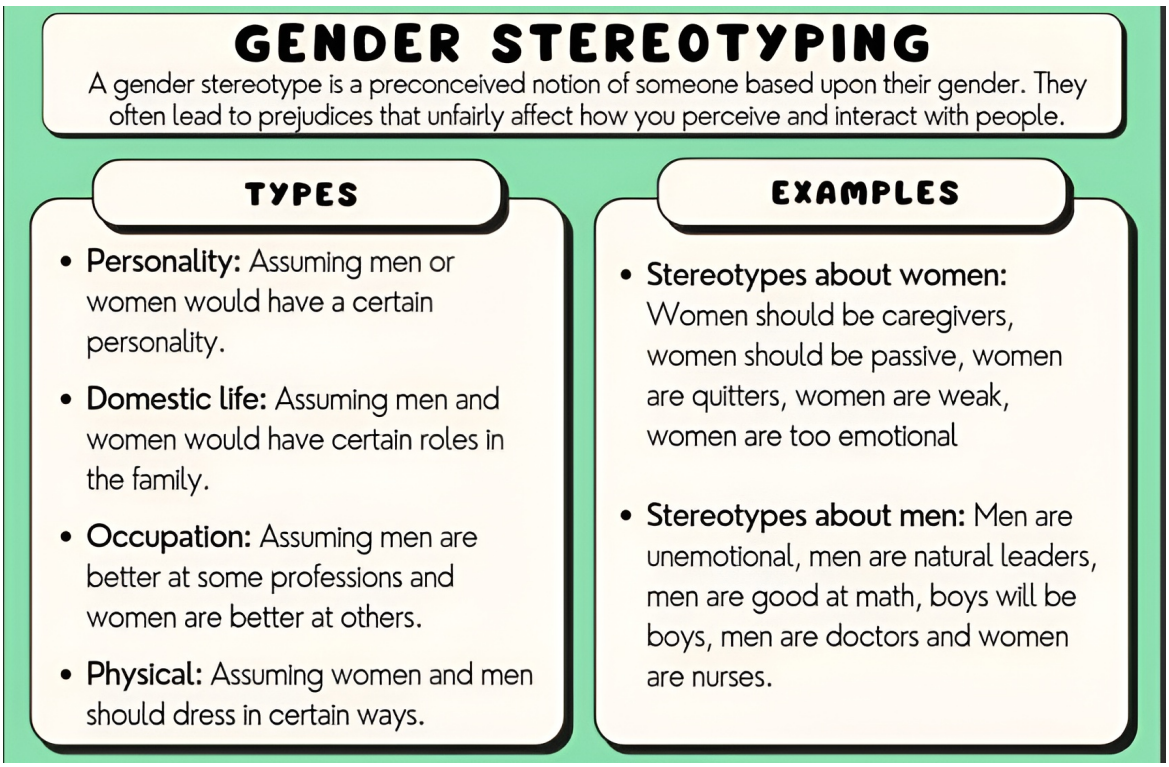
3. **Gender sensitivity** refers to the awareness and understanding of the differences in the experiences, needs, and perspectives of individuals based on their gender. It involves recognising how gender can influence social dynamics, opportunities, and treatment in various contexts, including workplaces, education, and communities. By developing gender sensitivity, individuals and organisations can contribute to a more equitable society that values and respects the diversity of gender identities and experiences. Here are some key aspects to understand the existence of various genders and develop empathy towards them:-

(a) **Awareness of Gender Differences.** It is important to understand that societal norms, roles, and expectations can lead to different experiences for men, women, and gender-diverse individuals.

(b) **Recognising Inequalities.** Identifying systemic inequalities and discrimination that affect individuals based on their gender, such as wage gaps, access to education, and representation in leadership roles.

(c) **Empathy and Respect.** Cultivating empathy for individuals of all gender identities, acknowledging their unique challenges and perspectives, and treating everyone with respect.

(d) **Inclusive Language.** Using language that is respectful and inclusive of all gender identities, such as using gender-neutral terms.



(e) **Promoting Equal Opportunities**. Advocating for policies and practices that ensure equal access to opportunities, resources, and decision-making processes for all genders.

(f) **Challenging Stereotypes**. Questioning and dismantling gender stereotypes and norms that limit individuals based on their gender identity.

(g) **Creating a Supportive Environment**. Fostering spaces where individuals feel safe and empowered to express their gender identity without fear of discrimination or bias.

(h) **Education and Training.** Engaging in ongoing education and training on gender issues to enhance understanding and promote sensitivity within organisations and communities.

4. **Promoting equality for all children** involves creating environments where Children are treated fairly and with respect, regardless of their background, gender, abilities, or identity. We can create environments where all children are treated fairly and with respect, promoting a foundation of equality that will benefit them throughout their lives.

5. **Respecting all genders is essential** for fostering inclusivity and understanding. By embracing these principles, we can contribute to a more respectful and inclusive society for everyone.

Meaning of Gender Stereotypes

6. Gender stereotypes are general ideas about how people of a certain gender should act. They reflect in-built biases based on the social norms of that society. These stereotypes are often inaccurate and continue to exist even when there is evidence against them.

7. **How Gender Stereotypes Develop.** The main causes of gender stereotypes are due to:-

(a) **Subconscious Biases**. Often, we aren't even aware that we have them or how they influence our behaviour.

(b) **Social Conditioning and Internalised Stereotypes**. Gender roles, norms, and expectations are learnt by watching others in our society, including our families, our teachers, and our classmates.

8. **Gender Intersects with Various other Identities,** creating unique experiences for individuals. Understanding these overlaps gives a deeper insight into identity and shows how unique everyone's experiences are. Here are some key aspects:-

(a) **Race and Ethnicity**. Gender experiences can differ significantly across racial and ethnic groups, influencing cultural expectations and societal treatment. For example, women of colour may face racism and sexism.



(b) **Class**. Socioeconomic status can influence gender experiences by affecting access to resources, opportunities, and healthcare. For example, marginalised groups may face additional barriers based on class.

(c) **Ability**. Gender and disability intersect, affecting how individuals experience both societal expectations and discrimination. Disabled individuals may face unique challenges in expressing their gender identity.

9. **Enabling an Environment for Holding one's Gender Identity with Pride**. Creating an inclusive environment involves using various strategies so that organisations and communities can make everyone feel proud to express their gender identity. This leads to a more diverse and welcoming atmosphere:-

(a) **Education and Awareness.**

- **Training Programs**. Implement training sessions on gender diversity and inclusivity for all employees or members of an organisation.
- **Workshops and Seminars**. Host events that highlight the experiences and contributions of diverse gender identities, promoting understanding and empathy.

(b) **Inclusive Policies.**

- **Non-Discrimination Policies**. Establish clear policies that protect individuals from discrimination based on gender identity and expression.
- **Supportive Practices**. Develop practices that accommodate various gender identities, such as gender-neutral bathrooms and options for pronouns in official documents.

(c) **Visible Representation.**

- **Diverse Leadership**. Promote diversity in leadership roles, ensuring representation of various gender identities in decision-making positions.
- **Role Models**. Highlight successful individuals from diverse gender backgrounds to inspire others and normalise diverse identities in different fields.

(d) **Safe Spaces.**

- **Support Groups**. Create support networks or affinity groups where individuals can connect, share experiences, and advocate for their rights.
- **Open Dialogue**. Encourage open conversations about gender identity, allowing individuals to express themselves without fear of judgement or retaliation.

(e) **Feedback Mechanisms.**

- **Anonymous Surveys**. Implement regular surveys to assess the inclusivity of the environment and gather feedback on areas for improvement.
- **Open Channels for Communication**. Establish channels for individuals to report concerns or suggest improvements regarding gender inclusivity.

PART II : CHILD PROTECTION AND THE POCSO ACT

10. The Protection of Children from Sexual Offences Act (POCSO) was enacted in June 2012 to deal with the matter of sexual offences against children. POCSO not only gives out punishments for offences and sets out a system for support for victims but also has improved mechanisms for catching wrongdoers.

11. **Salient Features of the POCSO Act.**

(a) **Comprehensive Definition of Child Sexual Abuse**.

- The Act defines various forms of sexual abuse against children.
- It covers both boys and girls under the age of 18 years, ensuring gender-neutral protection.

(b) **Stringent Punishments**.

- The Act prescribes severe penalties for different forms of abuse, ranging from rigorous imprisonment to the death penalty in extreme cases.
- It includes provisions for fines and mandatory compensation to the victim.

(c) **Child-Friendly Procedures**.

- The Act mandates child-friendly processes for reporting, recording evidence, and trial to minimise trauma for the child.
- Special courts are designated to handle POCSO cases, ensuring a speedy and sensitive trial process.

(d) **Mandatory Reporting**.

- The Act makes it mandatory for any person aware of an offence under the POCSO Act to report it to the authorities.

- Failure to report such offences can result in upto 6 months' imprisonment or a fine.

(e) **Protection of Identity**.

- The Act includes provisions to protect the identity of the child victim, ensuring confidentiality throughout the legal process.
- It prohibits media from disclosing the identity of the victim.

(f) **Medical Examination**.

- The Act requires that the medical examination of a child victim be conducted in the presence of a parent or another person whom the child trusts.
- In cases involving girl children, a woman doctor must conduct the examination.

(g) **Special Courts and Public Prosecutors**.

- Special courts are established to handle POCSO cases exclusively.
- The Act appoints Special Public Prosecutors to handle cases.

(h) **Care and Protection**.

- The Act ensures the provision of care and protection to child victims during the legal process.
- It includes guidelines for the rehabilitation of victims and their reintegration into society.

(j) **Preventive Measures**.

- The Act promotes awareness and educational programs to prevent child sexual abuse.
- It encourages the involvement of schools, institutions, and communities in creating a safe environment for children.

(k) **Burden of Proof**.

- In POCSO cases, the burden of proof is shifted to the accused, meaning they must prove their innocence.
- This provision aims to make it easier for victims to get justice.

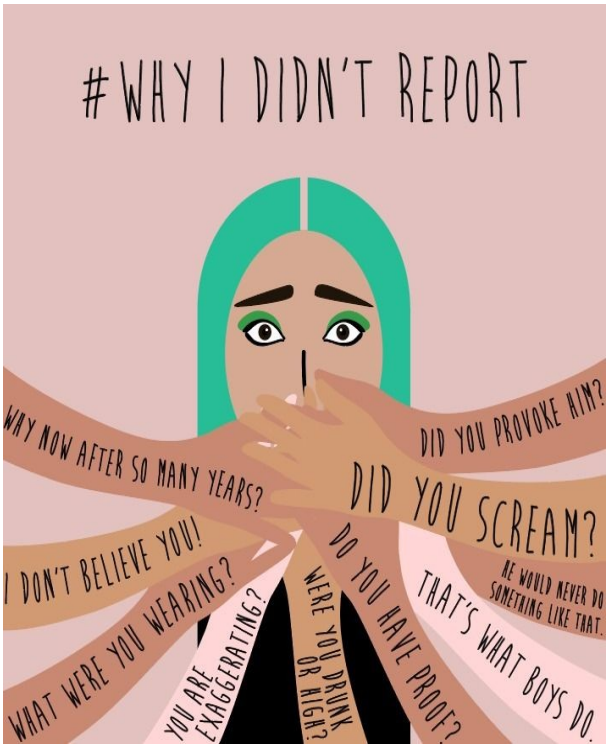
12. **General Principles of POCSO Act**. **(For Info only, Not to be Asked in Exam)**

The Protection of Children from Sexual Offences Act, 2012 (POCSO Act) came into effect on 19 June 2012, and it mentions 12 key principles that are to be followed by anyone, including the state governments, the Child Welfare Committee, the police, the special

courts, NGOs, or any other professional present during the trial and assisting the child during the trial. These include:-

(a) **Right to Life and Survival.** A child must be shielded from any kind of physical, psychological, mental, and emotional abuse and neglect.

(b) **Best Interests of the Child.** The primary consideration must be the harmonious development of the child.



(c) **Right to be Treated with Dignity and Compassion.** Child victims should be treated in a caring and sensitive manner throughout the justice process.

(d) **Right to be Protected from Discrimination.** The justice process must be transparent and just, irrespective of the child's cultural, religious, linguistic, or social orientation.

(e) **Right to Special Preventive Measures.** This right acknowledges that abused children are at a higher risk of repeated abuse; thus, preventive measures and training must be given to them for self-protection.

(f) **Right to be Informed.** The child victim or witness must be well informed of the legal proceedings.

(g) **Right to be Heard and to Express Views and Concerns.** Every child has the right to be heard in respect of matters affecting them.

(h) **Right to Effective Assistance.** Financial, legal, counselling, health, social and educational services, physical and psychological recovery services, and other services necessary for the child's healing must be provided.

(j) **Right to Privacy. The child's privacy and identity must be protected at all stages of the pre-trial and trial process** as per Sec-2023 of **POCSO**, which prohibits media from disclosing identity.

(k) **Right to be Protected from Hardship during the Justice Process.** Secondary victimisation or hardships for a child during the justice procedure must be minimised.

(l) **Right to Safety.** A child victim must be protected before, during, and after the justice process.

(m) **Right to Compensation.** The child victim may be awarded compensation for his/her relief and rehabilitation.

13. **Importance of the POCSO Act**. The Act is crucial in creating a safer environment for children, promoting accountability, and ensuring that society collectively works towards protecting its most vulnerable members. It is vital for the following reasons, and it is equally important that the children and their parents be made aware of its provisions:-



(a) **Legal Framework**. It provides a robust legal framework specifically aimed at protecting children from sexual abuse and exploitation.

(b) **Prevention and Reporting**. The Act emphasises prevention strategies and mandates the reporting of offences.

(c) **Child-Centric Approach**. It prioritises the needs and rights of children during legal proceedings, ensuring that their voices are heard and that they are treated with dignity and respect. The child's privacy and identity must be protected at all stages of the pre-trial and trial process.

(d) **Specialised Courts**. The establishment of special courts for hearing cases under this Act helps expedite trials.

(e) **Awareness and Education**. The POCSO Act encourages awareness programs and education regarding child safety.

(f) **Support Systems**. It facilitates the creation of support systems for victims, including medical care and counselling, which are essential for their recovery.

HIGHER ORDER THINKING SKILLS (HOTS)

- **How, in your opinion, can gender roles and stereotypes influence the perceptions and behaviour of adolescents?**
- **Explain the effectiveness of current child protection laws in India in preventing child labour and ensuring the welfare of children.**
- **Discuss the significance of the Protection of Children from Sexual Offences (POCSO) Act, 2012, in safeguarding children's rights. Suggest ways to improve its implementation.**

IMPORTANT LINKS

- **Child Protection.**
  - **UNICEF.** Child Protection **(https.//www.unicef.org/protection?)**
  - **Save the Children.** Child Protection **(https.//resourcecentre.savethechildren.net/child-protection?)**
- **POCSO Act**
  - **India Code.** The Protection of Children from Sexual Offences Act, 2012 **(https.//www.indiacode.nic.in/bistream)**
  - **The Law Advice.** POCSO Act Overview **(https.//www.thelawadvice.com/articles/the-protection-of-children-from-sexual-offence-pocso-act-acomprehensive-overview?)**

CONCLUSION

14. Understanding “Gender Sensitisation” is the process of teaching gender sensitivity and encouraging behaviour modification through raising awareness of gender equality concerns. Gender stereotypes are ideas about how members of a certain gender do, should be, or behave. They reflect ingrained biases based on the social norms of that society.

15. By nature, gender stereotypes are oversimplified and generalised. They are not accurate and often persist even when there is demonstrable evidence that contradicts them.

16. Child abuse constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development, or dignity. It is the responsibility of all of us to keep the future generation in the best fettle. Cadets must understand the POCSO Act and spread awareness.

SUMMARY

- Gender sensitisation is the process of teaching gender sensitivity and encouraging behaviour through raising awareness of gender equality concerns.
- It involves understanding and challenging the existing gender roles, stereotypes, and biases that are prevalent in society.
- Gender stereotypes are ideas about how members of a certain gender do, should be, or behave. They reflect ingrained biases based on the social norms of that society.
- Basic types of gender stereotypes include personality traits, domestic behaviours, occupations, and physical appearance.
- There exists a dire need to address gender sensitivity to enable holding the identity of one's gender with pride in any field.
- Child abuse constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development, or dignity.
- The Protection of Children from Sexual Offences Act, 2012 (POCSO Act) came into effect on 19 June 2012, and it mentions 12 key principles that are to be followed by anyone, including the state governments, the Child Welfare Committee, the police, the special courts, NGOs, or any other professional present during the trial and assisting the child during the trial.
- The Act incorporates child-friendly procedures for reporting, recording evidence, investigation, and trial of offences.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. What is gender sensitivity?

(a) Awareness of gender differences

(b) Awareness of gender equality and equity

(c) Awareness of gender roles

(d) Awareness of gender stereotypes

Q2. Which of the following is an example of gender-sensitive language?

(a) Policeman (b) Chairperson

(c) Male nurse (d) Female doctor

Q3. What is the primary aim of feminist movements?

(a) Liberty (b) Equality

(c) Fraternity (d) None of these

Q4. Which of the following is a gender stereotype?

(a) Boys are better at math.

(b) Girls are more emotional.

(c) Boys should not cry.

(d) All of the above

Q5. What is the primary goal of child protection?

(a) To ensure children's safety and well-being

(b) To punish those who harm children

(c) To provide education to children

(d) To provide healthcare to children

Q6. Which of the following is an example of child abuse?

(a) Physical harm (b) Emotional harm

(c) Neglect (d) All of the above

Q7. What is the role of a child protection officer?

(a) To investigate reports of child abuse

(b) To provide counselling to children.

(c) To provide legal advice to children

(d) To provide medical care to children

Q8. What does POCSO stand for?

(a) Protection of Children from Sexual Offences

(b) Prevention of Child Sexual Abuse

(c) Protection of Child Sexual Offences

(d) Prevention of Child Sexual Exploitation

Q9. Which of the following is a sign of child neglect?

(a) Poor hygiene (b) Frequent absences from school

(c) Malnutrition (d) All of the above

Q10. What is the minimum punishment for penetrative sexual assault under the POCSO Act?

(a) 5 years imprisonment

(b) 7 years imprisonment

(c) 10 years imprisonment

(d) 14 years imprisonment

Q11. The POCSO Act encourages awareness programs and education regarding child safety:-

(a) True (b) False

(c) May be true (d) None of the above

Q12. The establishment of _____ for hearing cases under the POCSO Act helps expedite trials.

(a) Police control room (b) Special Courts

(c) Hospitals (d) None of the above

Q13. What is the role of the Child Welfare Committee under the POCSO Act?

(a) To provide care and protection to child victims

(b) To investigate cases of child sexual abuse

(c) To provide legal advice to child victims

(d) All of the above

Q14. Gender stereotyping is not a personality-based trait:-

(a) False (b) May be true

(c) True (d) None of the above

15. Encouraging open conversations about gender identity, allowing individuals to express themselves without fear of judgement or retaliation, is called:-

(a) Lecturette (b) Sermons

(c) Open Dialogue (d) None of the above

Short Answer Questions

Q1. What is the main objective of the POCSO Act?

Q2. How does the POCSO Act ensure child-friendly procedures during the trial?

Q3. What are the mandatory reporting provisions under the POCSO Act?

Q4. How does the POCSO Act define "aggravated penetrative sexual assault"?

Q5. What measures does the Act include to protect the identity of child victims?

Long Answer Questions

Q1. Discuss the historical context and the need for the implementation of the POCSO Act.

Q2. Explain key provisions of the POCSO Act and the procedures for reporting and recording cases.

Q3. How did the POCSO Act influence the protection of children and the prosecution of offenders?

Q4. Evaluate the challenges and criticisms associated with the POCSO Act.

Q5. Examine the role of education and awareness in the effective implementation of the POCSO Act.

SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/ JW)

CHAPTER SSCD IV : SOCIAL EVILS AND DRUG ABUSE

"The world will not be destroyed by those who do evil, but by those who watch them without doing anything."





TEACHING INSTRUCTIONS

Period : **One (01)**
Type : **Lecture**
Year : **2nd Year JD/ JW**
Conducting Officer : **Associate NCC Officer**
Training Aids : **Charts on social evils and drug abuse, videos, and pamphlets.**

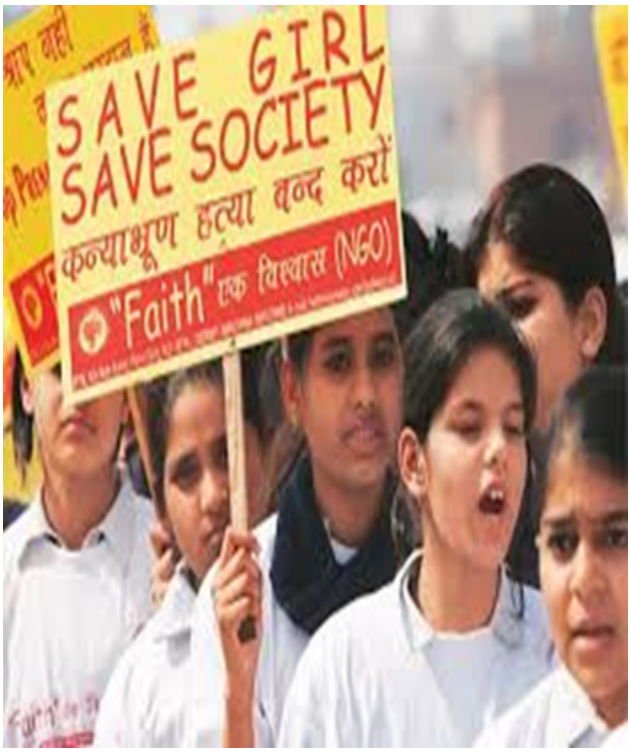
Time Plan

- Introduction : 05 Min
- Part I : 15 Min
- Part II : 15 Min
- Conclusion : 05 Min

INTRODUCTION

1. **Social evils** are deeply ingrained issues that negatively impact society, often perpetuating injustice and inequality. These issues frequently stem from societal injustice, cultural norms, and social practices that lead to exploitation and suffering, such as economic exploitation, discrimination, dowry, female foeticide, and corruption. Seriously, they resonate in individual lives and societal structures.

2. Drug abuse and drug trafficking are critical global issues with severe consequences for individuals and societies. **Drug abuse** involves the harmful and excessive use of substances, leading to addiction, physical and mental health problems, and social and economic difficulties. **Drug trafficking**, on the other hand, is the illegal production, distribution, and sale of drugs.



LEARNING OBJECTIVES

- Basic understanding of social evils, their causes, and means to overcome.
- Understanding drug abuse, its effects, and the laws against it.
- Drug trafficking and ways to curb it.

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Social Evils

(b) Part II: Drug Abuse

PART I : SOCIAL EVILS

3. **Social Evils.** Social evils involve complex issues and are pervasive wrongdoings and harmful practices that negatively impact society. Addressing these social evils requires concerted efforts from the government, civil society, and communities to promote equality, justice, and social awareness. India grapples with several significant social evils that affect its society and development:-

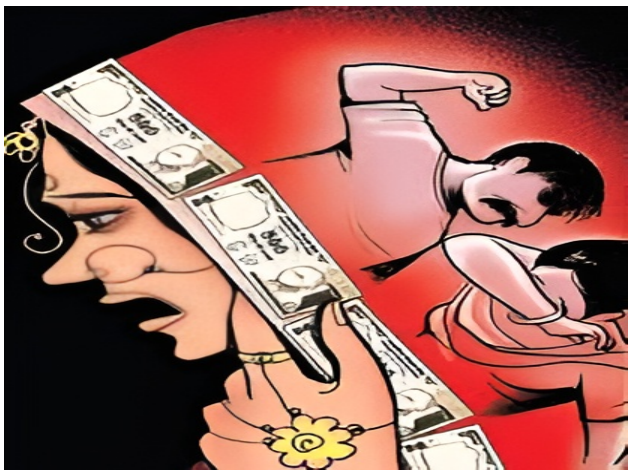


(a) **Caste Discrimination**. The caste system leads to discrimination, social exclusion, and violence against marginalised communities, particularly Dalits and Adivasis.

(b) **Gender Inequality**. Persistent issues such as dowry, female foeticide/infanticide, and gender-based violence hinder women's rights and empowerment.

(c) **Child Labor**. Many children are forced into labour, depriving them of education and exposing them to exploitation and abuse.

(d) **Untouchability**. Despite being illegal, practices related to untouchability continue, affecting the dignity and rights of certain communities.



(e) **Corruption**. Widespread corruption undermines governance and public trust, affecting economic development and social justice.

(f) **Poverty**. High levels of poverty contribute to various social problems, including lack of access to education, healthcare, and basic necessities.

(g) **Substance Abuse**. Alcoholism and drug addiction are prevalent, leading to health issues, family breakdowns, and increased crime rates.

(h) **Superstitions and Blind Beliefs**. These can lead to harmful practices, such as witch hunts, and a reluctance to seek medical treatment.



(j) **Religious Intolerance**. Communal tensions and violence between different religious groups affect social harmony and peace.

(k) **Environmental Degradation**. Poor environmental practices lead to health problems and threaten the livelihoods of vulnerable populations.

(l) **Female Foeticide**. Sex-selective abortion due to preference for male child, even before they are born, due to desire for a boy child, as sons are seen as the main source of income and help at old age.

(m) **Dowry**. In India, Dowry has led to significant social issues and controversies, including domestic violence against women.

4. **Causes of Social Evils**. The social evils faced by society in India stem from a complex interplay of historical, cultural, economic, and political factors. Addressing these root causes requires multifaceted approaches, including education, policy reforms, and community engagement to foster a more equitable and just society. Here are some of the primary causes:-

(a) **Historical Legacy**. The caste system has deep historical roots, contributing to entrenched discrimination and presumed social hierarchies that persist today.



(b) **Economic Disparities**. Widespread poverty and unequal access to resources lead to exploitation and perpetuate cycles of disadvantage, such as child labour.

(c) **Lack of Education**. Low literacy rates and inadequate education systems contribute to ignorance about rights, health, and social issues, making communities more vulnerable to exploitation.

(d) **Cultural Norms**. Traditional beliefs and practices, such as dowry and gender roles, reinforce gender inequality and can perpetuate harmful customs.

(e) **Corruption**. Corruption at various levels of government and society undermines law enforcement and social justice, allowing social evils to persist without accountability.

(f) **Patriarchal Structures**. Societal norms that prioritise male dominance contribute to gender discrimination and violence against women, limiting their opportunities and freedoms.

(g) **Religious Intolerance**. Historical divisions contribute to occasional communal tensions and a lack of social cohesion.

(h) **Superstitions**. Deep-seated superstitions and blind beliefs can lead to harmful practices and discourage rational thinking or medical intervention.

(j) **Urbanisation**. Rapid urbanisation without adequate infrastructure can lead to increased crime, substance abuse, and exploitation in densely populated areas.

(k) **Media Influence**. Sometimes, sensationalised media portrayals of issues can perpetuate stereotypes and social evils, rather than promoting awareness and education.

5. **Means to Overcome Social Evils**. Overcoming social evils in India requires a multi-pronged approach involving government, civil society, and community efforts. By combining education, legal reforms, community involvement, and economic empowerment, India can make significant strides towards overcoming social evils and fostering a more equitable society. Here are some effective means to address these issues:-

(a) **Education and Awareness**.

- Promote education at all levels to raise awareness about rights, health, and social issues through schemes such as *Beti Bachao Beti Padhao* etc.
- Implement programs to educate communities about gender equality, child rights, and the dangers of superstitions.

(b) **Legal Reforms**.

- Strengthen and enforce laws against discrimination, domestic violence, child labour, and other social evils.
- Establish special courts for faster justice in cases related to social evils.

(c) **Community Engagement**.

- Involve local communities in awareness campaigns and decision-making processes to address specific social issues.
- Foster community-led initiatives that promote social justice and equality.

(d) **Economic Empowerment**.

- Create job opportunities and skill development programs, especially for marginalised groups and women.
- Provide financial support and microfinance options to uplift economically disadvantaged families. Stand-Up India Scheme is one such government initiative.

(e) **Promote Gender Equality**.

- Implement programs that empower women, including education, healthcare access, and legal support.
- Challenge patriarchal norms through awareness campaigns and community dialogues.

(f) **Strengthen Support Systems**.

- Establish support networks for victims of violence, discrimination, and abuse, including counselling and rehabilitation services.
- Promote helplines and resources for reporting and addressing social evils.

(g) **Media and Communication**.

- Use media campaigns to raise awareness about social evils and promote positive narratives.

- Encourage responsible media coverage that avoids sensationalism and stereotypes.

(h) **Religious and Cultural Dialogue**.

- Foster interfaith dialogue to promote tolerance and understanding among different religious communities.
- Challenge harmful cultural practices through community engagement and education.

(j) **Health Initiatives**.

- Implement health programs that address issues like substance abuse and mental health.
- Provide access to healthcare and support services for vulnerable populations.

(k) **Policy Implementation and Monitoring**.

- Ensure that existing policies and programs aimed at combating social evils are effectively implemented and monitored.
- Encourage civil society organisations to play a role in holding authorities accountable.

COMMON SOCIAL EVILS

- **Dowry System**. The practice of demanding or giving dowry during marriage.
- **Child Labour**. The practice of employing children in hazardous or exploitative work.
- **Domestic Violence**. Physical, emotional, or sexual abuse of a family member or partner.
- **Racism and Casteism**. Discrimination based on race, caste, or ethnicity.
- **Corruption**. Abuse of power or position for personal gain.
- **Drug Abuse**. The misuse of drugs or substances that can harm individuals and society.
- **Commercial sexual exploitation and Human Trafficking**. The exploitation of individuals for sex or labour.



PREVENTION STRATEGIES

- **Education and Awareness**. Educating people about the negative consequences of social evils and promoting awareness about their prevention.
- **Legislation and Policy**. Implementing and enforcing laws and policies that prohibit social evils and protect victims.
- **Community Engagement**. Encouraging community participation and involvement in preventing social evils.
- **Counselling and Support**. Providing counselling and support services to victims of social evils.
- **Economic Empowerment**. Empowering individuals and communities economically to reduce their vulnerability to social evils.
- **Media and Advocacy**. Using media and advocacy to raise awareness and promote prevention of social evils.
- **Collaboration and Partnerships**. Collaborating with government agencies, NGOs, and community organisations to prevent social evils.

6. **Strong Value System for Responsible Citizens.** A strong value system and responsible citizenship are fundamental in addressing social evils. Here is how they contribute towards eradicating/fighting social evils:-

(a) **Ethical Principles**. Upholding values like honesty, integrity, and fairness helps combat corruption and exploitation.



(b) **Empathy and Compassion**. Understanding and caring for others' well-being can reduce discrimination and social exclusion.

(c) **Respect for Diversity**. Valuing different cultures, beliefs, and backgrounds fosters inclusivity and reduces prejudices.

(d) **Commitment to Justice**. A strong sense of justice drives individuals to fight against injustices and support equitable policies.

(e) **Participation.** Engaging in community activities and civic duties, such as voting and volunteering, strengthens democratic processes and community resilience.

(f) **Advocacy and Activism**. Speaking out against social evils and supporting movements that aim to address them lead to significant societal changes.

(g) **Environment Stewardship**. Taking responsibility for one's environmental impact helps combat environmental degradation.

(h) **Support for Victims**. Offering support to those affected by social evils, whether through direct assistance or advocacy, helps in their recovery and empowerment.

HIGHER ORDER THINKING SKILLS (HOTS)

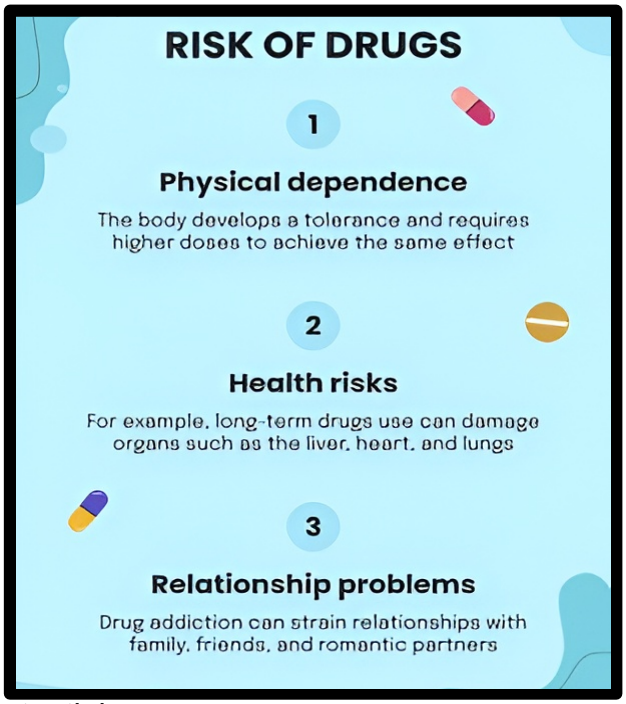
- **You have gone to visit your Dada-Dadi in a rural area. You come across a 12-year-old girl named Rani, who works in a nearby factory for 10 hours a day. Rani tells you that she works to support her family, as her parents are unable to find employment. What would you do?**

PART II : DRUG ABUSE

7. **"Drug abuse"** refers to the harmful or hazardous use of substances, including alcohol and illicit drugs. It causes addiction, health issues, and social problems, affecting individuals and communities. It has immense implications for the economy, burdening it with additional health care requirements, a decline in productivity, and the implementation of rules and regulations. "**Drug trafficking"** entails the illegal production, distribution, and sale of drugs. It is a major criminal activity that fuels violence, corruption, and instability in

many regions. Traffickers often exploit vulnerable populations, using coercion and violence to maintain control.

8. **Salient Features of Drug Abuse.** Various salient aspects are:-



(a) **Health Impact**. Drug abuse can lead to severe physical and mental health issues, including addiction, overdose, and long-term health problems such as liver damage, heart disease, and mental disorders.

(b) **Social Consequences**. It often results in strained relationships, social isolation, and difficulties in maintaining employment or education.

(c) **Economic Burden**. The cost of healthcare, lost productivity, and law enforcement related to drug abuse is substantial.

(d) **Criminal Activity**. Drug abuse is frequently linked to criminal behaviour, both as a cause and a consequence, including theft, violence, and other illegal activities that support the addiction.

9. **Raising Awareness.** Raising awareness about drug abuse is crucial for combating drug abuse and supporting those affected. Awareness campaigns and community programs play a vital role in educating people about the dangers of drug abuse and trafficking and help reduce stigma. These programs include:-

(a) **Events**. Organising events such as National Drug and Alcohol Facts Week (NDAFW) can help spread awareness. These events can include workshops, seminars, and interactive activities to engage the community.

(b) **Support and Recovery**. Highlighting the importance of support systems and recovery options is vital. Celebrating National Recovery Month in September can help increase understanding and support for those in recovery.

(c) **Local Initiatives**. Communities can host rallies, walks, and sports competitions to raise awareness and funds for addiction treatment programs.

(d) **Partnerships**. Collaborating with local schools, businesses, and organizations can strengthen efforts to educate and support the community.

(e) **Education**. Informing the public about the dangers and consequences of drug use is essential. This can be done through community outreach programs, school-based education, and public service announcements.

HIGHER ORDER THINKING SKILLS (HOTS)

- **How do historical and cultural factors contribute to the persistence of social evils such as caste discrimination and gender inequality in India?**
- **Evaluate the impact of drug abuse on the physical, mental, and social well-being of adolescents. Discuss the role of family, peers, and community in both contributing to and preventing drug abuse.**
- **Discuss the relationship between social evils such as poverty and unemployment.**
- **Assess the effectiveness of policies and programs aimed at combating drug abuse among teenagers. What improvements would you suggest to make these initiatives more effective?**

CONCLUSION

10. Social evils undermine the foundation of societies, hindering progress and perpetuating injustice. Eradicating these deeply rooted issues demands a united front, with government, communities, and individuals working collaboratively. Initiatives addressing poverty, inequality, corruption, discrimination, and crime, etc., must be implemented holistically, fostering inclusive and social justice. By dismantling the structural barriers that sustain these evils, societies can pave the way for a brighter future.

11. Drug abuse causes addiction, health problems, and social issues, while drug trafficking increases crime and violence. Solving these problems needs a well-rounded approach, including education, prevention, treatment, and strict law enforcement. Cadets need to understand that drug abuse and drug trafficking are major global issues with serious impacts on individuals and society.

SUMMARY

- Social evils are pervasive injustices and harmful practices that undermine societal well-being.
- Key issues include poverty, dowry, inequality, and family breakdown, which contribute to crime, violence, and substance abuse.
- The decline of community values, increased individualism, and consumerism exacerbate these problems.
- Additionally, issues like child exploitation, and lack of shared values such as tolerance and compassion further fragment society.
- Addressing these evils requires collective effort and a focus on both structural and behavioural solutions to foster a more inclusive and equitable society.
- Drug abuse and drug trafficking are significant global issues.
- Drug abuse involves the misuse of substances like opioids, methamphetamine, and cocaine, leading to severe health and social problems.
- Drug trafficking is the illegal trade of these substances, often controlled by organised crime networks. This illicit trade fuels violence, corruption, and addiction, impacting communities worldwide.
- Efforts to combat these issues include law enforcement actions, international cooperation, and public health initiatives aimed at prevention, treatment, and rehabilitation.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. Which practice, considered a social evil, involves the demand for property or valuable security from the bride's family?

(a) Dowry System (b) Child Marriage

(c) Gender Discrimination (d) Domestic Violence

Q2. Which social evil is associated with the subjugation and exploitation of women?

(a) Gender Inequality (b) Alcoholism

(c) Cybercrime (d) Pollution

Q3. Which is not considered a social evil?

(a) Human Trafficking

(b) Child Labour

(c) Environmental Conservation

(d) Female Foeticide

Q4. The Prohibition of Child Marriage Act, 2006, deals with:-

(a) Child Labour (b) Child Marriage

(c) Domestic Violence (d) Human Trafficking

Q5. What is the primary effect of drug abuse on the body?

(a) Improved Concentration

(b) Addiction and Health Degradation

(c) Increased Physical Strength

(d) Enhanced Creativity

Q6. Which of the following substances is commonly abused for its euphoric effects?

(a) Caffeine (b) Aspirin

(c) Alcohol (d) Paracetamol

Q7. What is the role of rehabilitation centres in combating drug abuse?

(a) Providing Legal Assistance

(b) Offering Medical and Psychological Support

(c) Promoting Entertainment Activities

(d) Conducting a Political Campaign

Q8. Which law in our country deals with drug abuse and its control?

(a) The Prohibition of Child Marriage Act

(b) The Narcotic Drugs and Psychotropic Substances Act

(c) The Dowry Prohibition Act

(d) The Protection of Women from Domestic Violence Act

Q9. Which of the following is a major reason for drug abuse among teenagers?

(a) Academic Success (b) Peer Pressure

(c) Financial Stability (d) Physical Health

Q10. What is a common consequence of long-term drug abuse?

(a) Improved Social Relationships

(b) Stable Employment

(c) Chronic Health Issues

(d) Better Mental Health

Q11. Which of the following is a synthetic drug often abused for its hallucinogenic effects?

(a) LSD (b) Penicillin

(c) Ibuprofen (d) Insulin

Q12. What is the primary goal of anti-drug campaigns?

(a) Increasing Drug Availability

(b) Encouraging Drug Use

(c) Preventing Drug Abuse and Educating the Public

(d) Promoting Drug-Related Business

Q13. Which Indian organisation is responsible for drug control and enforcement?

(a) Central Bureau of Investigation (CBI)

(b) Narcotics Control Bureau (NCB)

(c) Reserve Bank of India (RBI)

(d) Indian Space Research Organisation (ISRO)

Q14. Which of the following measures can help prevent drug abuse?

(a) Increased Availability of Drugs

(b) Strengthening Family Support Systems

(c) Reducing Education Programs

(d) Legalising All Drugs

Q15. Which of the following measures can help prevent drug abuse?

(a) Increased Availability of Drugs

(b) Strengthening Family Support Systems

(c) Reducing Education Programs

(d) Legalising All Drugs

Short Answer Questions

Q1. List out major health impacts of drug abuse to individuals.

Q2. What is the effect of drug trafficking on local communities and economies?

Q3. Describe the role of international organisations in combating drug trafficking.

Q4. What measures can be taken to combat human trafficking and in support of its victims?

Q5. How does child labour impact children's development and future opportunities?

Long Answer Questions

Q1. What are the root causes of child labour, and what measures are in place to eradicate it?

Q2. Analyse the impacts of human trafficking on individuals and society.

Q3. Examine the role of education and community programs in preventing drug abuse.

Q4. Evaluate the impact of drug abuse on youth and adolescents.

Q5. Explore the relationship between drug trafficking and organised crime.

SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/ JW)

CHAPTER SSCD V : FUNDAMENTAL RIGHTS AND DUTIES OF GOOD CITIZENS

"The test of good citizenship is loyalty to country."



TEACHING INSTRUCTIONS

Period : **One (01)**

Type : **Lecture**

Year : **1st Year JD/ JW**

Conducting Officer : **Associate NCC Officer**

Training Aids : **OHP, Screen, Pointer Staff, Presentation, Script or Pamphlet Flagged or Lesson Plan in File, Board and Markers, Charts.**

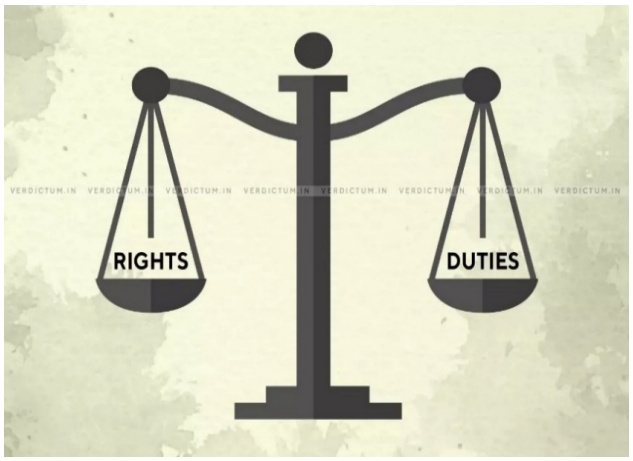
Time Plan

- Introduction : 05 Mins
- Part I : 10 Mins
- Part II : 05 Mins
- Part III : 15 Mins
- Conclusion : 05 Mins

INTRODUCTION

1. The Constitution of India establishes a single citizenship for the entire country. Any individual who, at the commencement of the Constitution on January 26, 1950, was domiciled within India and either born in India, had at least one parent born in India, or had resided in the country for a minimum of five years, was recognised as an Indian citizen. In a democratic nation, the responsibilities of a good citizen are diverse, encompassing both the exercise of fundamental rights and the conscientious fulfilment of essential duties.

2. A responsible citizen adheres to the laws of the nation and upholds its values. They exercise their fundamental rights and fulfil their duties, such as voting, paying taxes, and contributing to the fight against corruption. To be a good and responsible citizen, one should actively participate in addressing societal challenges, such as maintaining environmental cleanliness, supporting charitable causes, conserving electricity, water, and natural resources, and safeguarding public property.



LEARNING OBJECTIVES

- Basic understanding of fundamental rights, fundamental duties, and directive principles of the state
- Knowing our national symbols
- Understanding the need to become a good citizen

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Knowing Our Fundamental Rights, Duties and Directive Principles

(b) Part II : Our National Symbols

(c) Part III : What Makes a Good Citizen?

INTERESTING FACTS

- Any changes to fundamental rights require a constitutional amendment that should be passed by both the Houses of Parliament with special majority.
- Fundamental rights are enforceable through the courts of law. However, fundamental duties are not legally enforceable but serve as moral obligations.

PART I : KNOWING OUR FUNDAMENTAL RIGHTS, DUTIES AND DIRECTIVE PRINCIPLES

Fundamental Rights

3. The **Fundamental Rights in India**, outlined in Part III (Articles 12-35) of the Constitution, ensure civil liberties that allow all citizens to live in peace and harmony. These rights are called "fundamental" because they are crucial for the overall development—material, intellectual, moral, and spiritual—and are safeguarded by the Constitution, the supreme law of the land. Articles 32 and 226 give the Supreme Court and High Courts the power to issue writs to force the state to protect these rights if they are violated. This is especially true for the Fundamental Rights. These rights provide a legal framework for personal freedom and equality and are essential to the functioning of a democracy, enabling citizens to live with dignity and liberty. These include:-

(a) **Right to Equality (Articles 14-18)**. The Right to Equality, enshrined in Articles 14-18 of the Indian Constitution, is a fundamental right that guarantees equal treatment before the law to all citizens. This right ensures that every individual is treated with dignity and respect, regardless of their background, social status, or circumstances.

(b) **Right to Freedom (Articles 19-22)**. The Right to Freedom, enshrined in Articles 19-22 of the Indian Constitution, is a fundamental right that guarantees individual liberty and freedom. This right ensures that citizens have the freedom to express their thoughts, beliefs, and opinions without fear of persecution or retribution. Additionally it includes freedom of speech & expression, assembly, association, movement, residence, and profession.

(c) **Right against Exploitation (Articles 23-24)**. The Right against Exploitation, enshrined in Articles 23-24 of the Indian Constitution, is a fundamental right that protects citizens from exploitation and abuse. This right ensures that no person can be forced into labour or exploited for personal gain. It prohibits begging, bonded labour, and human trafficking.

(d) **Right to Freedom of Religion (Articles 25-28)**. The Right to Freedom of Religion, enshrined in Articles 25-28 of the Indian Constitution, is a fundamental right that guarantees citizens the freedom to practice, profess, and propagate their faith.

(e) **Cultural and Educational Rights (Articles 29-30)**. The Indian Constitution guarantees protection of minorities' right to conserve culture & establish educational Institutions.

(f) **Right to Constitutional Remedies (Article 32)**. This allows citizens to approach the judiciary to enforce their fundamental rights.

Fundamental Duties

4. While citizens enjoy various rights, they are also entrusted with fundamental duties. These duties remind citizens of their responsibilities towards the nation, society, and fellow citizens. The fundamental duties outlined in Article 51A of the Indian Constitution include:-

(a) Respect the Constitution, national flag, and anthem.

(b) Cherish the heritage of the country and preserve its composite culture.

(c) Uphold and protect the sovereignty, unity, and integrity of India.

(d) Defend the nation and render service when required.

(e) Promote harmony and the spirit of common brotherhood.

(f) Protect the environment, including forests, lakes, rivers, and wildlife.

(g) Develop scientific temper and a sense of inquiry.

(h) Strive for excellence in all spheres of individual and collective activity.

(j) Safeguard public property and Abjure violence

(k) Value and preserve the rich heritage of India's composite culture.

(l) Provide education to children between 6 and 14 years of age.

Directive Principles of State Policy



5. The Directive Principles of State Policy (DPSP), enshrined in Part IV of the Indian Constitution, guide the government in making policies that aim for the welfare of the people. Although not legally enforceable, they reflect the ideals of social and economic democracy. Some important principles include:-

(a) Promoting the welfare of the people by securing a social order based on justice.

(b) Ensuring equal opportunities for all citizens to lead a healthy and dignified life.

(c) Providing free and compulsory education for children up to the age of 14. 86th constitutional Amendment (2002) made education a fundamental right (Art 21A)

(d) Promoting international peace and fostering friendly relations with other countries

(e) Encouraging participation in governance at the grassroots level through Panchayati Raj institutions.

(f) These principles, together with the fundamental duties, create a balance between the rights of citizens and their obligations to society, reinforcing the foundation of a democratic nation.

HIGHER ORDER THINKING SKILLS (HOTS)

- **Imagine if the Right to Equality did not exist in India. How would it impact different sections of society?**

PART II : OUR NATIONAL SYMBOLS

6. **National Symbols and Their Significance**. National symbols are a source of pride and unity, representing the identity and sovereignty of the nation. Respect for these symbols is a duty for every citizen, especially those in uniform, who serve as role models. They have been explained hereunder:-

(a) **National Flag (Tiranga)**. The tricolour, with saffron at the top, white in the middle and green at the bottom, symbolises courage, peace and growth, respectively. The Ashoka Chakra in the centre represents justice and righteousness. Citizens are expected to honour the flag by hoisting it properly, not letting it touch the ground, and following the Flag Code of India.

(b) **National Anthem (Jana Gana Mana)**. The anthem, penned by Shri Rabindranath Tagore, reflects India's unity in diversity. The playing time of the full version of the National Anthem is 52 seconds. Every citizen is expected to stand in respect when the anthem is played, symbolising allegiance to the nation. Bharat Sarkar has issued orders related to the National Anthem as mentioned within the photograph, which is an important read to understand all the rulings that need to be followed in letter and spirit, including the correct pronunciation of the words' Punjab-**Sindhu**-Gujarat-Maratha'.



https://www.mha.gov.in/sites/default/files/AnthemEnglish_140316.pdf **(Authority for Reference only, not to be asked in exams)**

(c) **National Song (Vande Mataram)**. Written by Shri Bankim Chandra Chatterjee, it evokes the spirit of patriotism and love for the motherland. Though not obligatory, citizens are encouraged to sing it with pride. National symbols represent the collective identity of India and respecting them is an expression of one's loyalty to the nation.



INTERESTING FACTS

- National Fruit – Mughal emperor Akbar planted 100,000 mango trees in Darbhanga, Bihar, at a place now known as Lakhi Bagh.
- National River – Ganga is the longest river in India, flowing over 2,510 km of mountains, valleys, and plains.

(d) **National Emblem.** The state emblem of Lion Capital of Emperor Ashoka at Sarnath, preserved in the Sarnath museum near Varanasi, was adopted in December 1947 as the National Emblem of India.

सत्यमेव जयते



Some Other National Symbols of India

PART III : WHAT MAKES A GOOD CITIZEN

7. A good and law-abiding citizen is someone who actively contributes to the betterment of their country and adheres to the laws and regulations of their society. Good citizens respect legal rules, fulfil their civic duties, and typically engage positively within the community. It must be an endeavour of an NCC cadet that they should contribute to being a good Indian citizen and help others to follow them as a role model.



8. **Nation First & Loyalty to the Nation**. For a citizen, especially a cadet or military personnel, nation first is not just a motto but a way of life. Loyalty to the nation involves:-

(a) Defending the country's sovereignty at all times, even in the face of personal sacrifice.

(b) Upholding the law and order and ensuring the security of the state.

(c) Protecting national interests in all spheres, whether economic, cultural, or social. As representatives of national pride, cadets in uniform are expected to lead by example, displaying the highest standards of discipline and patriotism in their daily lives.

9. **Saying No to Corruption**. Corruption undermines democracy and weakens national integrity. A good citizen must:-



(a) Refrain from giving or accepting bribes.

(b) Report corruption and unethical practices when encountered.

(c) Promote transparency and accountability, especially in public offices and governance.

(d) By refusing to engage in corrupt practices, citizens contribute to a cleaner and more efficient system of governance. For cadets and military personnel, standing against corruption is particularly important, as their conduct must be exemplary.

10. **Earning by Fair Means**. Earning by fair means involves acquiring wealth and resources through honest, ethical, and legal ways. This principle encompasses:-

(a) **Hard work and Dedication**. Achieving success through effort and perseverance.

(b) **Transparency and Accountability**. Clearly disclosing sources of income and being answerable for actions.

(c) **Fair Business Practices**. Engaging in legitimate trade, avoiding exploitation, and fraud.

(d) **Respect for Laws and Regulations**. Complying with tax laws, labour laws, and environmental regulations.

(e) **Ethical Decision-Making**. Prioritising integrity over personal gain.

11. **Giving Back to Society.** It involves contributing to the well-being of communities, promoting social welfare, and preserving the environment. It involves philanthropy, volunteerism, Corporate Social Responsibility, mentorship, and environmental sustainability. These efforts promote community well-being, social welfare, and conservation. By embracing these principles, individuals and organisations foster social responsibility, driving positive change and sustainable development for future generations.

12. **Paying Taxes**. Paying taxes is not just a legal obligation but a civic duty. Taxes are essential for:-

(a) Funding national development projects, including infrastructure, education, healthcare, and defence.

(b) Supporting social welfare programs that benefit the less privileged sections of society.

(c) Ensuring the smooth functioning of public services, including law enforcement and disaster management. Good citizens understand the importance of contributing their fair share to the nation's treasury. By paying taxes honestly and on time, they help build a stronger, more prosperous country.

13. **Promote Harmony and Spirit of Common Brotherhood**. India is a country of diverse cultures, languages, and religions. Tolerance and living in harmony with others are essential for maintaining the nation's unity. A good citizen must:-

(a) Respect the beliefs and practices of others while upholding their own values.

(b) Promote interfaith dialogue and understanding to reduce communal tensions.

(c) Support initiatives that encourage inclusivity, especially in areas prone to social conflicts. Tolerance is the cornerstone of a peaceful society, and cadets, who come from various backgrounds, are in an ideal position to demonstrate unity and mutual respect.

14. Tolerance and living in harmony are vital for India's progress. By embracing diversity and promoting understanding, citizens ensure national unity and social cohesion. NCC cadets, as ambassadors of unity, play a pivotal role in sustaining India's rich cultural tapestry.

15. **Law-Abiding Citizens.** Adhering to the rules and regulations established by lawmakers helps ensure safety, security, peace, and harmony within the community. A law-abiding citizen is a responsible individual who actively contributes to social progress and upholds fairness and peace in society. They respect legal authority, participate in civic duties, and contribute to the community in positive ways. Key traits of law-abiding citizens include:-

(a) **Compliance with Laws**. They adhere to local, state, and central laws, avoiding actions that would be considered criminal.

(b) **Civic Engagement**. They often participate in community activities, such as voting, attending town hall meetings, or volunteering.

(c) **Respect for Authority**. They generally respect law enforcement and judicial systems, believing in their roles to maintain order and justice.

(d) **Moral Responsibility**. Many feel a sense of moral duty to contribute to the well-being of their community and to uphold social norms.

(e) **Conflict Resolution**. They tend to resolve disputes through legal and peaceful means rather than resorting to violence or illegal actions.

16. **NCC Cadets as Role Models**. Cadets in uniform are expected to be the embodiment of discipline, courage, and patriotism. Their role extends beyond the military; they serve as role models for the broader citizenry. As the future leaders, they must:-

(a) Demonstrate respect for the law, national symbols, and democratic values.

(b) Inspire others to follow their example of integrity, loyalty, and public service.

(c) Engage in community service, promoting education, health, and environmental protection. Encourage fellow citizens to embrace their responsibilities and contribute to nation-building. By practicing these values, cadets can inspire the younger generation to be active, responsible, and patriotic citizens.

17. NCC is an organisation that is always adapting and learning. At its core, the NCC is guided by a set of principles that aim to instil certain values in its cadets. These values are:-

(a) **Patriotic Commitment**. Encouraging cadets to contribute to the nation's development and well-being.

(b) **Respect for Diversity**. Fostering a sense of national unity and social cohesion by appreciating differences in religion, language, culture, and lifestyle.

(c) **Constitutional Values**. Developing a commitment to learn about and abide by the norms and values enshrined in the Indian Constitution.

(d) **Just and Impartial Authority**. Understanding the importance of fair and unbiased decision-making.

(e) **Community Development**. Encouraging participation in community development and social programs.

(f) **Healthy Lifestyle**. Promoting a lifestyle free from substance abuse and unhealthy habits.

(g) **Social Responsibility**. Cultivating sensitivity towards the needs of disadvantaged fellow citizens.

(h) **Self-Awareness**. Inculcating habits of restraint and self-awareness.

(j) **Moral Values**. Instilling values like honesty, truthfulness, self-sacrifice, perseverance, and hard work.

(k) **Respect for Knowledge**. Fostering respect for knowledge, wisdom, and the power of ideas.

18. NCC cadets exemplify exceptional role models, embodying discipline, leadership, and community service. They demonstrate core values of discipline, integrity, leadership, patriotism, and social responsibility. Confident communication, teamwork, problem-solving, emotional intelligence, and physical fitness define their character. As role models, NCC cadets inspire younger generations, promote community engagement, and foster national unity.

19. Through community service, NCC cadets address pressing issues like education, health, and environmental sustainability. Their leadership skills and teamwork encourage peers to participate in social initiatives. Cadets' dedication to national service and disaster relief efforts showcases their patriotism.

20. NCC cadets' positive influence extends beyond their communities. They promote cultural exchange, understanding, and harmony. Embodying NCC values, cadets set high standards, inspiring others to follow. Their exemplary conduct earns respect, fostering a culture of responsibility and civic engagement. By embracing these values, NCC cadets become catalysts for positive change, shaping a brighter future for themselves and society. Ultimately, NCC cadets emerge as responsible citizens, leaders, and change-makers, driving India's growth and development.

HIGHER ORDER THINKING SKILLS (HOTS)

- **If you see someone taking money that they shouldn't be taking, what would you do? How can corruption be set right?**
- **Your teacher has tasked you with writing an article in reference to rules to follow while playing the National Anthem. What important aspects should you cover?**

CONCLUSION

21. India's foundation is built on fundamental rights and duties, directive principles, and national symbols that promote unity and patriotism. National symbols like the National Flag, National Emblem, National Anthem, and National Song evoke feelings of national pride and devotion. The National Flag's tricolour represents India's cultural heritage and struggle for independence, while the Ashoka Emblem symbolises courage, strength, and wisdom.

22. To be a good citizen, one must demonstrate loyalty, adhere to the law, reject corruption, and contribute to society. Tolerance and harmony are essential qualities, emphasising social justice, equality, and individual dignity. By embracing these values, citizens build a just, equitable, and harmonious society. Cadets in Uniform serve as role models, demonstrating respect for the nation and inspiring others to adopt desired values.

SUMMARY

- A responsible citizen abides by all the laws and orders of the country. They are entitled to exercise all the fundamental rights and duties, such as casting a vote, paying government taxes, and protecting the country from corruption.
- The Fundamental Rights in India enshrined in part III (Articles 12–35) of the Constitution of India guarantee civil liberties such that all Indians can lead their lives in peace and harmony as citizens of India.
- While citizens enjoy various rights, they are also entrusted with Fundamental duties. These duties remind citizens of their responsibilities towards the nation, society, and fellow citizens.
- The Directive Principles of State Policy (DPSP), enshrined in Part IV of the Indian Constitution, guide the government in making policies that aim for the welfare of the people.
- National symbols are a source of pride and unity, representing the identity and sovereignty of the nation.
- A good citizen is an individual who actively contributes to the improvement of their country. It must be an endeavour of an NCC cadet that they should contribute to being a good Indian citizen and help others to follow them as a role model.
- In today's fast-paced world, where personal interests can overshadow the greater good, it is crucial to reaffirm the significance of responsible citizenship. By adopting values like loyalty, respect for the law, and social accountability, individuals can play a vital role in shaping a more just, equitable, and cohesive community.
- Cadets in uniform are expected to embody the values of discipline, integrity, and patriotism, serving as role models for citizens, particularly the younger generation. As representatives of NCC, they are entrusted with upholding the highest standards of behaviour, conduct, and community service.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. The National Anthem was written by:-

(a) Bankim Chandra Chattopadhya

(b) Rabindra Nath Tagore

(c) Mahatma Gandhi

(d) Vinoba Bhave

Q2. In which year was the peacock recognised as the national bird of India?

(a) 1963

(b) 1947

(c) 1971

(d) None of the above

Q3. Defend the nation and render service when required is a:-

(a) Fundamental Right

(b) Directive Principle

(c) Fundamental Duty

(d) None of the above

Q4. Cadets in uniform are expected to be the embodiment of discipline, courage, and patriotism:-

(a) True

(b) False

(c) Both (a) and (b)

(d) None of the above

Q5. The _____, enshrined in Part IV of the Indian Constitution, guide the government in making policies that aim for the welfare of the people:-

(a) Fundamental Rights

(b) Fundamental Duties

(c) Directive Principles of State Policy

(d) None of the above

Q6. The symbol of the Indian Rupee was accepted by the Government of India on:-

(a) 15th July 1950

(b) 15th August 1947

(c) 26th January 2014

(d) 15th July 2010

Q7. The Directive Principles of State Policy (DPSP) states providing free and compulsory education for children up to the age of:-

(a) 18 years

(b) 06 years

(c) 14 Years

(d) None of the above

Q8. A good and law-abiding citizen always respects legal rules and fulfils their civic duties:-

(a) True

(b) False

(c) May be True

(d) None of the above

Q9. The tricolour has ---------- colour on the top of the flag:-

(a) Saffron

(b) Green

(c) White

(d) Blue

Q10. ---------- and living in ---------- with others is essential for maintaining the nation's unity:-

(a) Truth, honesty

(b) Harmony, peace

(c) Corruption, bribery

(d) Tolerance, harmony

Q11. What is the significance of Fundamental Duties?

(a) They are enforceable by law

(b) They are moral obligations

(c) They promote national unity

(d) They protect citizens' rights

Q12. Who is responsible for implementing Directive Principles?

(a) Government

(b) Courts

(c) Parliament

(d) All of the above

Q13. How can citizens promote good governance?

(a) By participating in elections

(b) By paying taxes

(c) By reporting corruption

(d) All of the above

Q14. Which Fundamental Right ensures equal pay for equal work?

(a) The Right to Equality

(b) The Right to Freedom of Speech and Expression

(c) The Right to Life and Liberty

(d) The Right to Education

Q15. Which Fundamental Duty promotes national integration?

(a) The Right to Equality

(b) The Right to Freedom of Speech and Expression

(c) The Right to Life and Liberty

(d) To value and preserve the rich heritage of our composite culture

Short Answer Questions

Q1. What are the National Anthem and National Song?

Q2. Write a short note on 'Right to Freedom of Religion.'

Q3. How does paying of taxes help a country?

Q4. What do you mean by a Good Citizen?

Q5. What is the importance of a National Symbol to a Nation?

Long Answer Questions

Q1. What do you understand by Fundamental Duties?

Q2. Write a brief on Directive Principles of the state policy.

Q3. What are the benefits of being a law-abiding citizen?

Q4. Write short notes on National Emblem, National Animal, National River. National Game & National Flower.

Q5. What are the Core Values of an NCC Cadet?

SOCIAL SERVICE AND COMMUNITY DEVELOPMENT (JD/JW)

CHAPTER SSCD VI : ROAD, RAIL, AND AIR SAFETY

"It is as important to travel well, as to arrive."







TEACHING INSTRUCTIONS

Period : **One (01)**

Type : **Lecture**

Year : **2nd Year JD/JW**

Conducting Officer : **Associate NCC Officer**

Training Aids : **OHP, Screen, Pointer Staff, Presentation, Script or Pamphlet Flagged or Lesson Plan in File, Board and Markers, Charts**

Time Plan

- Introduction : 05 Min
- Part I : 20 Min
- Part II : 10 Min
- Conclusion : 05 Min

INTRODUCTION

1. Road, rail, and air accidents are man-made tragedies that result in significant human suffering. These accidents carry a significant cost in terms of lost lives, injuries, and economic impact. Road networks are designed to improve connectivity and services, but accidents often occur due to factors like excessive traffic, traffic rule violations, speeding, drunk driving, and inadequate maintenance of vehicles and roads. Rail accidents, such as derailments, are often caused by human error, sabotage, natural events like landslides on hilly tracks, or fires. These accidents lead to numerous fatalities and extensive damage, costing Indian Railways a substantial amount each year. Air accidents, which may stem from technical failures, fires, poor take-offs and landings, adverse weather conditions, hijackings, or bombings, can often be prevented with timely precautions.



LEARNING OBJECTIVES

- Basic understanding of road/rail & air safety various dos & don'ts
- Spreading consciousness on road, rail & air safety

PREVIEW

The lecture will be conducted in the following parts:-

(a) Part I : Understanding the importance of Road, Rail & Air Safety

(b) Part II : Raising Awareness

DID YOU KNOW?

- Major Reasons for Traffic collisions in India are:-
  - Over-Speeding & Drunken Driving
  - Use of Mobile Phones While Driving
  - Driving on the Wrong Side Against Opposing Traffic
  - Non-use of Helmets

PART I : UNDERSTANDING THE IMPORTANCE OF ROAD, RAIL & AIR SAFETY

2. WHO Global Road safety Report 2023 ranks India very high when it comes to the number of accidents on the road. However, in recent years, improvement has been seen in this area. With the rapid increase in the number of vehicles on the road, the traffic conditions are under a lot of pressure. Therefore, road/rail and air safety is one of the most serious public health issues in our country. It has an impact on everyone, whether one drives a vehicle, walks or rides a bicycle, or travels in a train or by air.

Road Travel

3. Road transport is the most cost-effective mode of transportation in India, both for freight and passengers, keeping in view its level of penetration in populated areas. Exposure to adverse traffic environments is high in India because of the unprecedented rate of motorisation and growing urbanisation fuelled by a high rate of economic growth. As a result, incidents of road accidents, traffic injuries, and fatalities have remained high.

4. Every year, over 1,68,000 people die in road accidents on Indian highways. This means that 460 people die every day, or 20 people every hour.

5. According to the Transport Research Wing, which came out with the Road Accident Report of 2019, road accidents can have multiple causes:-

(a) **Over speeding.** The major cause of road accidents in these recent years is over-speeding. It is also responsible for the most number of deaths and injuries in road accidents. Hence, drive safe and within speed limits even when you are getting delayed.

(b) **Driving without a Valid License.** Driving without a valid license accounts for a major cause of accidents. A license is not just a document; it needs to be treated as something earned after having met all requirements of driving, including knowledge of all road signs.

(c) **Driving on the Wrong Side**. India follows Left-Hand traffic (LHT) system, where vehicles keep to the left. Driving on the **opposite or wrong side**, **against oncoming traffic,** just to save a few seconds or a small amount of fuel, is a menace which is a major cause of accidents.

(d) **Drunken Driving**. It accounts for about 2.7% of the total accidents. Blood Alcohol Concentration (BAC) limit in India is 0.03%, above which accident risks rise significantly. Always call a cab or arrange for a designated driver whenever you are at any event where alcohol is served. Never drink and drive yourself, or pillion-ride with anyone, who has consumed alcohol.

(e) **Use of Mobile Phone.** This accounts for 2.3% of accidents. Using a mobile phone while driving distracts you. Hence, you should pull up to the curb and answer

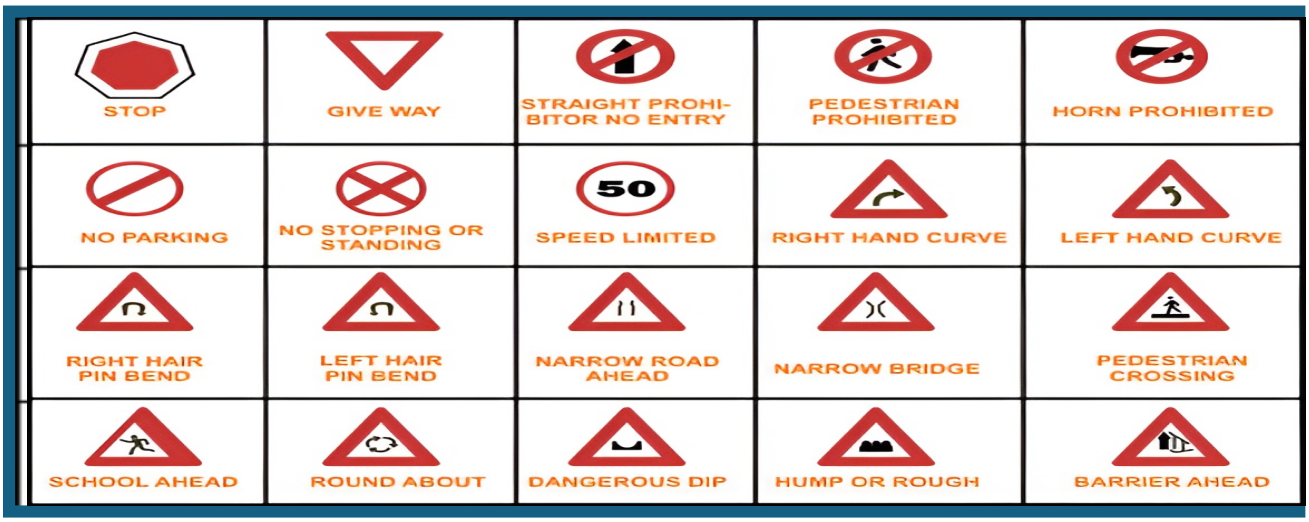
calls instead of driving and speaking into the phone. Never take your eyes off the road, and do not attempt to text while driving.

(f) **Jumping Red Lights.** This is the cause of 1.0% of road accidents in India. While this indicates vast compliance with the traffic rules, it is still a major cause of road accidents. Therefore, do not jump the signals, as it may cause disasters.

(g) **Type of Area (Residential, Commercial, Institutional).** It is odd to know that most of the accidents took place in open areas and not congested or residential areas. Hence, stricter observance of traffic rules in open areas such as highways is a must. Certain dos and don'ts become essential to follow to keep oneself safe.

6. Understanding Road Safety refers to the measures that must be adopted by everyone while using roads. These safety methods are meant for reducing the risk of accidents and injuries or casualties on the road. These rules must be followed by all users of roads, including pedestrians, cyclists, motorists, and bus and truck drivers. Safety methods also relate to the construction and layout of roads as well as traffic regulation systems. Hence, road safety involves:-

(a) The design of roads and highways.
(b) Laws pertaining to traffic and vehicles.
(c) Systems of traffic safety and control.
(d) Driver education.
(e) School students' education.
(f) Mass education.
(g) Traffic regulation and road safety signs.
(h) Vehicle design.
(j) Motor vehicle safety inspection and maintenance.



IMPORTANT ROAD SIGNS
(For Information only, Not to be asked in Exam)

7. **Dos for Citizens Regarding Road Safety.**

(a) Obey traffic rules.

(b) Conduct or attend road safety seminars.

(c) Educate the general public on traffic rules.

(d) Wear helmets and seat belts.

(e) Give pedestrians the right-of-way in crosswalks (zebra crossings).

8. **Don'ts for Citizens Regarding Road Safety**.

(a) **Do not drive on wrong side of the road or on the wrong way, especially in the main lane of the opposite side.**

(b) Do not drink and drive.

(c) Do not over-speed.

(d) Do not cross the road during the red signal.

(e) Do not use mobile phones while driving.

(f) Do not engage in other activities during driving.

(g) Do not cross the solid white line marking the road shoulder.



Do not Drive on Wrong Side of the Road

9. **Safety Aspects to be Followed by Cadets during Movement by Road.** Many lives are lost in road accidents. As cadets, it is essential to place emphasis on safety during movement by road. Whether travelling individually or in groups, adhering to safety protocols can significantly minimise risks and ensure a secure journey. Road safety is mostly about driving safe and following rules. Certain key safety aspects to be kept in mind are:-

(a) **Wear Seatbelts**. Make sure to always fasten seatbelts securely.

(b) **Follow Traffic Rules**. Obey traffic signals, speed limits, and pedestrian crossings.

(c) **Avoid Distractions**. Refrain from using mobile phones or engaging in conversations while driving. Also refrain from listening to loud plugged music, as this increases the chances of road accidents.

(d) **Use Authorised Transport**. Use only authorised and registered vehicles for transportation.

(e) **Mindful Driving**. It is often observed that young people, in their exuberance, engage in racing, rash driving, and stunt driving, which is unwarranted. A 'safety first' mindset can significantly help reduce road accidents. While driving, it is essential to

maintain a safe distance between vehicles to allow for better reaction time. Additionally, one must avoid driving when unwell.

(f) **Rules & Regulations**. One must follow all rules & regulations. **Whatever the urgency, never drive on wrong side against the flow of traffic, especially in its overtaking lane.** Always drive with a valid driving license. Doing Third Party Insurance is mandatory, so renew it timely.

(g) **Other important aspects**. Some other important aspects that must be borne in mind are not to drive in bad and inclement weather, and if unavoidable, the use of fog lights is a must; not to drive on the wrong side of the road in order to save time and distance, as this may cause the accident victim to lose a limb or life.

Rail Safety

10. Indian Railways is among the largest railway networks globally, with millions of passengers depending on it daily for transportation. Train accident records indicate that derailments and incidents at railway crossings are the leading causes of accidents. Until recently, many railway crossings were unregulated, with a large number of accidents being caused by human error.



11. **Primary Reasons Behind Railway Accidents.** Railway accidents pose significant threats to human life and infrastructure worldwide. Primary factors contributing to these tragic events are:-

(a) **Infrastructure Defects.** The railway infrastructure, which includes tracks, bridges, overhead wires, and rolling stock, is often defective due to poor maintenance, ageing, vandalism, sabotage, or natural disasters.

- Much of the infrastructure was built in the 19th and 20th centuries and has not been upgraded to meet the growing demand and modern standards.
- The railway system also suffers from a lack of funds, corruption, and inefficiency, which hamper its development and maintenance.
- Moreover, many routes are operating at over 100% capacity, which increases the risk of accidents due to congestion and overloading.

(b) **Human Errors.** The railway staff, who are responsible for operating, maintaining, and managing the trains and tracks, are prone to human errors due to fatigue, negligence, corruption, or disregard for safety rules and procedures.

- Human errors can result in incorrect signalling, miscommunication, over-speeding, or overlooking defects or hazards.
- The railway staff also lacks adequate training and communication skills, which affect their performance and coordination.

(c) **Signalling Failures.** The signalling system, which controls the movement and direction of trains on the tracks, can fail due to technical glitches, power outages, or human errors, as under:-

- Signalling failures can lead to trains running on the wrong track, colliding with other trains or stationary objects, or overshooting sta tions.
- For example, the recent train accident in Odisha was reportedly caused by a change in electronic interlocking that was not communicated properly to the drivers.



(d) **Unmanned Level Crossings (UMLCs).** UMLCs are places where railway tracks cross without any barriers or signals to regulate traffic:-

- UMLCs pose a high risk of accidents as vehicles or pedestrians may not notice the approaching train or may try to cross the track when the train is near. In 2018-19, UMLCs accounted for 16% of all train accidents in India.
- The railways have eliminated all the UMLCs on broad gauge routes, but there are still many Manned Level Crossings (MLCs) that pose a risk of accidents.

12. **Dos for Citizens Regarding Rail Safety.**

(a) Carry your own Identification Card while travelling.

(b) Always use overbridge to cross the track.

(c) Stop vehicles when the gate is closed at the crossing.

(d) Pull the chain only in an emergency if required to stop the train.

(e) Report to the railway police regarding unidentified objects or suspected persons.

13. **Don’ts for Citizens regarding Rail Safety.**

(a) Do not be careless while crossing train tracks.

(b) Do not try to get in/get down while the train is moving.

(c) Do not ignore the signal at the railway crossing.

(d) Do not sit on the footsteps/footboard while travelling.

(e) Do not use fire while travelling.

(f) Do not consume alcohol during journey.

(g) Do not accept any eatables from unknown persons.

(h) Do not quarrel with railway staff and fellow passengers.

(j) Do not travel on the footboards of a moving train.

(k) Do not bunch up to present a large target at railway platforms.

14. **Safety Aspects to be Followed by Cadets During Movement by Rail.** NCC cadets often have to undertake a journey for undergoing various camps such as Ek Bharat Sreshtha Bharat, National Integration camps, Army attachment camps, Republic Day Camps and others. Therefore, a cadet must prioritise safety when travelling by rail. Certain key safety aspects are:-

(a) **Planned Journey**. A planned execution of a journey obviates many mishaps. The planned journey always includes moving on a confirmed reservation, preferably moving in a group. Always obey the instructions of the Permanent Instructor (PI) staff and the Associate NCC Officers (ANOs) accompanying you on the trip.

(b) **Proper Identification.** Always carry your Identity Card and travel in NCC attire, preferably in the NCC tracksuit; this will enable the cadet to have an easier identification.

(c) **Packing and Carriage of Luggage.** A cadet must make an endeavour not to carry any major valuables with them to prevent any untoward incidents.

(d) **Follow Railway Rules**. Adhere to railway regulations and instructions from railway staff.

(e) **Be cautious on Platforms**. Watch your step on platforms and avoid standing near the edge.

(f) **Use authorised Railway Stations**. Use only authorised railway stations for boarding and alighting.

(g) **Keep Valuables Secure**. Keep luggage and personal belongings secure and within sight.

(h) **Be Prepared for Emergencies**. Know the location of emergency exits and first aid facilities. Always keep the contact numbers of your family members accessible to you/others in case of any emergency.

(j) **Travel Insurance**. One should always opt for travel/accident insurance while booking one's tickets. Substantial compensation is provided for accident victims. For example, IRCTC travel insurance provides coverage of up to ₹10 lakhs.

15. **Air Safety. Aviation safety** is the study and practice of managing risks in aviation. This includes preventing aviation accidents and incidents through research, educating air travel personnel, passengers, and the general public, as well as the design of aircraft and aviation infrastructure. The aviation industry is subject to significant regulation and oversight. Aviation security is focused on protecting air travellers, aircraft, and infrastructure from intentional harm or disruption, rather than unintentional mishaps. Air travel mishaps can occur for a variety of reasons, often involving a combination of factors, as given below:-

(a) **Human Error.** Mistakes made by pilots, air traffic controllers, or ground crew can lead to accidents. This includes miscommunication, misjudgement, or failure to follow procedures.

(b) **Mechanical Failures.** Technical malfunctions or failures in aircraft systems, such as engines, navigation, or control systems, can result in emergencies or crashes.

(c) **Weather Conditions.** Severe weather, including storms, turbulence, fog, and icing, can pose significant risks to flight safety and operations.

(d) **Poor Maintenance.** Inadequate maintenance or failure to adhere to safety protocols can lead to mechanical issues that compromise flight safety.

(e) **Runway Conditions.** Slippery or damaged runways can affect take-off and landing, increasing the risk of accidents during these critical phases of flight.

(f) **Bird Strikes.** Collisions with birds during take-off or landing can damage aircraft and, in rare cases, lead to crashes.

(g) **Unlawful Interference.** Deliberate acts of sabotage, including bombings or hijackings, pose significant risks to air travel safety.

(h) **Pilot Fatigue.** Long hours and insufficient rest can lead to pilot fatigue, impairing decision-making and performance.

(j) **Inadequate Training.** Insufficient training for pilots and crew on emergency procedures, equipment handling, or new technologies can contribute to mishaps.

(k) **Security Breaches.** Failures in airport security measures can allow prohibited items on board, increasing the risk of incidents during flight.

(l) **Air Traffic Control Issues.** Mismanagement or errors in air traffic control can lead to collisions, near misses, or runway incursions.

16. **Dos for Citizens regarding Air Travel.**

(a) **Do Arrive Early**. Arrive at the airport well ahead of your flight (typically 3-4 hours for international flight & 2-3 hours for domestic flights).

(b) **Do Check Baggage Policies**. Familiarise yourself with your airline's baggage allowances and fees to avoid surprises.

(c) **Do Keep Important Documents Handy**. Have your passport, boarding pass, and any required visas accessible.

(d) **Do Follow Security Procedures**. Comply with security screening protocols, removing items as instructed.

(e) **Do Wear Comfortable Clothing**. Dress in layers and wear comfortable shoes for a long flight.

(f) **Do Respect Cabin Crew Instructions**. Follow instructions from the flight attendants for safety and comfort.

(g) **Do Keep Valuables Close**. Store important items like electronics and jewellery in your carry-on.

(h) **Do Consider Travel Insurance**. Look into travel insurance for added protection against unexpected events.

(j) **Do Practice Good Hygiene**. Use hand sanitiser frequently and avoid touching your face.

17. **Don'ts for Citizens Regarding Air Travel.**

(a) **Don’t Arrive Last Minute**. Avoid rushing, which can lead to missed flights or stress.

(b) **Don’t Overpack**. Stick to the essentials and avoid exceeding baggage limits.

(c) **Don’t Ignore Security Guidelines**. Don’t bring prohibited items in your carry-on or checked baggage.

(d) **Don’t Disrupt Others**. Be mindful of your noise levels and avoid using loud devices.

(e) **Don’t Remove Your Seatbelt Until Instructed**. Keep your seatbelt fastened while seated, especially during turbulence.

(f) **Don’t Engage in Disruptive Behaviour**. Avoid arguments or disrespectful behaviour towards crew and other passengers.

(g) **Don’t Forget to Charge Devices**. Ensure your electronic devices are fully charged before flying.

(h) **Don’t Leave Valuables Unattended**. Always monitor your possessions.

(j) **Don’t Ignore Health Protocols**. Follow any health guidelines provided by the airline or authorities.

(k) **Don’t Panic in Emergencies**. Stay calm and follow crew instructions if an emergency arises.

18. **Safety Aspects to be Followed by Cadets during Movement by Air.** When cadets are moving by air, safety is of utmost importance. Here are the key safety aspects that ensure their well-being during air travel:-

(a) **Before Boarding a Flight.** It is essential that cadets carry their tickets, valid identification cards, and emergency contact numbers with them. A cadet must ensure fitness to fly. They must pack the luggage as per dimensions and baggage-carrying instructions.

(b) **In the Flight.** While undertaking a journey, the cadet must;-

- **Follow Airline Instructions**. Adhere to airline rules and instructions from cabin crew.
- **Use Seatbelts**. Wear seatbelts at all times when seated.
- **Keep Electronic Devices on Flight Mode**. Switch electronic devices to flight mode during take-off, landing, and when instructed by cabin crew.
- **Be aware of Emergency Exits**. Take note of emergency exit locations and follow evacuation procedures in case of an emergency.
- **Stay Hydrated and Comfortable**. Drink plenty of water and adjust your seating to avoid discomfort during long flights.

(c) **After completion of a flight Journey.** A cadet, after completion of their air travel, must check and collect the luggage before leaving the airport.

19. By following the above-mentioned safety measures, the journey can be conducted smoothly, ensuring cadets' safety and well-being throughout the travel.

PART II : RAISING AWARENESS

20. Transportation safety requires collective responsibility and awareness. Educating individuals about potential hazards, safety protocols, and emergency preparedness is crucial. Public awareness campaigns, integrating safety education into school curricula, and community engagement are effective strategies. The key areas of focus include:-

(a) Adherence to safety guidelines and regulations

(b) Risk management and mitigation strategies

(c) Emergency preparedness and first aid training

(d) Responsible behaviour, such as avoiding distractions and wearing seatbelts.

21. Spreading consciousness about transportation safety yields profound benefits that transform individual behaviours and societal norms. By promoting awareness, five pivotal advantages emerge as mentioned below:-

(a) Reduced accident rates.

(b) Increased passenger awareness.

(c) Improved emergency response.

(d) Enhanced infrastructure.

(e) Culturally ingrained safety mindset.

22. Public awareness campaigns can be launched through various media channels, highlighting the importance of safe driving practices, such as:-

(a) Wearing seatbelts.

(b) Avoiding distractions while driving, and

(c) Following traffic rules.

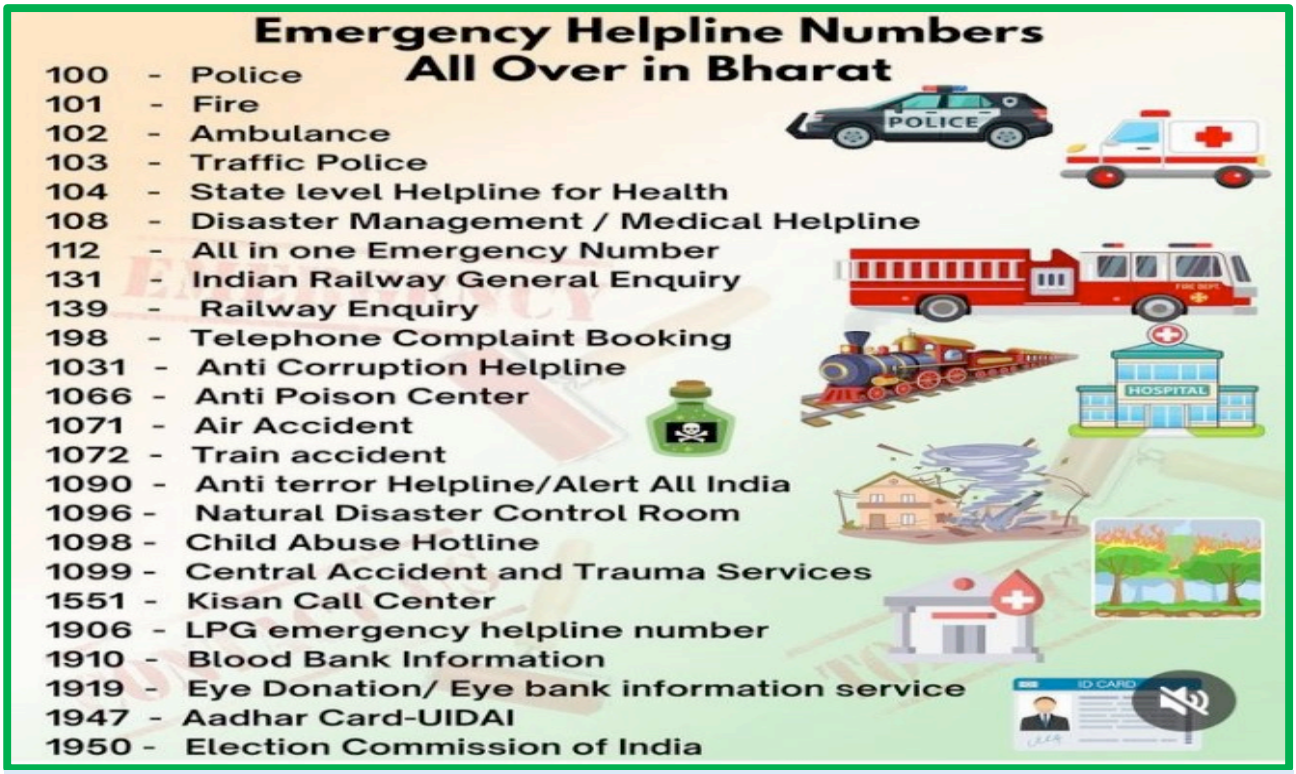
(d) Wrong side driving is a severe menace in our country which causes many accidents. Right education and stringent enforcement of laws on this aspect are a must to avoid any mishap.

(e) Vehicles not to be driven without obtaining the driver's license.

(f) Educational programs can be conducted in schools and colleges, teaching students about road safety and responsible driving habits.

(g) Enforcement of safety protocols, such as strict penalties for traffic violations and regular vehicle checks, can also help prevent accidents, ultimately saving countless lives and promoting a culture of safety.

23. Governments, organisations, and individuals must unite to promote transportation safety. By fostering a culture of responsibility, we ensure safer journeys. Public awareness campaigns can be launched through various media channels, highlighting the importance of safe travel practices. Educational programs can be conducted in schools and communities, teaching people about safety and responsible travel habits. Enforcement of safety protocols, such as regular maintenance checks, strict penalties for safety violations, and crowd control measures, can also help prevent accidents, ultimately saving lives and promoting a culture of safety.



Emergency Help Line Numbers
(For Information only, Not to be asked in Exam)

HIGHER ORDER THINKING SKILLS (HOTS)

- **As a graduation student and an NCC cadet, what will you recommend to your teacher for different ways to make our roads safer? Compare and discuss the effectiveness of methods like enforcing traffic rules, creating public awareness, and improving road infrastructure.**

CONCLUSION

24. Safety is paramount during travel, necessitating adherence to rail, road, and air safety measures. Rules and regulations, including motor vehicle laws, ensure everyone's well-being. Vigilance and compliance with safety protocols are crucial.

25. India's transportation sector faces accidents and fatalities despite advancements. Human error, inadequate infrastructure, and lack of enforcement contribute. Government initiatives like the National Road Safety Policy, Rail Safety Fund, and Air Safety Management System address these challenges. Public awareness campaigns highlighting safe practices, education, and enforcement are vital.

SUMMARY

- Road, rail, and air accidents are man-made disasters that involve high human suffering. They impose a huge cost in terms of deaths, injuries, and loss of income.
- One needs to understand the causes and abide by certain Dos and Don’ts and have a precautionary approach to ensure adequate safety and security.
- Spreading awareness is crucial to prevent road, rail, and air accidents in India.
- The country's alarming number of fatalities and injuries on roads can be reduced by addressing the main causes of accidents, such as driving on the wrong side of the road, driving recklessly, over-speeding, especially over poor road conditions, through awareness campaigns, education, and enforcement of safety protocols.
- Promoting awareness and education can help prevent rail accidents by addressing human error, technical failure, and overcrowding.
- Furthermore, ensuring safe air travel requires raising awareness about preventing air accidents, mitigating key factors such as technical failure and human error.
- Awareness can foster a culture of safety and reduce the number of accidents on the roads, railways, and airways.
- In addition, individuals needs to make a note of emergency response numbers so as to seek assistance in times of need representatives of NCC, they are entrusted with upholding the highest standards of behaviour, conduct, and community service.

ASSESSMENT EXERCISE

Multiple Choice Questions

Q1. The road, rail and air accidents are _____ types of disasters:-

(a) Manmade (b) Natural

(c) Neither (a) nor (b) (d) None of the above

Q2. Do not cross the road during the _____ signal:-

(a) Yellow (b) Green

(c) Red (d) None of the Above

Q3. _____ are places where railway tracks cross without any barriers:-

(a) Manned Level Crossings

(b) Semi-manual Level Crossings

(c) Unmanned Level Crossings

(d) None of the above

Q4. One should report to the railway police regarding unidentified objects or suspected persons in the railway station:-

(a) False (b) True

(c) Maybe (d) None of the above

Q5. What is the primary cause of road accidents in India?

(a) Drunken Driving (b) Over-speeding

(c) Poor Road Conditions (d) All of the above

Q6. What should you do immediately in case of a road accident?

(a) Call the police (b) Provide first aid

(c) Take photos of the scene (d) All of the above

Q7. What should you do in case of a train emergency?

(a) Panic and try to exit the train immediately.

(b) Remain calm and follow the instructions of the train staff.

(c) Try to call for help using your mobile phone.

(d) None of the Above

Q8. Understanding _____ Safety refers to the measures that must be adopted by everyone while using roads:-

(a) Rail (b) Air

(c) Road (d) None of the above

Q9. Spreading consciousness to prevent accidents is crucial in reducing the alarming number of fatalities:-

(a) False (b) True

(c) Maybe (d) None of the above

Q10. Which of the following is a common cause of rail accidents?

(a) Excessive speed of the train

(b) Poor track maintenance

(c) Failure in signalling System

(d) None of the above

Q11. Which is the most effective safety device for a driver or passenger in a car?

(a) Air-conditioning

(b) Seat Belt

(c) GPS Device

(d) None of the above

Q12. What does a solid white line on the side of the road indicate?

(a) Passing is allowed.

(b) No parking zone

(c) The shoulder and limit of the roadway

(d) A divider for oncoming traffic

Q13. What does a red signal on a railway crossing indicate?

(a) Trains are moving slowly.

(b) It is safe to cross.

(c) Stop and do not cross.

(d) Maintenance is happening.

Q14. What should passengers do in case of a fire on a train?

(a) Panic and try to run

(b) Remain calm and follow the instructions of the train staff.

(c) Try to call for help using your mobile phone.

(d) None of the Above

Q15. What should a passenger do in case of a loss of cabin pressure?

(a) Put on the oxygen mask

(b) Get up and move to a side

(c) Notify the pilot

(d) None of the above

Short Answer Questions

Q1. Write any two Dos of road travel safety.

Q2. Write any two Don’ts of rail travel safety.

Q3. What are the main causes of road accidents in India?

Q4. What measures can be taken to reduce the risk of accidents while driving at night?

Q5. Describe the importance of wearing seatbelts while driving.

Long Answer Questions

Q1. How will you plan your journey?

Q2. What safety precautions will you take while undertaking a train journey?

Q3. What are the dos and don’ts of road travel?

Q4. What are the security regulations while you undergo air travel?

Q5. Explain the major causes of road accidents.

ANSWER KEY: MULTIPLE CHOICE QUESTIONS (MCQ)

ANSWER KEY TO MCQ : NCC BUILDING BLOCKS

Answer key to MCQ: NCC BUILDING BLOCKS (Chapter - I)

Q1.	(c)	Q2.	(a)	Q3.	(c)	Q4.	(c)
Q5.	(b)	Q6.	(c)	Q7.	(c)	Q8.	(b)
Q9.	(b)	Q10.	(a)	Q11.	(c)	Q12.	(b)
Q13.	(c)	Q14.	(b)	Q15.	(b)		

Answer key to MCQ: NCC BUILDING BLOCKS (Chapter - II)

Q1.	(c)	Q2.	(b)	Q3.	(c)	Q4.	(d)
Q5.	(b)	Q6.	(b)	Q7.	(a)	Q8.	(d)
Q9.	(b)	Q10.	(c)	Q11.	(b)	Q12.	(c)
Q13.	(b)	Q14.	(b)	Q15.	(b)		

Answer key to MCQ: NCC BUILDING BLOCKS (Chapter - III)

Q1.	(c)	Q2.	(c)	Q3.	(a)	Q4.	(b)
Q5.	(a)	Q6.	(c)	Q7.	(b)	Q8.	(b)
Q9.	(b)	Q10.	(a)	Q11.	(d)	Q12.	(a)
Q13.	(c)	Q14.	(d)	Q15.	(c)		

ANSWER KEY TO MCQ : NI

Answer key to MCQ: NI (Chapter - I)

Q1.	(d)	Q2.	(b)	Q3.	(a)	Q4.	(c)
Q5.	(b)	Q6.	(c)	Q7.	(a)	Q8.	(c)
Q9.	(b)	Q10.	(d)	Q11.	(b)	Q12.	(a)
Q13.	(d)	Q14.	(c)	Q15.	(b)		

Answer key to MCQ: NI (Chapter - II)

Q1.	(a)	Q2.	(d)	Q3.	(b)	Q4.	(c)
Q5.	(b)	Q6.	(a)	Q7.	(b)	Q8.	(c)
Q9.	(c)	Q10.	(d)	Q11.	(c)	Q12.	(b)
Q13.	(d)	Q14.	(a)	Q15.	(b)		

ANSWER KEY TO MCQ : BCA

Answer key to MCQ: BCA (Chapter - I)

Q1.	(c)	Q2.	(d)	Q3.	(b)	Q4.	(b)
Q5.	(b)	Q6.	(d)	Q7.	(a)	Q8.	(b)
Q9.	(b)	Q10.	(d)	Q11.	(a)	Q12.	(c)
Q13.	(d)	Q14.	(c)	Q15.	(b)		

Answer key to MCQ: BCA (Chapter - II)

Q1.	(d)	Q2.	(d)	Q3.	(a)	Q4.	(c)
Q5.	(b)	Q6.	(d)	Q7.	(a)	Q8.	(c)
Q9.	(a)	Q10.	(c)	Q11.	(d)	Q12.	(a)
Q13.	(c)	Q14.	(a)	Q15.	(d)		

ANSWER KEY TO MCQ : DM

Answer key to MCQ: DM (Chapter - I)

Q1.	(b)	Q2.	(a)	Q3.	(c)	Q4.	(d)
Q5.	(d)	Q6.	(b)	Q7.	(c)	Q8.	(a)
Q9.	(d)	Q10.	(a)	Q11.	(d)	Q12.	(d)
Q13.	(d)	Q14.	(b)				

Answer key to MCQ: DM (Chapter- II)

Q1.	(d)	Q2.	(b)	Q3.	(a)	Q4.	(d)
Q5.	(e)	Q6.	(d)	Q7.	(c)	Q8.	(c)
Q9.	(d)	Q10.	(b)	Q11.	(c)	Q12.	(b)
Q13.	(c)	Q14.	(a)	Q15.	(c)		

Answer key to MCQ: DM (Chapter - III)

Q1.	(c)	Q2.	(c)	Q3.	(d)	Q4.	(d)
Q5.	(b)	Q6.	(d)	Q7.	(c)	Q8.	(b)
Q9.	(b)	Q10.	(b)				

Answer key to MCQ: DM (Chapter - IV)

Q1.	(b)	Q2.	(b)	Q3.	(c)	Q4.	(b)
Q5.	(b)	Q6.	(c)	Q7.	(a)	QB.	(b)
Q9.	(b)	Q10.	(b)	Q11.	(c)	Q12.	(b)
Q13.	(b)	Q14.	(d)	Q15.	(a)	Q16.	(b)

ANSWER KEY TO MCQ : EA

Answer key to MCQ: EA (Chapter - I)

Q1.	(b)	Q2.	(a)	Q3.	(b)	Q4.	(a)
Q5.	(a)	Q6.	(a)	Q7.	(d)	Q.8	(a)
Q9.	(b)	Q10.	(a)	Q11.	(a)	Q12.	(b)
Q13.	(a)	Q14.	(a)	Q15.	(b)	Q16.	(a)
Q17.	(c)	Q1B.	(b)	Q19.	(a)	Q20.	(c)

Answer key to MCQ: EA (Chapter - II)

Q1.	(c)	Q2.	(d)	Q3.	(c)	Q4.	(c)
Q5.	(c)	Q6.	(b)	Q7.	(c)	Q8.	(c)
Q9.	(c)	Q10.	(b)	Q11.	(a)	Q12.	(a)
Q13.	(b)	Q14.	(c)	Q15.	(c)	Q16.	(c)
Q17.	(b)	Q18.	(b)	Q19.	(d)	Q20.	(c)

ANSWER KEY TO MCQ : GA

Answer key to MCQ: GA (Chapter - I)

Q1.	(b)	Q2.	(c)	Q3.	(a)	Q4.	(b)
Q5.	(b)	Q6.	(c)	Q7.	(b)	Q8.	(b)
Q9.	(c)	Q10.	(b)	Q11.	(b)	Q12.	(b)
Q13.	(b)	Q14.	(a)	Q15.	(b)	Q16.	(b)
Q17.	(c)	Q18.	(b)	Q19.	(b)	Q20.	(b)

Answer key to MCQ: GA (Chapter - II)

Q1.	(a)	Q2.	(b)	Q3.	(a)	Q4.	(c)
Q5.	(a)	Q6.	(c)	Q7.	(b)	Q8.	(b)
Q9.	(b)	Q10.	(a)	Q11.	(c)	Q12.	(b)
Q13.	(b)	Q14.	(a)	Q15.	(c)	Q16.	(b)
Q17.	(b)	Q18.	(d)	Q19.	(c)	Q20.	(a)

ANSWER KEY TO MCQ : LWN

Answer key to MCQ: LWN (Chapter - I)

Q1.	(a)	Q2.	(b)	Q3.	(b)	Q4.	(c)
Q5.	(c)	Q6.	(c)	Q7.	(b)	Q8.	(a)
Q9.	(c)	Q10.	(b)	Q11.	(b)	Q12.	(c)
Q13.	(c)	Q14.	(b)	Q15.	(b)		

Answer key to MCQ: LWN (Chapter - II)

Q1.	(b)	Q2.	(b)	Q3.	(b)	Q4.	(b)
Q5.	(a)	Q6.	(d)	Q7.	(b)	Q8.	(b)
Q9.	(b)	Q10.	(b)	Q11.	(d)	Q12.	(b)
Q13.	(a)	Q14.	(b)	Q15.	(b)		

ANSWER KEY TO MCQ : MH

Answer key to MCQ: MH (Chapter - I)

Q1.	(b)	Q2.	(c)	Q3.	(d)	Q4.	(d)
Q5.	(b)	Q6.	(c)	Q7.	(c)	Q8.	(b)
Q9.	(d)	Q10.	(c)				

Answer key to MCQ: MH (Chapter - II)

Q1.	(c)	Q2.	(b)	Q3.	(c)	Q4.	(b)
Q5.	(c)	Q6.	(a)	Q7.	(b)	Q8.	(d)
Q9.	(c)	Q10.	(c)				

Answer key to MCQ: MH (Chapter - III)

Q1.	(c)	Q2.	(b)	Q3.	(c)	Q4.	(b)
Q5.	(b)	Q6.	(b)	Q7.	(c)	Q8.	(c)
Q9.	(b)	Q10.	(c)				

Answer key to MCQ: MH (Chapter - IV)

Q1.	(c)	Q2.	(c)	Q3.	(b)	Q4.	(a)
Q5.	(a)	Q6.	(b)	Q7.	(b)	Q8.	(a)
Q9.	(b)	Q10.	(a)				

Answer key to MCQ: MH (Chapter - V)

Q1.	(c)	Q2.	(b)	Q3.	(b)	Q4.	(a)
Q5.	(b)	Q6.	(c)	Q7.	(b)	Q8.	(c)
Q9.	(a)	Q10.	(c)				

Answer key to MCQ: MH (Chapter - VI)

Q1.	(b)	Q2.	(b)	Q3.	(c)	Q4.	(b)
Q5.	(a)	Q6.	(b)	Q7.	(a)	Q8.	(a)
Q9.	(b)	Q10.	(a)				

Answer key to MCQ: MH (Chapter - VII)

Q1.	(b)	Q2.	(c)	Q3.	(d)	Q4.	(a)
Q5.	(b)	Q6.	(b)	Q7.	(b)	Q8.	(b)
Q9.	(b)	Q10.	(d)				

ANSWER KEY TO MCQ : SSCD

Answer key to MCQ : SSCD (Chapter - I)

Q1	(c)	Q2	(a)	Q3	(a)	Q4	(b)
Q5	(b)	Q6	(b)	Q7	(c)	Q8	(b)
Q9	(b)	Q10	(d)	Q11	(d)	Q12	(c)
Q13	(d)	Q14	(c)	Q15	(a)		

Answer key to MCQ : SSCD (Chapter - II)

Q1	(a)	Q2	(d)	Q3	(a)	Q4	(c)
Q5	(a)	Q6	(a)	Q7	(d)	Q8	(c)
Q9	(b)	Q10	(c)	Q11	(a)	Q12	(c)
Q13	(d)	Q14	(c)	Q15	(a)		

Answer key to MCQ : SSCD (Chapter - III)

Q1	(a)	Q2	(b)	Q3	(a)	Q4	(a)
Q5	(b)	Q6	(a)	Q7	(d)	Q8	(a)
Q9	(a)	Q10	(b)	Q11	(a)	Q12	(b)
Q13	(b)	Q14	(c)				

Answer key to MCQ : SSCD (Chapter - IV)

Q1	(c)	Q2	(b)	Q3	(b)	Q4	(c)
Q5	(b)	Q6	(c)	Q7	(c)	Q8	(b)
Q9	(b)	Q10	(b)	Q11	(b)	Q12	(c)
Q13	(c)	Q14	(a)	Q15	(c)		

Answer key to MCQ : SSCD (Chapter - V)

Q1	(b)	Q2	(a)	Q3	(c)	Q4	(a)
Q5	(c)	Q6	(d)	Q7	(c)	Q8	(a)
Q9	(a)	Q10	(d)	Q11	(b)	Q12	(a)
Q13	(d)	Q14	(a)	Q15	(d)		

Answer key to MCQ : SSCD (Chapter - VI)

Q1	(a)	Q2	(c)	Q3	(c)	Q4	(b)
Q5	(d)	Q6	(d)	Q7	(b)	Q8	(c)
Q9	(b)	Q10	(d)	Q11	(b)	Q12	(c)
Q13	(c)	Q14	(b)	Q15	(a)		



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