

Senior Secondary Course

374 - Military Studies

Book 1



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A Word with You

Dear Learners

NIOS welcomes the learners to its course Military Studies which is for Senior Secondary Learners. The course is meant to develop the interest and deepen the understanding of learners in the field of Military Studies. Military Studies is very important to know about the need of Armed Forces and their role in the field of security.

This course has been divided in two parts and has 06 modules divided into 18 lessons. The modules are : **Military Studies, Structure and Role of the Forces, Security and Geo-Strategy, Indian Armed Forces : Weapons and War Equipment and Modernisation, Warfare and its Types, Armed Forces and its Role in Internal Security**

Each module deals with a separate concept and are interlinked with each other to maintain the continuity of the content. Five lessons out of 18 have been earmarked for Tutor Marked Assignment (**TMA**). These are **Lesson No.2** (Concept and Evolution of Military Studies), **Lesson No. 5** (Special Forces), **Lesson No. 8** (Geo-politics), **Lesson No.13** (Biological Warfare) and **Lesson No. 14** (Chemical Warfare). Remaining 13 lessons are meant for public examination. We hope that this course will attract the learners who have a keen interest in armed forces. The course is related to enhance the knowledge of working military personnel and prepare the young generation for army jobs.

Your feedback is always welcome.

For any kind of queries and suggestions feel free to contact us : www.nios.ac.in. We shall be happy to serve you.

Wish you all the best.

Chairman
NIOS

How to use the Study Material

Congratulation! You have accepted the challenge to be a self-learner. NIOS is with you at every step and has developed the material with the help of a team of experts, keeping you in mind. A format supporting independent learning has been followed. If you follow the instructions given, then you will be able to get the best out of this material. The relevant icons used in the material will guide you. These icons have been explained below for your convenience.

Title: will give a clear indication of the contents within. Do read it.

Introduction: This will introduce you to the lesson linking it to the previous one.



Objectives: These are statements that explain what you are expected to learn from the lesson. The objectives will also help you to check what you have learnt after you have gone through the lesson. Do read them.



Notes: Each page carries empty space in the side margins, for you to write important points or make notes.



Intext Questions: Very short answer self check questions are asked after every section, the answers to which are given at the end of the lesson. These will help you to check your progress. Do solve them. Successful completion will allow you to decide whether to proceed further or go back and learn again.



What You Have Learnt: This is the summary of the main points of the lesson. It will help in recapitulation and revision. You are welcome to add your own points to it also.



Terminal Exercises: These are long and short questions that provide an opportunity to practice for a clear understanding of the whole topic.



Do You Know: This box provides additional information. The text in boxes is important and must be given attention. It is not meant for evaluation, but only to improve your general knowledge.



Answers : These will help you to know how correctly you have answered the questions.



Activities: Certain activities have been suggested for better understanding of the concept.

www

Web site: These websites provide extended learning. Necessary information has been included in the content and you may refer to these for more information.

Military Studies Course

Overview of the Learning Material

Module	Lesson No.	Name of the Lesson	Mode of Assignment	
			TMA	PE
Module 1 : Military Studies	1	Importance of Military Studies		PE
	2	<i>Concept and Evolution of Military Studies</i>	TMA	
	3	Need of Military Studies Today		PE
Module 2 : Structure and Role of the Forces	4	Armed Forces		PE
	5	<i>Special Forces</i>	TMA	
	6	Paramilitary Forces		PE
Module 3 : Security and Geo-Strategy	7	Geo-Strategy		PE
	8	<i>Geo-politics</i>	TMA	
	9	Maritime Security		PE
Module 4 Indian Armed Forces : Weapons and War Equipment and Modernisation	10.	Role and Equipment used by the Armed Forces		PE
	11.	Modernisation of the Indian Armed Forces		PE
Module 5 Warfare and Its Types :	12.	Nuclear Warfare		PE
	13	<i>Biological Warfare</i>	TMA	
	14.	<i>Chemical Warfare</i>	TMA	
	15.	Cyber Warfare		PE
Module 6 Armed Forces and its Role in Internal Security	16.	Armed Forces in Peace Keeping		PE
	17	Armed Forces in Disaster Management		PE
	18.	Armed Forces in Internal Security		PE

Total Lesson : 18
Lesson for Public Examination (PE) : 13
Lesson for Tutor Marked Assignment (TMA) : 5

Note : Content and images adapted from web-based resources in this SLM is being used for educational purposes only and not for commercial purposes.



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		TMA/PE
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MODULE 2 : STRUCTURE AND ROLE OF THE FORCES		
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MODULE 3 : SECURITY AND GEO STRATEGY		
7 GEO-STRATEGY	57	PE
8 GEO-POLITICS	68	TMA
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Note

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IMPORTANCE OF MILITARY STUDIES

Military Studies is also known by various names like defence and strategic studies, military science, war and national security studies, war and strategic studies etc. Military Studies is currently taught only in a handful of colleges / universities in India. This raises two questions. One, what is the importance of Military studies? Two, why should you as young students study this subject? As you would have studied in history mankind always suffered from wars but never gave up the need to fight wars. In the modern world, the need to wage wars has changed and the methods of fighting too have changed.

The importance of having strong armed forces and the need to protect the people against various threats is a constant feature of our life. Knowledge of military security, how armed forces are organised to fight a war and what is the art of warfare are questions, which get answered by studying military studies. By learning about the military, the Government and the armed forces the people become more awakened and can handle situations better. The military study helps the leaders to understand the importance of Armed Forces in defending our motherland.



Objectives

After studying this lesson, you will be able to:

- explain the meaning and importance of military studies;
- describe the curriculum of military studies for soldiers and
- emphasise the need for studying military studies.

1.1 Introduction to Military Studies

Military studies from ancient times, deals with all subjects pertaining to the military and how soldiers and kings are trained in the art of fighting. It can be defined as the study



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of **military organisations**, **analysis of security threats** to a country, the **art of warfare** and the method of using the armed forces in the defence of the nation. Let us understand the meaning of each of these words used in the definition.

- (a) **Study of Military Organisation** - Ancient armies started with foot soldiers and later went on to create the Chaturangabala force consisting of chariots, elephants, cavalry and infantry. Our ancient gurus thought about this organisation of the army. They taught this subject and the soldiers learnt to use the horses, elephants and weapons. Study of military organisations commenced from ancient times and continues even today.
- (b) **National Security** - Any kingdom or nation faces enemies, threats from environment, threats from natural calamities etc. It is important to understand the type of threats and methods to overcome the threat. Therefore, an analysis of national security will tell us about how big the army should be and how should it be organised to fight against all identified threats.
- (c) **Art of Warfare** - Warfare is defined as the activity of fighting between two armies. When two nations fight they employ different strategies and tactics to win the battle. Armies have to be trained to use different strategies and tactics against enemy forces to win. Therefore this subject is important for soldiers and officers to learn the tactics and strategies used in battle.

1.2 Curriculum for Military Studies

After the definition of military studies let us look at the subjects that are included in the curriculum for military studies. The subjects that would be taught include the following:-

- i) **Skill at arms** - Soldiers were taught the use of personal weapons and made to practice daily, to become an expert in handling the weapons. Different weapons were used by the ancient armies in which training was required. These were different types of Gadas, various types of weapons used by Central Tribes and weapons of ancient South Indian armies.
- ii) **Skill of using bow and arrow** - One of the major skills required for the soldiers during that period, was to learn the use of 'Bow and Arrow' during battles.

Other skills a soldier needed were horsemanship and fighting with enemies on horseback during battles.

1.2.1 Important Aspects in Military Studies

- i) **Terrain** - Study of terrain where the battle will be fought. This subject helps in making defences, forts (in olden times) and creating obstacles for the enemy.
- ii) **Tactics** - Tactics is the art or plan of deploying army units to maneuver to a position of advantage in a battle. Different tactics have to be thought over against different types of enemies and different terrain (fighting in mountains will be

different from fighting in deserts) etc.

- iii) **Maps and Astronomy** - These are required for navigating and moving from one place to another. In ancient times there were no maps and armies used directions, movement of sun and stars to march from one place to another.
- iv) **Leadership** - Military leadership is an art a creative activity based on character, ability and mental power. It is one of the most important factor in war fighting.
- v) **Logistics** - The armies have to be equipped and supplied essential items during a battle. Logistics becomes important to win a battle.

1.2.2 Ethics of war Fighting

Since olden times India always fought a just war - 'Dharam Yudha. It means, the king fought a war only when it was required for the welfare of the kingdom. Similarly, the warrior or soldier had a code of conduct. Being disciplined was the first code. Some of the warrior codes or laws that were followed by ancient armies in India were:-

- A warrior (Kshatriya) in armour must not fight with one who is not wearing armour.
- One should fight only one enemy and cease fighting if the opponent is disabled.
- Aged men, women and children, the retreating, or one who held a straw in his lips as a sign of unconditional surrender should not be killed.



Intext Questions

1.1

1. Explain the meaning of Military Studies.
2. What is meant by art of warfare?
3. Name any three subjects taught in military studies.

1.3 Why should we Study Military Studies?

Military studies should be taught to all soldiers and officers who are part of the armed forces of a country. There is no doubt in this. Where if we say that soldiers must study this subject, the reason why they should be studying it must be understood well. Having seen the curriculum in the previous paragraph of this lesson, the reasons all soldiers to study it; are as follows:-

- A soldier has to be highly professional and proficient in the use of weapons at all times. This involves learning about the weapon and continuously practicing with it.
- Armies of a nation have to be prepared for war at all the times. Therefore to be ready to fight at any time armies have to be trained well.



Note

Military Studies



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- A good army is one that can plan its strategy and tactics well and execute it in the battle. Study of Art of Warfare is therefore very important.
- A soldier who is taught and trained well in fighting remains happy. His morale is high and he goes to battle very confidently.
- In a democracy, the political leaders direct the armed forces to prepare and go to war. The ministers, the political hierarchy, the bureaucrat who assist the government must also learn about military. They decide on how the army should be organized, direct the army to fight when required, plan and execute national security. The government is responsible for the defence of the country and the armed forces are means to achieve national security.

1.3.1 Army

An army is judged by seeing how well its soldiers are trained. Soldiers who are well trained always perform well. It gives them added confidence in doing their task. In ancient times and even now, a well-trained regular army enjoy the confidence to win battles when required.



What You Have Learnt

- Military Studies is the study of military science, war and national security studies, war and strategic studies. Armed forces do require this study to be able to protect the people against various threats - war, natural calamities and disasters. Art of warfare is to handle the war or war like situations. Art of warfare is to be able to employ different tactics and strategies to win the war.
- Curriculum for Military Studies includes skill at arms, skill at using bow and arrows, skill to use horses in war and to be able to fight the enemies on the horse back.
- Military Studies have important aspects like : Terrain, Tactics, Maps and Astronomy, Military Leadership, Logistics. Soldiers do have a code of conduct during war. It is against ethics of war to kill old aged people, women and children also the disabled soldiers and soldiers who have surrendered. Military Studies is need to have an organised and disciplined armed force. It must to proficient in using different weapons and ready at all times to protect the people and fight a war confidently.



Terminal Exercises

1. Differentiate between 'Tactics' and 'Strategy'.
2. Who all should study Military Studies ?

3. Why is study of Terrain important to win a battle?



Answers to Intext Questions

1.1

1. Military studies can be defined as the study of military organisations, analysis of security threats to a country, the art of warfare and the method of using the armed forces in the service of the nation.
2. Warfare is defined as the activity of fighting between two enemies. The tactics and strategy used in battle constitutes art of warfare.
3. The study of Terrain over which battle will be fought is important to formulate strategy, tactis and logistics. This will help in over coming the enemy and winning the battle.



Note

Module - I

Military Studies



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2

CONCEPT AND EVOLUTION OF MILITARY STUDIES

From history of India you may have learnt of how armies were formed and how they protected the people. If armies have been there since long and they are an essential part of a society, then it is important to know how armies function and how they should be used by the Government. So, what is Military Studies? Military studies deals with all subjects pertaining to the military and how soldiers and kings are trained in the art of war fighting.

The lessons in this book will answer questions such as how are the armed forces organised to fight a war? what are the rank structures? What are the weapons with the armed forces? What is the role and responsibility of armies in today's world? How should the armed forces be used by the government? How was the military trained in olden times? How did the training change with time?



Objectives

After studying this lesson, you will be able to:

- describe the military education organisation in ancient India;
- compare the military studies subjects as taught by ancients and as taught today and
- trace the changes that came with changes in the armies.

2.1 Military Studies in Ancient India

Before learning about military studies, it is important to know about the education system of ancient India. First was the system of Gurukul. It was basically a residential school where all children including the children of the king were sent to learn. Important points to know about the Gurukul system are as follows:-

- (a) It was a residential school where the Guru or teacher had a house. The teacher and the student stayed together in the Gurukul.
- (b) Students stayed in the school for about 10 years to learn many subjects.
- (c) The subjects taught included language, grammar, science, mathematics and vedas.

- (d) The Guru also taught Military subjects such as use of weapons, physical training and art of warfare.
- (e) Military subjects were compulsory for all students including sons of kings.
- (f) Life in a Gurukul was tough and a strict disciplined routine was followed.
- (g) Education was free and it included boarding and lodging at the Gurukul. It was possible to give free education in those days because the king and other wealthy people gave money to run gurukuls.
- (h) The concept of Gurukul was living with the teacher and helping the teacher with daily activities. This included farming, cleaning, woodcutting etc. The students therefore learnt practical aspects of living. By doing this, students learnt theory and practicals together so that every student could become a person with good character.

**Note**

2.1.1 Types of Schools

Apart from Gurukul system there were other types of schools. In South India, temples were the centres of all cultural activities and educational institutions formed part of temple establishments. There were schools and colleges in important temples. In certain place there were post -graduate institutions to impart higher education in special subjects.

The educational institutions attached to the temples were known as Salais. These were endowed Schools of a residential type, where scholars received free tuition as well as free boarding and lodging, clothing and other amenities till they completed their studies. Chera King Ay first established the system of 'Salais' in Kerala around 8 A.D. The syllabus and method of teaching were similar to the Gurukul system. Along with the Salais was the Kalari School which specialised in martial arts and training of soldiers.

2.1.2 Kalari and Physical Education

Kalari was one of the most important educational institutions of South India.



Fig. 2.1 : Kalaripayattu

Military Studies



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It was a military school where general education was imparted through a rigorous course of physical training and the study of the science of offence and defence. The Rajas of Kerala were great patrons of learning and to them are credited the establishment of Kalaris in Military Schools. It was presided over by the Panikkar or Kurup.

The youth of the land were taught the use of weapons as well as marital arts such as fencing, boxing and wrestling. Even the Namboothiri youths received military training in the Kalari during the wars of the 11th century when the Kalari system came into vogue. The training received in the Kalaris was called Kalaripayattu.

It was a regular and full-fledged scheme of physical education intended for the youth of the land. The most promising of the trainees were taught the marmas, viz, the vulnerable parts of the body. Kalaris were intended to foster martial spirit of the Nairs and to keep them fit for war.

2.1.3 Physical Education

During ancient times, physical fitness was given prime importance, especially by the kings and the higher-class warriors. Physical education consisted of strength training; running; swimming; weight lifting. Along with physical education games formed an important curriculum of training.

Ancient India had a rich tradition of games that were played and passed on through generations and cultures. Games were not only meant for leisure but also to develop mental capabilities and maintain physical fitness. Games played in ancient India were related to military tactics and strategy. Popular games played by soldiers include Chaturanga, Chess called Ashatapada or 64 squares, Wrestling and Archery.

2.1.4 Places for Higher Education

Apart from Gurukuls, there were Academies for higher education, similar to what we call colleges. These were called *Parishads*, *Ashramas*, *Vidyapeeth*, and *Ghatikas* etc, depending upon the subjects being taught. Some of the most famous Indian institutions known worldwide in those times were Takshashila and Nalanda universities.

Vallabhi, Sringeri and Kanchi were other places of learning in ancient India.



ACTIVITY 2.1

Do you know how to play chess or Chaturanga? Well, look up the internet and learn how Chaturanga and chess are played. This helps in training the mind to formulate strategy to defeat the opponents king and army.



Intext Questions

2.1

1. Explain any two features of the gurukul system of education.
2. Name any three Academies in ancient India for higher education.
3. The name of the military school in ancient Kerala was _____.
4. Normally a student spent _____ years of his life in a Gurukul.

2.2 Military Education

Military science was generally called Dhanurveda. In Ashrams or Gurukuls there were several departments. The department that dealt with military studies was called Mahendrasthana. You may have learnt in History about how armies were formed and what weapons were used by soldiers.

All armies in India had chariots, elephants, cavalry and infantry. It was called Chaturangabala. So how did the soldiers learn to fight? Military education was organised into two types of teaching. First was the individual training of the soldiers. The second was training the army in fighting as a combat unit.

2.2.1 Individual Training

All soldiers and sons of kings had to attend Gurukul with all others. All students were treated as equal. Only those students who had the skills to handle weapons were taught Dhanurveda or the art of fighting with weapons. In other words Gurukul was the first step in learning the art of fighting.

In ancient times, military education was not only organized by the State, but also by individual teachers too who would undertake this duty. In every village, there were military training camps where villagers were given military education for self-defence.

2.2.2 Collective Training

After their basic education in the Gurukulam, individuals were enrolled as soldiers and organised into various units of the army. Each unit had a specific role in war. The soldiers in the cavalry were experts in horse riding and fighting on horseback. Similarly, the charioteer was a good driver who could take the chariot with speed to the given place.

The elephant army was different from the cavalry. All these separate units of the army needed specialised teaching in handling the horses, elephants, etc. and also skilfully managing them in battle. You must have heard of Chanakya, who was a renowned philosopher, scholar and teacher under Chandragupta Maurya. His famous work is 'Arthashastra'. In his book he mentions that army used to assemble at one place every



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day in the morning and start their training. Typically the training started with physical training followed by use of individual weapons. Soldiers handling animals had to spend time with their animals and train with them. The leaders would also train the soldiers to fight as a team and follow the tactics.

2.2.3 Administration of the Army Units

Apart from training the soldiers and the army units, there were departments looking after administration of the army units. The officers, men and handlers were taught subjects specific to their job. For example an elephant handler learnt about animal behaviour, controlling the animal, what to feed and when to feed the animal, etc.

Officers such as the Senapathi were required to have knowledge about law and justice, in order to keep the soldiers disciplined.

The curriculum for the princes was Dhanurveda, Nitishastra, Siksha (lore) of elephants and chariots, Alekhya and Lekhya (Painting and Writing). Langhana (jumping) and Tairana (swimming).

Military education is very different from other form of education. The training of leaders and soldiers is as per their role & task in a battle.



Intext Questions

2.2

1. Name the department that taught military studies in ashrams/ Gurukuls.
2. Name any three subjects taught to the Princes in ancient India.

2.3 Evolution of Military Studies

From Vedic times to modern India, a number of changes happened as we have learnt in history. With the Muslim invaders came the Islamic system of learning in Maktabas and Madarsas. After the Muslims came the British. They brought the English method of teaching and organising schools and colleges. While both, the Muslims and the British encouraged higher education, the concept of educating soldiers and officers of the military also changed with time.

The British set up specialised academies for training officers. Training centres for soldiers were established at different places. Teaching in military studies became different for soldiers and officers. It was no longer a common academy for both the soldier and the officer. For officers Indian Military Academy was established and for soldiers Regimental centres at various locations were opened.



Note

2.3.1 Military Education in Medieval India

We have seen how soldiers were trained in the art of fighting in ancient India. Let us see what changed came when Muslims invaded India and established Mughal rule. What changed during Mughal rule and in the rest of India ? Major changes were:-

- Use of fire arms;
- Use of artillery or guns;
- Use of horse cavalry and archers on horse back;
- Changes in tactics in the battlefield.

Because of these changes, the subjects changed. With a change in subjects the teaching methods and places of training also changed. For example, in olden times any open field could become a school. With the advent of firearms and guns, large areas were identified to train soldiers where specialised facilities like firing ranges were established. Why were large areas required for training in artillery guns? The need for safety from firearms and the longer distance to which guns could aim and fire, were the reasons for the requirement of large areas.

2.3.2 Stages of Training in Armies

In the medieval period, training of the army consisted of three parts -

THREE TIER TRAINING OF ARMIES IN THE MEDIEVAL AGE

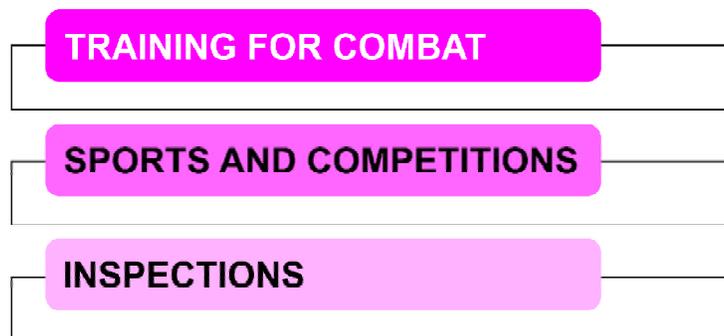


Table 2.1 - Training Structure

- (a) **Training for Combat** : Combat training was organised for individual soldiers as well as for the army units. This training also included games that helped in combat. The army had to be alert and ready at all times for war.

Therefore, their training was continuous and it was part of daily routine for the soldiers to train for battle. The basic training for combat consisted of the following types of training:-



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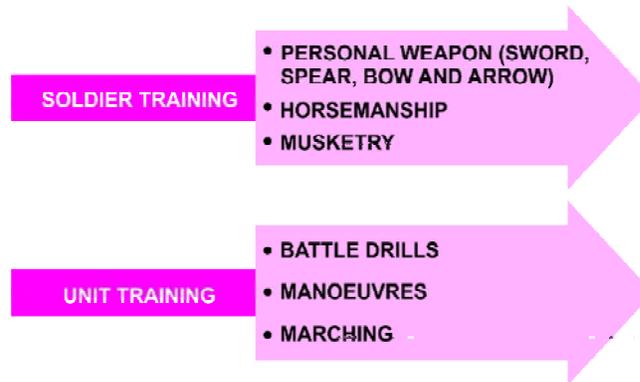


Table 2.2 - Types of Training

(b) **Sports and competitions** : Armies the world over believe that sports is a very useful form of training a soldier for battle. The influence of sport was crucial for instilling a warrior ethic and team spirit. The virtues displayed on the sporting field were also the ideal virtues of a soldier. The games and competitions organised were:-

- (i) Armed and Unarmed combat;
- (ii) Archery; horse racing and chariot racing;
- (iii) Boxing, Wrestling and swimming competitions;
- (iv) Hunting.

(c) **Benefits of Games :**

1. Build essential virtues of Strength, Courage, Chivalry and fair play
2. Instil fighting spirit and ability to win
3. Mental Fitness - Quick Thinking
4. Build Camaraderie among Troops and Officers

(d) **Inspections** : A well organised kingdom had good practices of keeping its army trained and ready for war always. It was also necessary to carry out inspections to check their state of readiness. Inspections by the King, Minister in charge of army and the Senapathy were conducted periodically.

During such inspections, some sort of drill and manoeuvres by the army units were shown to the inspecting officer. The commanding officers were also expected to show proficiency in basic military skills like horsemanship, archery and musketry, and their troops were supposed to practice with their weapons regularly.

2.3.3 Military Education in British India

'There is not a country' wrote Thomas in 1891 'where the love of learning had so early

an origin or has exercised so lasting and powerful an influence'. According to him 'The English found in India, a widespread style of elementary education and higher education, of which the former was mainly practical while the latter mainly literary, philosophical and religious.

For about 150 years, the British were involved in trade and conquest in India. The educational training of the Indian troops started with the establishment of the East India Company. The beginning of an educational system for the army in India can be traced to the establishment of the British Regimental Schools, which provided training to the British troops.

Some of the British Regiments had brought the sergeants who were called "The School Master", along with them for the purpose of imparting instructions to their troops. But the number of schoolmasters and mistresses were negligible in proportion to the strength of the troops. As a result, the commanding officers were permitted to appoint educationally qualified non-commissioned officers as acting masters. Thus, a new system of formal education of troops was started.

2.3.4 Education under the Crown

From 1774 to 1785 British East India Company opened a number of regimental centres for British and European troops. The East India Company did not bother too much about educating Indian sepoys. However, after the 1857 mutiny, the Queen took over the reigns as new ruler of India, from The East India Company. New and more army units with native Indian sepoys were raised. Far reaching changes took place in army education under the Crown. These were as follows:-

- (a) Aims and objectives of educational training were defined for the first time.
- (b) Organizational set up was worked out to keep pace with the developments of educational training from time to time.
- (c) Army certificates were introduced and linked with pay and promotion.
- (d) Roman Urdu was adopted as the medium of instruction for the army.
- (e) Training directives were issued for implementation of the educational training.
- (f) Army Educational Corps was raised in 1921 to train instructors for the British and Indian troops.

2.3.5 Indianization of Military Training

During the pre-independence period, the Indian army had a two fold pattern of training. The soldiers were recruited from different regions such as Punjab, Tamil Nadu, Bihar, etc. Each of these regiments had Regimental Centres where the troops received formal education and training. Separate Academies were built for officers.



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Apart from these centres, a number of schools were also set up. These were:-

- Rashtriya Indian Military College, Dehradun was founded in March 1922. This college provided basic school education and physical training for those who wanted to become officers in the Indian Armed forces.
- Chail Military School (oldest military school) was established in February 1922.
- Ajmer Military School
- Belgaum Military School
- Dholpur Military School
- Sainik Schools were opened in each state as feeder institution for National Defence Academy, Pune after 1962 war.



ACTIVITY 2.2

Use the internet and see the link given to understand the history of sports.

<https://www.theatlantic.com/video/index/552878/history-of-sports/>

Make a brief report of about one page.



Intext Questions

2.3

1. In the Islamic system of education the schools were called _____ and _____.
2. What were the subjects taught in Military studies to the soldiers in Medieval India?
3. Describe the three-tier training for armies in Medieval India.



What You Have Learnt

- Concept of learning Military Studies in Ancient India was through the system of Ashrams and Gurukul.
- There were specialised schools for combat training.
- Games were considered important part of a soldier's life. It helped in physical fitness and in increasing battle skills.
- Soldiers were trained in individual skills as well as collectively as a unit. Battle drills and manoeuvre were taught and practiced everyday.
- The training of soldiers for war changed with time and with invention of new weapons and ammunition.
- In the medieval period, Muslim system of education was followed. However, army training was done as a three-tier system.

- British India changed the form of training army sepoys. The system of education of soldiers was formalised. Regimental centres became the backbone of soldier training.
- British also started a number of military schools for basic education of children wanting to join the army.



Terminal Exercises

1. Explain the importance of physical education for the army.
2. Explain the meaning of "collective Training".
3. Differentiate between Soldier training and unit training, followed in Medieval India.
4. Name any four schools started by the British for children.
5. State the benefits of games in military.



Answers to Intext Questions

2.1

1. (a) It was a residential school;
(b) The Guru and student stayed together;
(c) Military related subjects was taught by the Guru.
2. Takshashila, Nalanda and Vallabhi schools.
3. Kalari.
4. 10 years.

2.2

1. Mahendrasthana.
2. Dhanurveda, Nitishastra, Siksha (lore) of elephants and chariots

2.3

1. Maktabas and Madarsas.
2. (a) Personal weapon(sword, spear, bow and arrow)
(b) Horsemanship
(c) Musketry

Module - I

Military Studies



Note

Module - I

Military Studies



Note

3. (a) Training for combat
- (b) Sports and Competitions
- (c) Inspections



Note

3



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NEED OF MILITARY STUDIES TODAY

In the previous lesson, you have learnt the concept and evolution of military studies through the important periods of our history. The changes in military education from ancient ages to modern times was a result of improvements in weapons and changes in warfare techniques. Science and technology played an important role in this transformation of the armies.

Today we see modern weapons and newer forms of warfare. Powerful nations are trying to dominate the weaker nations. There is terrorism and insurgency, cyber warfare and natural disasters to deal with. In an anarchic world, armies have to be prepared all the time to fight a battle. Governments must understand use of force to overcome situations affecting national security.

Therefore the subject of military studies has not only become very important but also complex. In this lesson you will learn the changes in the army, its weapon systems and how it has impacted warfare.



Objectives

After studying this lesson, will be able to:

- assess the need for transformation of the armies;
- explain the transformation of training of the army and
- examine the modern system of training Armed Forces.

3.1 Transformation of Armies over the Ages

Armies changed with time. There were new discoveries and man understood the use of metals such as iron, copper, etc. He made an alloy called bronze. With the discovery of metal, he made weapons of metal which were more lethal and it could also be made in different shapes. Thus armies changed old methods & evolved new tactics and methods to fight their enemies. See figures below to learn the different types of weapons:



Note



Fig. 3.1 Weapons Through the Ages

3.1.1 Transformation in Warfare

A study of military history will tell you how warfare had changed with time. In the ancient age, it was the 'Chaturangabala' force consisting of Cavalry, Elephant, chariots and infantry. Warfare was a series of set piece battles at a pre defined battle ground. While armies used various strategies and tactics to win a war, the fighting per se was static in nature.

Over the years, as metallurgy improved, new weapons were introduced. The chariots were not seen in battle in the medieval age. Cavalry was the arm used for speedy movement of troops to surprise the army. It allowed attack from unexpected directions and therefore was the most used in this age. As science improved, we saw the introduction of wheeled vehicles, guns and ammunitions.

The Mughals used guns extensively to win battles. A soldiers personal weapon of sword, bow & arrow/spear were replaced by rifles and machine guns in the nineteenth century. World War I & II was the turning point for new forms of warfare when trench

war fare was introduced. See Table 3.2 below to get a perspective of the changes that have happened over different periods.

PERIOD	TYPE OF ARMY	TYPE OF WARFARE	WEAPONS
ANCIENT AGE	Chaturangabala	static or positional	swords, spears, bow & arrow etc.
MEDIEVAL AGE	infantry, cavalry, artillery	positional as well as manoeuver	swords, bow & arrow, guns
BRITISH ERA	cavalry, infantry, artillery, signals, engineers, Airforce, Navy	Maneuver, air and naval warfare	Tanks, Artillery, Rifles, Machine guns, Bombs, Torpedos, Missiles & Rockets.
MODERN DAY	Special forces, army, navy and air force	Diplomatic war, Terrorism, Insurgency Hybrid warfare not contact warfare	Drones, missiles, nuclear weapons, Helicopters, Air defence weapons

Table 3.2 - Transformation in Warfare

3.1.2 Impact of Technology on Warfare

Science changed the nature of warfare due to newer inventions. The important discoveries by man that revolutionised warfare were as follows:-

- Metals and wheel (Ancient age);
- Gun Powder (Medieval age);
- IC engines (motor cars, railway engines, tanks)
- Aircraft
- Naval battle ships, submarines, torpedoes;
- Missiles;
- Wireless communication;
- Nuclear bomb;
- Improvised Explosive Device (IED);
- Drones



Note

Military Studies



Note

What we saw was just the impact of technology on weapons. As part of the modernisation and changes in the armies, the organisation also changed. Some of the new branches in the army were the Engineers, Signals, Army Supply Corps, Army Ordnance Corps, Intelligence, Air Defence, etc. Obviously, each of these arms had its own specialisation.

The soldiers and officers had to be trained to handle the role and responsibility of that corps. Army, Navy and Air Force have to now fight together to win wars. This gave rise to Tri-Service organisations and Tri-Service training.



Intext Questions

3.1

1. Name any three weapons of a modern day soldier.
2. What was the type of armies in the British Era?



ACTIVITY 3.1

- a. Use the internet and see the link given to understand the history of weapons.
<https://www.theatlantic.com/video/index/393683/a-brief-visual-history-of-weapons/>
Download and print/draw at least two weapons each, used in ancient, medieval and modern India.
- b. From the diagrams given below differentiate between the skills that ancient soldier had to learn and those that a modern soldier has to master to fight a battle.

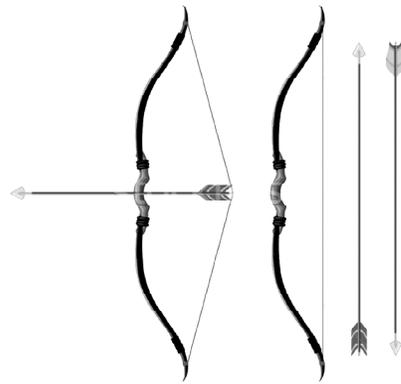


Spear Wapon



Talwar

Source-<https://www.indianetzone.com/photosgallery/51/talwar.jpg>



Note

3.2 Transformation in Training

You have already learnt how a soldier was trained in the ancient age and in medieval era. During the British period, armies were modernised and became more mobile. The new methods of fighting and modern weapons made it necessary to change the subjects being taught. What aspects of the army changed during the period before World War II ?

- Army became Armed Forces with the raising of Air Force and Navy.
- Training in Military subjects became specialized to each of the three wings of armed forces - Army, Navy and Air Force.
- Re-organization of army was done to suit the new methods of battle. Army raised additional arms such as Combat Engineers (building bridges and roads, clearing obstacles, etc), Signals (telecommunication).
- The standard infantry had rifles, machine guns, guns, mortars, Anti Tank Missiles. Cavalry became an arm with battle tanks. Artillery had long-range guns and rockets, self-propelled guns.
- The basic soldier training of skill at arms was the same, except that the subject became complicated and intense. A rifle replaced the sword.
- All three services of Army, Navy and Air Force have to fight the war together. Hence Tri-service training was introduced.

3.2.1 Changes in Training the Army

You have seen in the previous lesson how soldiers were trained and taught military skills in the Ashrams and Gurukuls. As the armies transformed and acquired greater capabilities, the method of training also changed. Let us see in a tabular form what were the changes in the subjects taught to the soldiers.



Note

Subject	Ancient Soldier	Modern Soldier
Skill at arms	Fighting with a sword/spear/bow&arrow	Aim and shoot with a rifle, machine gun, pistol, sub-machine gun
Parts of weapon	Parts of sword/spear	Larger number of parts of rifle/machine guns/ guns/tanks
Maintenance	Sharpening swords and arrows, cleaning spears, swords, shield	Specialized cleaning of moving parts, maintenance of Metal, wooden/ plastic parts; safe storage of weapon; maintenance of ammunition etc.
Physical training, Sports and Games	Yes	Yes
Special subjects	None	Use of small arms weapons, different types of ammunition guns, machine guns, faults rectification, communication devices, construction of bridges.



ACTIVITY 3.2

- Look up the internet and list the type of weapons used by infantry soldiers in World War I.
- Compare the list with the infantry weapons of World War II.

3.3 Modern System of Training Armed Forces

3.3.1 School System

In the previous lesson you learnt about the Indianisation of military education wherein, the raising of Military schools was highlighted. The Sainik Schools were established after 1962 and one managed by the Sainik Schools Society under Ministry of Defence. as feeder institutions for National Defence Academy, Pune.

They were conceived by V. K. Krishna Menon, the then Defence Minister of India, to rectify the regional and class imbalance amongst the Officer cadre of the Indian Military, and to prepare students for entry into the National Defence Academy (NDA), Khadakwasla, Pune and Indian Naval Academy. Today there are 26 such schools covering all the states of the country.

3.3.2 National Cadet Corps (NCC)

Further, at the school and colleges, the system of NCC was established. The NCC in India was formed with the National Cadet Corps Act of 1948. It was raised on 15 July 1948. It is a Tri-Services organization, comprising the Army, Navy and Air Force, engaged in grooming the youth of the country into disciplined and patriotic citizens.

The National Cadet Corps in India is a voluntary organization, which recruits cadets from high schools, colleges and universities all over India. The Cadets are given basic military training in small arms and parades.

The officers and cadets have no liability for active military service once they complete their course but are given preference over normal candidates during selections based on the achievements in the corps. You would be surprised to know that, during the Indo-Pakistani war of 1965 & 1971, NCC cadets were responsible for the second line of defence. They organized camps to assist ordnance factories, supplying arms and ammunition to the front and were also used as patrol parties to capture enemy paratroopers.

The NCC cadets also worked hand in hand with the Civil defence authorities and actively took part in rescue works and traffic control. The NCC has a lady's wing, which gives equal opportunity to women to take part in all activities of the NCC.

3.3.3 Specialised Academies

As you have seen the transformation of the modern army with an airforce and naval component and superior weapons, the training also became specialised. Each wing of the armed forces had a set of academies to train their personnel.

- (a) **Soldier Training** - Army has regimental centres where the recruits and soldiers of a regiment are trained. In addition, training academies train personnel in specialised aspects of the respective corps/branch of the army. Unlike the army regimental centres, the Navy and the Air Force have various academies for training their personnel in each of its branch.
- (b) **Officer Training** - Officers of each of the three services undergo basic training after school at The National Defence Academy, Khadakwasala, Pune. Those who graduate from civil colleges are also trained at the Indian Military Academy



Note



Note

(IMA)/ Naval Academy/ Air Force Academy and The Officers Training Academy(OTA).

A tabulation of some of the training establishments of the Indian Armed Forces is given below.

Feeder Institutions	
EDUCATION & TRAINING	<ul style="list-style-type: none"> • Sainik Schools • Military schools • Rashtriya Indian Military College (RIMC)
TRI SERVICE	<ul style="list-style-type: none"> • National Defence Academy • Defence Services Staff college • National Defence College
INDIAN ARMY	<ul style="list-style-type: none"> • Officers Training Academy • Army War College • College of Military Engineering • School of Artillery • Counter Insurgency and Jungle Warfare School • Indian Military Academy • Infantry School • Armed Corps Center & School
INDIAN NAVY	<ul style="list-style-type: none"> • Indian Naval Academy • INS Chilka (sailor training) • INS Satvahana (Submarine training) • INS Garuda (naval aviation training)
INDIAN AIR FORCE	<ul style="list-style-type: none"> • Airforce Academy • Airforce Technical College • Airforce Administrative College

Table 3.4 - Military Training Establishments of India

**Intext Questions****3.2**

1. In which year were the Sainik Schools started in India?
2. National Cadet Corps Act was promulgated in the year _____.
3. Name any three Military Schools in India.

**What You Have Learnt**

- Military studies changed over the ages due to changes in military organization, introduction of newer weapons and due improvement in science and technology.
- Method of warfare also changed due to the changes in weapon system and the organizational changes.
- Changes were made in the subjects being taught to a soldier. The curriculum of military studies adapted to the changes in warfare and weapons.
- There was a transformation in training a soldier in India.
- National Cadet Corps (NCC) was created in 1948 with the aim of training the youth of the country on basics of army training.
- Schools like Sainik schools and Military schools were established. Academies for specialized training, as per new organization of the Army, Air Force and Navy was created.
- Each wing of the Armed Forces had its own Academies as per their respective requirements to learn and train the soldiers and officers.

**Terminal Exercises**

1. Explain the impact of technology on weapons? Name any five changes in weapon system that changed the nature of warfare.
2. Describe the changes in the type of warfare from Medieval age to British and modern era.
3. What is meant by Specialised academies for training personnel of the armed forces?
4. Describe the modern system of schools for training students to enroll into the armed forces in India.
5. Explain the features of The National Cadet Corps.

Module - I**Military Studies****Note**



Answers to Intext Questions



Note

3.1

1. Machine guns, Missiles, Guns and Tanks.
2. Cavalry, Infantry, Artillery, Signals, Engineers, Airforce, Navy.

3.2

1. 1961
2. 1948
3. Sainik Schools, Military schools and Rashtriya Indian Military College or Chail Military School (oldest military school) was established in February 1922, Ajmer Military School, Belgaum Military School, Dholpur Military School



4



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ARMED FORCES

The soldiers are faced with a variety of challenges including the difficult areas like icy glaciers, sandy deserts, mountainous jungles and the vast seas. They willingly face these challenges and are prepared to make any sacrifice for the Nation.

The values of comradeship and brotherhood pervade all ranks of the army. The soldiers lay down their lives for the three Ns - Naam (name or honour), Namak (loyalty to the Nation) and Nishan (insignia or flag of the unit/regiment or Nation). They exhibit valour when fighting the enemy. There is no discrimination on the basis of caste, religion or any other aspect. This ensures team spirit and unity. They usually choose death over dishonour. The forthrightness, integrity and dignity forms the ethos of every soldier.

In this lesson we shall learn about the different Commands of the Indian Army in greater detail as well as the Ethos of the armed forces. Before we look at the organisational structure we shall examine the ethos of the Indian Army.



Objectives

After studying this lesson, you will be able to:

- explain the role and organisational structure of Indian Army;
- describe the role and structure of Indian Navy and
- explain the role and organisational structure of Air Force.

4.1 Role of the Indian Army

The Indian Army mainly has the task to protect the territorial integrity of our country and safeguard its sovereignty from external aggression or internal disorder. The army also provides assistance to the civil administration in the event of a natural or manmade disaster. The Indian Army also participates in UN peace keeping missions by sending troops. The Indian Army maintains a high standard of operational preparedness to play any of the roles mentioned here.

Structure and Role of the Forces



Note

4.1.1 Structure of the Indian Army

The Indian Army is organised into 7 commands with 6 operational commands and one training command. These are Western Command, Eastern Command, Northern Command, Southern Command, South Western Command, Training Command, Central Command.



Fig 4.1 : Western Command (Headquarters - Chandimandir)



Fig 4.2 : Eastern Command (Headquarters - Kolkata)



Fig 4.3 : Northern Command (Headquarters - Udhampur)



Note



Fig 4.4 : Southern Command (Headquarters - Pune)



Fig 4.5 : South-Western Command (Headquarters - Jaipur)



Fig 4.6 : Training Command (Headquarters - Shimla) - It is the only non operational command as it has all service training institute under it.



Fig 4.7 : Central Command (Headquarters - Lucknow)

Each Command is headed by a General Officer Commanding in Chief (GOC-in-C). His rank is Lieutenant General.



Note

4.1.2 Sub Divisions of the Army

The Army has further sub divisions where the soldiers are grouped into a fighting force. The combat arms are infantry and armed corps others are combat support arms and services unit. Infantry is organised as under:

Section : 10 soldiers make a Section

Platoon - 3 sections make a Platoon headed by a JCO (Junior Commissioned Officer)

Company - Three Platoons make a Company headed by a Company Commander who is a Major or Lt.Colonel in rank.

Battalion - Four companies make a Battalion. This is the main fighting unit of infantry and is commanded by a Battalion Commander in the rank of Colonel.

Brigade - Three battalions form a Brigade and commanded by Brigade Commander, a Brigadier rank officer.

Division - Three to four Brigades make up a Division headed by a Major General who is termed GOC (Division Commander). The Indian Army today has 37 divisions including Infantry, Mountain, Armoured, Artillery and Re-organised Army Plains Infantry Division or RAPIDS.

Corps - Three to four divisions make up a Corps. A Lieutenant General heads the Corp as GOC (Corps Commander).

Command- Each command is led by General Officer Commanding-in-Chief with the rank of Lieutenant General. India has 7 Commands of which six are operational commands and one training command called ARTRAC (Army Training Command)

India also has tri aservices commands, namely the Strategic Forces Command, Integrated Defense Staff (IDS) and the Andaman and Nicobar Command. These are headed by Army Navy and Air Force officers on a rotational basis.

4.1.3 Organization of the Indian Army

Indian Army is organized in two parts - Combat Arms and Services.

Combat Arms

This is the fighting forces of the Army. This comprises :

1. **Armoured Corps** - This has replaced the cavalry or horses in Indian Army. It is one of the main fighting arms of the modern army. It consists of tanks as its main weapons. They also provide vital support to the Infantry (foot soldiers) by providing cover when they are attacking the enemy positions.
2. **Mechanized Infantry** - Mechanised Infantry is the latest arm of the Indian Army.



Note

3. **Infantry** - These are fighting troops who attack and occupy captured ground. It is the most important and largest branch of the fighting forces in the Indian Army.

It is supported by combat support arms which are:-

- **Artillery** - The guns that provide fire power are under the Artillery. They are used to destroy the defences of the enemy and give infantry fire cover to capture enemy positions.
- **Corps of Engineers** - Also known as Sappers, these are Engineers who perform the operations like laying and clearing of mines, constructing bridges, roads and handling explosives. Their motto is SARVATRA or Everywhere. They are very important in increasing the mobility of the army units.
- **Corps of Army Air Defence** - The Air Defence has become imminent after the change in the character of the battlefield with the introduction of aircraft.

Their motto is Akashe Shatrun Jahi (Defeat the Enemy in the Sky).

- **Army Aviation Corps** - Adopting the motto Suveg Va Sudrid, the youngest of the Indian armed corps has helicopter which can operate in different terrains, climatic conditions and other challenges. It can utilise the ability to observe the enemy deep inside its own territory.
- **Corps of Signals** - In this information age, armies have to strengthen existing information communication and technology networks, ensure connectivity to soldiers in remote locations and provide cyber security in both peace time and in war. This is fulfilled by the Corps of Signals. Their motto is Teevra Chaukas or Intense Alertness.

Services: Apart from the Combat and Combat support Arms, the remaining army is organised under the services. Their main task is to provide logistical (arms, ammunition, rations etc.) material to the army.

The Services include the following departments:

1. Army Service Corps
2. Army Medical Corps
3. Army Dental Corps
4. Army Ordnance Corps
5. Corps of Electronics and Mechanical Engineers
6. Remount and Veterinary Corps
7. Military Farms Service
8. Army Education Corps
9. Corps of Military Police

Structure and Role of the Forces



Note

10. Pioneer Corps
11. Army Postal Service Corps
12. Intelligence Corps
13. Judge Advocate General's Department
14. Military Nursing Service



Intext Questions

4.1

1. Explain the meaning of three Ns close to a soldier's heart.
2. Name the place where Training Command of the Army is located. Explain its task.
3. What is meant by a Battalion?
4. Explain the role of Corps of Army Air Defence.

4.2 Indian Navy

The Indian Navy's motto is (शं नो वरुणः) or May the Lord of the Oceans be auspicious unto us. It is bestowed with the task of safeguarding the seas that surround peninsular India.

4.2.1 Role of the Navy

There are four roles which not only includes war fighting at sea but increasingly disaster relief, rescue and humanitarian assistance.

The Navy is not only mandated to exercise naval power against the enemy but also to defend Indian territory and maritime trade.

Naval Diplomacy is an important role of Navy where it furthers international cooperation through joint naval exercises, and ship visits to friendly countries.

Constabulary relates to the ability of the Navy to maintain law and order at sea by preventing crimes like piracy.

Benign role - Though the Navy is a military unit it performs important non military tasks too. These include:

Humanitarian Assistance and Disaster Relief like shipping people away from troubled areas; transporting essential supplies to places affected by natural calamities like floods, cyclones and earthquakes;

Search and Rescue (SAR) of boats and personnel in distress;

Hydrographic surveys and mapping of coastal and ocean territory for other countries too.

4.2.2 The Structure of Indian Navy

The Indian Navy is divided into three commands



Fig 4.9 : Western Naval Command with headquarters at Mumbai



Fig 4.10 : Eastern Naval Command having headquarters at Vishakapatnam.



Fig 4.11 : Southern Naval Command with headquarters at Kochi.

Each Naval Command is headed by a Flag Officer Commanding in chief (FOC-in-C). His rank is Vice Admiral.

4.2.3 Organisation of The Indian Navy

The Navy is broadly divided into the following branches:



Note

Structure and Role of the Forces



Note

- Executive
- Engineering
- Logistics
- Education
- Medical

The Officers of the Navy will be employed in a variety of roles requiring specialised knowledge and training in the various branches namely executive, communication, navigation, logistics etc.



Intext Questions

4.2

1. Write the motto of Indian Navy.

2. At which place is the headquarters of the Eastern Naval Command located?

3. Describe the different tasks under the benign role of the Indian Navy.

4.3 The Indian Air Force

The Indian Air Force is the fourth largest in the world. It consists of modern aircraft and a well trained flying force that can safeguard the skies for our nation's security.

4.3.1 Role of the Indian Air Force

The main role of the Indian Air Force is to secure Indian air space and protect it from intruders. The Air Force is also tasked to undertake air warfare during conflicts. They also play a vital role in deploying troops to remote areas and assisting in logistics. They provide air support to the other arms namely Navy and Army in their operations too.

From a humanitarian point of view, rescue of civilians in times of crises and disaster is also a principal role of the Indian Air Force. Air lifting or evacuating Indian nationals from other countries in times of civil war or other calamities is also performed by the IAF.

President, Vice President or Prime Minister, Defence Minister are also provided transport facilities by Indian Air Force.

4.3.2 Structure of the IAF

The Indian Air Force is divided into three branches namely Flying Branch, Technical Branch, and Ground Branch.

The Indian Air Force is divided into five operational commands and two functional commands. The functional commands are the Training Command at Bangalore and the Maintenance Command at Nagpur. The principal task of the Functional commands is to keep the men and machines (aircraft) ready for war. The Training includes flight training (training in operating different aircraft); specialised advanced training for MIG and other fighter aircraft; helicopter training and transport Air Craft training.

The five operational commands are :



Fig 4.12 : Central Air Command - HQ Allahabad, Uttar Pradesh



Fig 4.13 : Eastern Air Command HQ Shillong, Meghalaya



Note

Structure and Role of the Forces



Note



Fig 4.14 : Southern Air Command HQ
Thiruvananthapuram, Kerala



Fig 4.15 : South Western Air Command HQ
Gandhinagar, Gujarat



Fig 4.16 : Western Air Command HQ Delhi

"Two additional commands of the Air Force which are responsible for training and maintenance of the fleet are:"



Fig 4.17(a) Air Force Training Command, Bangalore Fig 4.17(b) Maintenance Command, Nagpur

The Commands have Air Force Stations or bases in a variety of locations.

Each Command is headed by an Air Officer Commanding in Chief (AOC-in-C). This is held by an Air Marshal.

4.3.3 Organization of the Indian Air Force

Similar to the army, the Indian Air Force has self sufficient fighting units. Each of these units are grouped into larger force and placed under a Command. Under each command the sub divisions are as follows:-

Section - This is the smallest unit in the Air Force. Three aircraft make a Section. It is commanded by a Flight Lieutenant.

Flight - Two sections make a Flight. A Flight is headed by a Squadron Leader.

Squadron - Squadrons are of two types Flying Squadron and Transport Squadron. Three Flights make a Squadron. There are 18 aircraft in a fighting squadron headed by a Commanding Officer who is of the rank of a Wing Commander/Group Captain. However a Transport Squadron is headed by a Group Captain.

Wing - Two or three squadrons make a Wing. The wing is usually located at an Air Force Station. The Wing is commanded by an Group Captain/Air Commodore.

Station - One Wing and one or two squadrons make a Station. It is commanded by an Air Commodore. Larger stations are commanded by an Air Vice Marshal.

Command - An Operational Command can have nine or 16 bases or stations.



Intext Questions

4.3

1. How many Operational Commands does the Indian Air Force have?

2. Explain the term 'squadron'.

3. Explain the role of the Indian Air Force.



What You Have Learnt

- Indian Army is organised in two parts. Combat Arms and Services. Combat Arms is the fighting forces of the army and comprises (i) Armoured corps (ii) Mechanised infantry (iii) Infantry. Apart from combat arms remaining army is organised under the services. Services include (i) Army Service Corps (ii) Army Medical Corps (iii) Army Dental Corps (iv) Army Ordnance Corps (v) Corps of Electronics and Mechanical Engineers (vi) Remount and veterinary corps (vii) Military Farms Service (viii) Army Education Corps. (ix) Corps of Military Police



Note

Structure and Role of the Forces



Note

(x) Pioneer Corps. (xi) Army Postal Services Corps. (xii) Intelligence Corps (xiii) Judge Advocate General's Deptt. (xiv) Military Nursing Service.

Motto of the Indian Navy is "Sham No Varunah". It also fights for the secretary of the country and plays important role during natural disasters and rescue operation. Indian Navy is divided into three commands.

- Indian Air Force is the fourth largest in the world. It has been divided into five operational and two functional commands.
- Organisation of the Air Force starts with section, flight, squadron, wing, station.



Terminal Exercises

1. Describe the various divisions of Indian Army.
2. Explain the various roles of the Indian Navy.
3. Explain the organisational structure of IAF.



Answers to Intext Questions

4.1

1. Naam (name or honour), Namak (loyalty to the Nation) and Nishan (insignia or flag of the unit/regiment or Nation)
2. Training Command is located in Shimla. It is an all-service training institute.
3. Four companies make a Battalion. This division is the main fighting unit of the army and is commanded by a Battalion Commander in the rank of Colonel.
4. The Air Defence has become imminent after the change in the character of the battlefield with the introduction of aircraft. Their motto is Akashe Shatrun Jahi (Defeat the Enemy in the Sky). They follow the principle of "First In last out" meaning they would provide initial cover to the fighting units and attack important enemy assets while guarding our own.

4.2

1. शं नो वरुणः or May the Lord of the Oceans be auspicious unto us.
2. The Eastern Naval Command is located at Vishakapatnam
3. Under the benign role the Indian Navy performs the following tasks:
 - Humanitarian Assistance and Disaster Relief like shipping people away from troubled areas; transporting essential supplies to places affected by natural calamities like floods, cyclones and earthquakes;

- Search and Rescue (SAR) of boats and personnel in distress
- Hydrographic surveys mapping out coastal and ocean territory for other countries too.

4.3

1. The main role of the Indian Air Force is to secure Indian air space and protect it from intruders. The Air Force is also tasked to undertake air warfare during conflicts. They also play a vital role in deploying troops to remote areas and assisting in logistics. They provide air support to the other arms namely Navy and Army in their operations too.

From a humanitarian point of view, rescue of civilians in times of crises and disaster is also a principal role of the Indian Air Force. Air lifting or evacuating Indian nationals from other countries in times of civil war or other instability is also performed by the IAF.

President, Vice President or Prime Minister, Defence Minister the one provided transport facilities by Indian Air Force.

2. The Indian Air Force has Five Operational Commands.
3. Three Flights make a Squadron. There are 18 aircraft in a fighting squadron headed by a Commanding Officer who will be of the rank of a Wing Commander. However a Transport Squadron may be headed by a Group Captain.

Module - II

Structure and Role of the Forces



Note

Module - II

Structure and Role of the Forces



Note



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5

SPECIAL FORCES

In this lesson you will learn more about the special tasks performed by these forces, the training required for it and the importance of this elite force.

Warfare involves myriad styles of engagement - on sea, in the air, on the ground, engaging in subversive activities by special forces deep within enemy territory without the enemy's knowledge. Special Forces emerged in the early 20th century, with a significant growth in the field during the Second World War, when every major army involved in the fighting created formations devoted to special operations behind enemy lines.



Objectives

After studying this lesson, you will be able to:

- explain the history of special forces globally;
- explain the history of Indian Special Forces and
- describe the detailed structure of other special forces.

5.1 History of Special Forces Globally

Special Forces are military units trained to conduct special operations. Special operations as military activities conducted by specially designated, organized, trained, and equipped forces, manned with selected personnel, using unconventional tactics, techniques, and modes of employment. Thus, Special Forces are not only elite and also special as they are used for specialised combat tasks, conducting missions that general-purpose forces either cannot perform or not with acceptable levels of risk and costs.

Often, Special Forces are confused with units that perform covert operations for intelligence organizations, operating under different authorities and employing different skill sets in order to keep the sponsorship of the units and their activities hidden. Sometimes elite military units are used to perform special operations, and sometimes Special Forces are loaned to intelligence organizations to perform covert operations.

Special Forces have played an important role throughout the history of warfare, whenever the aim was to achieve disruption by "hit and run" and sabotage, rather than through more traditional conventional combat. Other significant roles lay in reconnaissance, providing essential intelligence about the enemy and increasingly in combating irregular forces, their infrastructure and activities.

The British Army deployed two Special Forces during their border wars: the Corps of Guides formed in 1846 and the Gurkha Scouts (a force that was formed in the 1890s and was first used as a detached unit during the 1897-1898 Tirah Campaign). During the Second Boer War (1899-1902) the British Army felt the need for more specialised units.

Scouting units such as the Lovat Scouts, a Scottish Highland regiment made up of exceptional woodsmen outfitted in ghillie suits and well practised in the arts of marksmanship, field craft, and military tactics filled this role. This unit was formed in 1900 by Lord Lovat and early on reported to an American, Major Frederick Russell Burnham, the Chief of Scouts under Lord Roberts. After the war, Lovat's Scouts went on to formally become the British Army's first sniper unit. Additionally, the Bushveldt Carbineers, formed in 1901, can be seen as an early unconventional warfare unit.

5.2 History of Indian Special Forces

The history of Indian Special Forces revolves around raising of Parachute battalions by the British Indian Army and subsequently formation of Parachute Regiment in 1952. The Regiment's successfully conducted of airborne operation's and commando raids across the borders. Indian Army had commando battalions. Later these units were designated as special forces and are tasked with specialised tasks behind the enemy positions.

During 1971 conflict, a need for Naval component of Special Forces was felt after experimenting with amphibious operations (Operation Jackpot) where an amphibious landing was planned at Cox Bazaar (then Pakistani Naval Base, now Bangladesh). Marine Commandos (MARCOS) who are patterned on the lines of SEALs of USA were raised after this experience.

After the assassination of the erstwhile Prime Minister, Mrs Indira Gandhi a decision to raise a force under Ministry of Home (MHA) was taken. Besides security of VVIPs it was envisaged that this newly raised force would also cater for element of CT, anti-hijacking and anti-kidnapping.

Consequently in 1984, National Security Guard was formed. NSG was carved out of Special Group and like its creator it too, was, and is, manned by troops of Indian Army (IA), essentially from infantry.

**Note**

Structure and Role of the Forces



Note

Formed in 2004, GARUDs of the Indian Air Force (IAF) are quite similar to the Royal Air Force Regiment (RAFR) of UK which was raised as a response to 'Blitzkrieg' during Second World War. Like RAFR the GARUD's primary task is to carry operations in the enemy territory in support of the ground battles.

5.3 Structure of the other Special Forces

The structure of Special Forces consists of the newly created '*Armed Forces Special Forces Division (AFSFD)*', which will function under the Integrated Defence Staff (IDS). This set up brings together all the SF units of the Army, Navy and Air Force under one commander. Presently, the new Division (AFSFD) is headed by a Major General of the Army. A brief description of all the SF units of the Indian Armed Forces are described in the following sections.

5.3.1 Parachute Regiment

The Parachute Regiment consisting of PARA and PARA (SF) battalions is the bulwark of conducting Special Operations in the country. It is also the single biggest contributor to almost all specialist units like the NSG, SG, Commando Battalion of Rashtriya Rifles (RR). The Regiment has its own training center which gets recruits from the regional recruiting centers of the Indian Army.

The unit was created in 1966 by the Indian Army. During the Indo-Pakistani War of 1965, a small ad hoc force comprising volunteers from most infantry units from North India under Maj Megh Singh of the Brigade of the Guards, operated along and behind enemy lines. The performance of this force made the powers that be sit up and take notice of the contribution and necessitated the raising of unconventional forces.

Forming the nucleus of the new force from the volunteers of the then disbanded Meghdoot Force, a battalion was raised to be part of the Brigade of Guards. Since paratrooping is an integral part of commando tactics, the unit was transferred to the Parachute Regiment. Raised in July 1966, 9th Battalion, The Parachute Regiment (Commando) was the first special operations unit. The list of PARA (SF) Battalions is:

- 1 PARA (SF) (raised 1961) converted to special forces.
- 2 PARA (SF) (ex-3 Maratha LI, converted to Special Forces)
- 3 PARA (SF) (ex-1st Kumaon, converted to Special Forces)
- 4 PARA (SF) (raised 1961, converted to Special Forces)
- 9 PARA (SF) (raised in 1966, the first dedicated Special Forces unit of the Indian Army)
- 10 PARA (SF) (raised 1967)

- 11 PARA (SF) (raised 2011)
- 21 PARA (SF) (raised 1996)

5.3.2 National Security Guard

The National Security Guard (NSG) is an Indian Special forces unit under the Ministry of Home Affairs (MHA). The NSG was established in the wake of 1984 Operation Blue Star. Since its raising the NSG has been used in the Punjab in 1986, and in Jammu and Kashmir. However it is not categorised under the uniform nomenclature of Central Armed Police Forces.

It has a Special Forces mandate, and its core operational capability is provided by the Special Action Group (SAG) which is drawn from the Indian Army. The Special Rangers Group (SRG), the police component of NSG, which also handles VIP security, is composed of personnel on deputation from other Central Armed Police Forces and State Police Forces. The NSG personnel are often referred to in the media as Black Cats because of the black dress and black cat insignia worn on their uniform.

5.3.3 Garuds

The Garud is an Indian Air Force unit which was unveiled in February 2004. It primarily protects Indian Air Force installations from terrorist attacks. Garud trainees undergo a 72-week probation training course, which is the longest among all the Indian Special Forces. The total duration of training before a trainee can qualify as a fully operational Garud is around three years. Garuds have diverse responsibilities.

Besides base protection force to protect airfields and key assets in hostile environments, some advanced Garud units are trained like Army Para Commandos and the Naval MARCOS to undertake missions deep behind enemy lines. During hostilities, Garuds undertake combat search and rescue, rescue of downed airmen and other forces from behind enemy lines, suppression of enemy air defence (SEAD), radar busting, missile and munitions guidance (lasing of targets) and other missions in support of air operations.

5.3.4 Marine Commandos

MARCOS (previously Marine Commando Force), is the special forces unit of the Indian Navy created for conducting special operations such as amphibious warfare, close quarter combat, counter-terrorism, direct action, special reconnaissance, unconventional warfare, hostage rescue, personnel recovery, combat search and rescue, asymmetric warfare, amphibious reconnaissance including hydrographic reconnaissance.

The MCF is specially organised, trained and equipped for the conduct of special operations in a maritime environment. MARCOS is short for Marine Commandos. The force has gradually acquired experience and a reputation for professionalism over



Note

Structure and Role of the Forces



Note

the three decades it has been in existence.

The MARCOS are capable of undertaking operations in all types of terrain, but are specialised in maritime operations in Jammu and Kashmir through the Jhelum River and Wular Lake, a 65 square kilometre freshwater lake. Some MARCOS personnel are also attached with the Army Special Forces units conducting counter-terrorism operations in the area.

The first batch of marine commandos qualified in February 1987. The exclusivity of the unit lies in its competence to operate in all three mediums namely Sea, Air and Land. The MCF is specially organized, trained and equipped for the conduct of special operations in a maritime environment. Personnel from unit are deployed round the clock from Kashmir for CI/CT ops to Goa, Somalia for anti-piracy operations. The unit has always been at forefront in providing diving / civil assistance during times of natural disaster. The core tasking of MARCOS include:-

- conducting clandestine attack against enemy ships, offshore installations and other vital assets behind enemy lines;
- supporting amphibious operations including pre-assault operations;
- conducting unconventional warfare;
- conducting surveillance and recce missions in support of military operations;
- conducting clandestine diving operations;
- conducting hostage rescue operations in maritime environment;
- combating terrorism in a maritime environment.



Intext Questions

5.1

1. Explain the meaning of Special Forces.

2. Describe the different capabilities of Special Forces.

3. Name the first PARA (SF) special operations unit. When was it raised?

4. Who are the Black Cats? Why are they called so?

5. Describe the different responsibilities of Garuds.

- 6 Explain the roles of MARCOS.



What You Have Learnt

- Besides the existence of regular armed forces divisions, a separate set of personnel trained for specific purposes are employed to conduct covert operations behind enemy lines. These are known as Special Forces.
- After the Second World War many countries raised and employed special forces. India has raised special forces battalions and a Parachute Regiment, an Air Force Special Forces unit known as GARUD as well as a marine operations unit called MARCOS.
- Each of these forces undergo rigorous and specialized training and are capable of performing a wide range of tasks designed to reduce enemy capabilities while also preventing them from launching attacks.



Terminal Exercises

1. Describe the history of Indian Special Forces.
2. Explain the structure of PARA (SF).



Answers to Intext Questions

5.1

1. Special Forces are military units trained to conduct special operations. These include military activities conducted by specially designated, organized, trained, and equipped forces, manned with selected personnel, using unconventional tactics, techniques, and modes of employment.
2. Capabilities of Special Forces are :
 - a. Reconnaissance and surveillance in hostile environments
 - b. Offensive action
 - c. Support to counter-insurgency through population engagement and support
 - d. Counter-terrorism operations
 - e. Sabotage and demolition
 - f. Hostage rescue
3. The 9th Battalion, Parachute Regiment (Commando) was the first special operations unit. It was raised in July 1966.



Note

Structure and Role of the Forces



Note

4. The National Security Guard (NSG) personnel are often referred to as Black Cats. This is because of the black dress and black cat insignia worn on their uniform.
5. GARUD primarily protects Indian Air Force installations from terrorist attacks including airfields and key assets in hostile environments by commando raids. They are also tasked to seal off weapons systems, fighter hangars and other major systems during intrusions and conflicts.
6. Conduct clandestine attack against enemy ships, offshore installations and other vital assets behind enemy lines.
 - To support amphibious operations including pre-assault ops.
 - To conduct unconventional warfare.
 - Conduct of surveillance and recce missions in support of military operations.
 - Conduct of clandestine diving operations.
 - To conduct hostage rescue operations in maritime environment.
 - Combating terrorism in a maritime environment.



6



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PARAMILITARY FORCES

A paramilitary force is a semi-militarized force whose organizational structure, tactics, training, subculture, and (often) function are similar to those of a professional military, but which is not included as part of a state's formal armed forces. Though paramilitary is not a military force, it is usually like military's light infantry force in terms of training, and organizational structure. Paramilitary force like B&F, which is for border guarding, comes under the Army during war and performs some functions of infantry.



Objectives

After studying this lesson, you will be able to:

- explain the meaning of paramilitary forces and
- describe the different types of paramilitary forces and their specific purposes.

6.1 Paramilitary Forces

Indian Paramilitary Forces refer to three organisations that assist the Indian Armed Forces closely and are led by officers of the Indian Army or Indian Navy. However, any law or rules of the Government have not defined them. Earlier, the term 'paramilitary' forces was used for eight forces:

1. Assam Rifles
2. Special Frontier Force
3. Indian Coast Guard
4. Central Reserve Police Force
5. Border Security Force
6. Indo-Tibetan Border Police
7. Central Industrial Security Force
8. Sashastra Seema Bal



Note

However, from 2011, they have been regrouped into two classes whereby the later six are called Central Armed Police Forces (CAPF).

The first three are the current paramilitary forces of India - Assam Rifles (part of Home Ministry), Special Frontier Force (part of Cabinet Secretariat) and Indian Coast Guard (part of Ministry of Defence).

6.2 Assam Rifles (AR)

The Assam Rifles is the oldest paramilitary force of India. The unit can trace its lineage back to a paramilitary police force that was formed under the British in 1835 called Cachar Levy. Since then the Assam Rifles have undergone a number of changes in its name the Assam Frontier Police (1883), the Assam Military Police (1891) and Eastern Bengal and Assam Military Police (1913), before finally becoming the Assam Rifles in 1917.

Over the course of its history, the Assam Rifles and its predecessor units have served in a number of roles, conflicts and theatres including World War I where they served in Europe and the Middle East, and World War II where they served mainly in Burma. In the post World War II period the Assam Rifles has expanded greatly, as has its role.

There are currently 46 battalions of Assam Rifles with a sanctioned strength of 63,747 personnel. It is under the control of the Ministry of Home Affairs (MHA). The officers required for Assam Rifles is provided by Indian Army. Officers from the Indian Army are selected to serve a deputation duty in the Assam Rifles for a fixed number of years. They perform many roles including the provision of internal security under the control of the army through the conduct of counter insurgency and border security operations, provision of aid to the civil power in times of emergency, and the provision of communications, medical assistance and education in remote areas.

In times of war they can also be used as a combat force to secure rear areas if needed. Since 2002 it has been guarding the Indo-Myanmar barrier as per the government policy of '**one border-one force**'.

Assam Rifles ranks	Indian Army ranks
Director General (Army officer on deputation)	Lieutenant General
Inspector General (Army officer on deputation)	Major General
Deputy Inspector General (Army officer on deputation)	Brigadier
Commandant (Army Officer on deputation)	Colonel
Second in Command	Lieutenant Colonel
Deputy Commandant	Major
Assistant Commandant	Captain

6.2.1 Border Security Force (BSF)

The Border Security Force (BSF) is the primary border guarding force of India. It is one of the six Central Armed Police Forces of the Union of India. It was raised in the wake of the 1965 War on 1 December 1965, "for ensuring the security of the borders of India and for matters connected there with". It is a Central Armed Police Force charged with guarding India's land border on western front during peacetime and preventing transnational crime.

It is a Union Government Agency under the administrative control of Ministry of Home Affairs. The BSF has its own cadre of officers but head, designated as a Director-General (DG), since its raising, has been an officer from the Indian Police Service. It also takes officers from IPS on deputation.

The BSF has grown exponentially from a few battalions in 1965 to 186 battalions with a sanctioned strength of 2,57,363 personnel including an expanding air wing, marine wing, intelligence units. It currently stands as the world's largest border guarding force.

The BSF has played major role since the Indo-Pakistani War of 1971, including Operation Blue Star and Operation Black Thunder. It has also handled Counter Insurgency operations in Jammu and Kashmir.

6.2.2 Central Industrial Security Force (CISF)

The Central Industrial Security Force (CISF) was set up under an Act of the Parliament of India on 10 March 1969 with a strength of 2,800. CISF was subsequently made a para military force of the Republic of India by another Act of Parliament passed on 15 June 1983. Its current active strength is 144,418 personnel. In April 2017, the government raised the sanctioned strength from 145,000 to 180,000 personnel. This force is directly under the Union Ministry of Home Affairs and its headquarters is in New Delhi.

The CISF provides security cover to 300 industrial units, government infrastructure projects and facilities and establishments located all over India. Industrial sectors like atomic power plants, space installations, mints, oil fields and refineries, major ports, heavy engineering, steel plants, barrages, fertiliser units, airports and hydroelectric/thermal power plants owned and controlled by Central Public Sector Undertakings (PSUs), and currency note presses producing Indian currency are protected by CISF. It, thereby, covers installations all over India straddling a variety of terrain and climatic conditions.

CISF also provides consultancy services to private industries as well as other organisations within the Indian government. The consulting wing has amongst its clients some of the renowned business houses and organisations of India including TISCO, Jamshedpur; SEBI Hqrs. Mumbai; Vidhana Sabha, Bangalore; Orissa Mining Co.,



Note

Structure and Role of the Forces



Note

Bhubaneswar; Telangana Assembly, Hyderabad; Bangalore Metropolitan Transport Corp.; HIL Kerala; IB Thermal plant, Odisha; IARI, Delhi; NBRI, Lucknow and Electronics City, Bangalore.

The scope of CISF's consulting practice includes security consulting and fire protection consulting.

CISF is a unique organisation in paramilitary forces for India, which works for sea ways, airways and some of the major installations in India. In CISF there are some reserved battalions which work with the state police to protect law and order. CISF plays a major role in Disaster Management, for Disaster Management course the personnel are trained at NISA, Hyderabad. Another unique thing which the CISF has is a Fire Wing which helps during fire accidents in Industries where CISF is on guard.

6.2.3 Central Reserve Police Force (CRPF)

The Central Reserve Police Force (CRPF) is the largest of India's Central Armed Police Forces. It functions under the aegis of Ministry of Home Affairs (MHA) of the Government of India. The CRPF's primary role lies in assisting the State/Union Territories in police operations to maintain law and order and counter insurgency. It came into existence as the Crown Representative's Police on 27 July 1939. After Indian Independence, it became the Central Reserve Police Force on enactment of the CRPF Act on 28 December 1949.

Besides law and order and counter-insurgency duties, the CRPF has played an increasingly large role in India's general elections. During all the Parliamentary elections the CRPF has played a major role in the security arrangements. Of late, CRPF contingents are also being deployed in UN missions.

With 239 battalions and various other establishments, the CRPF is considered India's largest paramilitary force and has a sanctioned strength of 313,678 personnel. Today, it is actively looking after the internal security of every part of India and has even operated abroad as part of IPKF and the United Nations peacekeeping missions. It is performing a variety of duties ranging from VIP security to election duties, from guarding of vital installations to the counter-Naxal operations.

The Rapid Action Force (RAF) - The RAF is a specialised 10 battalion wing of the Indian Central Reserve Police Force. It was formed in October 1992, to deal with communal riots and related civil unrest. The battalions are numbered from 99 to 108. RAF is a zero repose force which gets to the crisis situation within a minimal time, thus infuses an immediate sense of security and confidence amongst the general public.

Parliament Duty Group (PDG) - The PDG is an elite CRPF unit tasked to provide armed protection to Parliament House. It comprises 1,540 personnel drawn from

various units of CRPF. PDG members are trained in combating nuclear and biochemical attacks, rescue operations and behavioural management.

Commando Battalion for Resolute Action (CoBRA)

In 2008 a wing called Commando Battalion for Resolute Action (CoBRA) was added to the CRPF to counter the Naxalite movement in India. This specialised CRPF unit is one of the few units of the Central Armed Police Forces in the country who are specifically trained in counter insurgency warfare. This elite fighting unit has been trained to track, hunt and eliminate small Naxalite groups. There are currently 10 CoBRA units. 10 CoBRA units that were raised between 2008-2011 have been trained, equipped and deployed in all LWE/ Insurgent affected areas of the states of Chhattisgarh, Bihar, Odisha, Jharkhand, Madhya Pradesh, Maharashtra, West Bengal, Andhra Pradesh, as well as Assam & Meghalaya. It is one of the best Central Armed Police in the country trained to survive, fight and win in the jungle.



Note

CRPF Ranks	Police Ranks
Director General (Apex Scale of the Indian Police Service)	Director General of a State Police Force
Special Director General (HAG+ Scale of the Indian Police Service)	Special Director General
Additional Director General (HAG Scale of the Indian Police Service, also available to BSF cadre)	C.P, ADG
Inspector General (IG)	IG/ Joint CP
Deputy Inspector General (DIG)	DIG/ Additional CP
Commandant (CO)	SSP/DCP
Second In Command (2IC)	SP/DCP
Deputy Commandant (DC)	Addl. SP/Addl. DCP
Assistant Commandant (AC): Group A Gazetted Officer	DSP/ACP

Structure and Role of the Forces



Note

6.2.4 Indo Tibetan Border Police (ITBP)

ITBP was raised on 24 October 1962, under the CRPF Act, in the wake of the Sino-Indian War of 1962. The ITBP was intended for deployment along India's border with China's Tibet Autonomous Region.

In September 1996, the Parliament of India enacted the 'Indo-Tibetan Border Police Force Act, 1992' to "provide for the constitution and regulation" of the ITBP "for ensuring the security of the borders of India and for matters connected therewith". The first head of the ITBP, designated Inspector General, was Balbir Singh, a police officer previously belonging to the Intelligence Bureau. The ITBP, which started with 4 battalions, has, since restructuring in 1978 undergone expansion to a force of 56 battalions as of 2017 with a sanctioned strength of 89,432.

The ITBP is also trained in disaster management, and nuclear, biological and chemical disasters. ITBP personnel have been deployed abroad in UN peacekeeping missions in Bosnia and Herzegovina, Kosovo, Sierra Leone, Haiti, Western Sahara, Sudan, Afghanistan and elsewhere. Two battalions of ITBP are deputed to National Disaster Response Force.

6.2.5 Sashastra Seema Bal (SSB)

SSB is one of India's Central Armed Police Forces. It is currently under the administrative control of the Ministry of Home Affairs (MHA), Government of India. Prior to 2001, the force was known as the Special Service Bureau (SSB). As of 2017, it has 76,337 active personnel in 67 battalions.

The previous role of the Special Service Bureau was to motivate and mobilise India's border population for national security during times of peace as well as war and to promote a sense of security and brotherhood among the population, in furtherance of national integration. Its present-day role consists of preventing cross-border crime and smuggling as well as other anti-national activities.

In pursuit of achieving this mandated task, the SSB has been conferred with certain powers under the Criminal Procedure Code of 1973, the Arms Act of 1959, the NDPS Act of 1985 and the Passport Act of 1967. The Government of India also contemplates conferring additional powers under the Customs Act of 1962.

These powers are to be exercised within a belt of 15 km in the states of Uttarakhand, Uttar Pradesh, Bihar, West Bengal, Sikkim, Assam and Arunachal Pradesh, running along the Indo-Nepal and Indo-Bhutan borders, as well as in any other area of SSB operation.



Intext Questions

6.1

1. What is meant by Paramilitary Forces ? Explain.
2. Name India's oldest paramilitary force.
3. Describe the eight paramilitary forces.
4. Explain the meaning of CoBRA

6.2.6 Indian Coast Guard (ICG)

The Indian Coast Guard (ICG) protects India's maritime interests and enforces maritime law, with jurisdiction over the territorial waters of India, including its contiguous zone and exclusive economic zone. The Indian Coast Guard was formally established on 18 August 1978 by the Coast Guard Act, 1978 of the Parliament of India as an independent Armed force of India. It operates under the Ministry of Defence.

The Coast Guard works in close cooperation with the Indian Navy, the Department of Fisheries, the Department of Revenue (Customs) and the Central and State police forces. Missions of Indian Coast Guard include:

1. Safety and protection of artificial islands, offshore terminals and other installations
2. Protection and assistance to fishermen and mariners at sea
3. Preservation and protection of marine ecology and environment including pollution control
4. Assistance to the Department of Customs and other authorities in anti-smuggling operations
5. Law enforcement in territorial as well as international waters
6. Scientific data collection and support
7. National defence during hostilities

Its additional responsibilities cover:

1. Offshore Security Coordination Committee (OSCC)
2. National Maritime Search and Rescue Coordinating Authority (NMSARCA)
3. Lead Intelligence Agency (LIA)
4. Coastal Area Security

The Indian Coast Guard organisation is headed by the Director-General (DG ICG) who is located at Coast Guard Headquarters (CGHQ), New Delhi. At CGHQ, he is assisted by four Deputy Director-Generals of the rank of Inspector-General, and other senior officers heading various staff divisions. Director-General of Indian Coast Guard is equivalent to Vice Admiral of Indian Navy.



Note



Note



ACTIVITY 6.1

Find out the name of the present Director General of the Indian Coast Guard and write 2 lines about his personal achievements.

The Indian Coast Guard operates five regions. Each region is headed by an officer of the rank of Inspector-General. Each of the regions is further divided into multiple districts, typically covering a coastal state or a union territory.

Indian Coast Guard Ranks	Indian Navy Ranks
Director-General	Vice Admiral
Special Director-General	Vice Admiral
Additional Director-General	Vice Admiral
Inspector-General	Rear Admiral
Deputy Inspector-General	Commodore
Commandant	Captain
Commandant (Junior Grade)	Commander
Deputy Commandant	Lt Commander
Assistant Commandant (Two year service)	Lieutenant
Assistant Commandant	Sub Lieutenant

6.2.7 Special Frontier Force (SFF)

The SFF is a paramilitary special force of India created on 14 November 1962. Its main goal originally was to conduct covert operations behind Chinese lines in the event of another Sino-Indian War. The force was established under the direct supervision of the Prime Minister, the unit under the operational command of IB and later R&AW, was designated the Special Frontier Force, and was primarily used for conducting clandestine intelligence gathering and commando operations along the Line of Actual Control with China.

SFF was raised with covert operations in mind, mainly along the Indo-China border, however SFF has been fielded by R&AW and the Indian government in various covert and overt operation theatres.

The SFF is also known as 'Establishment 22' or just '22' due to its first Inspector General, Major General Sujjan Singh Uban (Retd.) of Indian Army, who used to be commander of 22 Mountain Regiment during World War II, a Military Cross holder

and a legendary figure in the British India Army. Singh commanded the 22nd Mountain Regiment during World War II in Europe and a Long Range Desert Group Squadron (LRDS) in North Africa.

Based in Chakrata, Uttarakhand, the force was put under the direct supervision of the Intelligence Bureau, and later, the Research and Analysis Wing, India's external intelligence agency.



Intext Questions

6.2

1. Describe the different tasks of Indian Coast Guard
2. What is meant by 'Establishment 22'? Why is it called so? Explain.



What You Have Learnt

- Indian paramilitary forces refer to the three organisation that assist the Indian Armed Forces. Earlier this term was used for eight forces - (i) Assam Rifles (ii) Special Frontier Force (iii) Indian Coast Guard (iv) Central Reserve Police Force CRPF (v) Border Security Force (BSF) (vi) Indo Tibetan Border Police (ITBP), Central Industrial Security Force (CISF) (viii) Sashastra Seema Bal (SSB). Nowadays the last six forces are called Central Armed Police Forces.
- Assam Rifles is the oldest paramilitary force of India. BSF guards the borders of the India. CISF provides security to industrial units, government infrastructure and projects. CRPF acts under the aegis of Ministry of Home Affairs and assists in maintaining law and order. ITBP was raised for deployment along the India's Border with China's Autonomous Region. SSB is under Ministry of Home Affairs and its target was to mobilise the India's border population for national security and promote a sense of security and brotherhood.
- Indian Coast Guard works in close cooperation with Navy and protects the artificial islands, fishermen and mariners at sea. Special Frontier Force SFF has the assignment to conduct covert operations behind Chinese Lines in event of another Sino-Indian war.



Terminal Exercises

1. Explain the functions and organisation of Central Industrial Security Force.
2. Explain the functions of the Border Security Force.
3. Explain the tasks of Central Reserve Police Force and provide its rank structure.

Module - II

Structure and Role of the Forces



Note



Note



Answer to Intext Questions

6.1

1. A paramilitary is a semi-militarized force whose organizational structure, tactics, training, subculture, and (often) function are similar to those of a professional military, but which is not included as part of a state's formal armed forces.
2. The Assam Rifles is the oldest paramilitary force of India. It was raised in 1835.
3. The Eight paramilitary forces are :
 - a. Assam Rifles
 - b. Special Frontier Force
 - c. Indian Coast Guard
 - d. Central Reserve Police Force
 - e. Border Security Force
 - f. Indo-Tibetan Border Police
 - g. Central Industrial Security Force
 - h. Sashastra Seema Bal
4. Commando Battalion for Resolute Action (CoBRA)

6.2

1. Different tasks of Coastal Guard are :
 - Safety and protection of artificial islands, offshore terminals and other installations
 - Protection and assistance to fishermen and mariners at sea
 - Preservation and protection of marine ecology and environment including pollution control
 - Assistance to the Department of Customs and other authorities in anti-smuggling operations
 - Law enforcement in territorial as well as international waters
 - Scientific data collection and support
 - National defence during hostilities.
2. The SFF is also known as 'Establishment 22' or just '22' due to its first Inspector General, Major General Sujjan Singh Uban (Retd.) of Indian Army, who used to be commander of 22 Mountain Regiment during World War II, a Military Cross holder and a legendary figure in the British India Army.



Note

7



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GEO-STRATEGY

In previous lessons you have learnt about the evolution of military studies and its relevance to all of us. You must have also understood the structure and role played by Indian armed forces. In fact, the need for strong armed forces is an historical phenomenon when empires during ancient to medieval and modern times were compelled to maintain strong armed forces to achieve their goal of expanding their empires by capturing territories.

Today this is achieved through various strategies by increasing economic power and strengthening defence. Countries also enter into treaties and alliances with other countries as part of their strategy to achieve their national goals. The question here is how was this possible, then and now? What factors help to maintain such strong forces? These cannot be answered without understanding the importance of national power and strategies. What are India's natural resources and economic potential? And how do these help to strengthen the military?

It is important now to turn to understanding the meaning of geo-strategy and how India's geo-political objectives are realized.



Objectives

After studying this lesson, you will be able to:

- explain the meaning of geo-strategy;
- identify India's national power potential and
- describe the various economic activities of the country.

7.1 What is Geo-strategy?

As you can see, the term geo-strategy is combination of the words geography and strategy. The subject matter of geography deals with describing earth in terms of its physical features, distribution of population, land use, economic resource of the country etc. Strategy on the other hand is a calculated plan of action to achieve goals of the state.



Note

Geography: description of earth in terms of physical features, population distribution, land use and resource availability

Strategy: Calculated plan of action to achieve goals of the state.

This means that geographical factors are essential determinants of strategy. In this section you will learn how the combination of both geography and strategy has played a role in the development of defence strategies for India.

To understand, answering the question, what geographical factors are responsible in determining strategy is important. But before doing so it is important that you should know that there are many sub-fields of geography such as human geography, which deals with people and their community, economic geography dealing with location and distribution of economic activities and others. However, what we are concerned here is the strategic aspect of geography which is called geo-strategy.

This sub-field of geography deals with controlling and accessing geographical areas or territories that affect security and well-being of a state. There are several geographical factors that impact strategy such as Land, Demography and Natural Resources. Let us discuss some of them below.

7.1.1 Land

Land is defined in terms of physical geography or physiography. Possession of vast land or territory determines the power of a country. Every country has different land size, which are not uniformly distributed. Each country may have various land features such as hills, mountains, plains, deserts, rivers and forests. As far as India is concerned its physiography is divided into at least four aspects as follows:

- a) Mountains in the North particularly the Great Himalayan range and other lesser mountains such as Aravalli mountains in Rajasthan, the Vindhya mountains, Western Ghats and the Eastern Ghats, the Nilgiris or Blue mountains and others.
- b) Plains in the Northern India often called Indo-Gangetic plains.
- c) The Plateau region of the South spreading from the Indo-Gangetic plain and covered by the Western Ghats and Eastern Ghats on both sides. The Deccan plateau is the largest plateau in the whole country; and finally,
- d) The islands of India - the total coastline of India comprises of 7516 km. The coast of Gujarat in the Western part of India is the longest and the second longest is the coast line of Andhra Pradesh in the East. The Indian territorial limits include more than 200 islands including that of Andaman and Nicobar islands in the East of India and Lakshwadeep islands to the West of the country.

7.1.2 Demography & Culture

India is one of the most densely populated countries in the world. With more than 1.2 billion people it is the second largest populated country in the world, the first being China. Its total population is more than that of USA and Russia put together and more than the total population of the entire African continent. What are the advantages of population from a military perspective?

- Firstly, they provide the manpower requirement of all three services of Indian military - the army, navy and air force along with the paramilitary forces. During emergency situations such manpower potential acts as strong reserves for the country.
- Secondly, they are also a source of economic activity of country for agricultural, manufacturing and industrial production.
- Thirdly, India has a large concentration of very young population. Nearly 42 percent of India's population is below the age of 15 years and only 12 percent of the population is aged 50 years and over. This is significant because young population adds to the work force of the country and contributes to the increase in economic development of the country.

The diversity of the country is another advantage for India because no other country in the world exhibits such variety of speech, written language, religious and social customs as India. The major religions of India are: Hinduism, Islam and Christianity. Besides Hindus, Muslims and Christians, we have in our population Sikhs, Jains and Buddhists. India is also home to large number of languages spoken with as many as 845 languages and dialects.

However 22 major languages are recognized by the constitution of India. These differences in religions, customs, languages and castes are because our people belong to different racial groups. These variations in land and demographic resources are used by humans in variety of ways to their advantage. Let us see what natural resources does the country possess? The next few sections will explain them.



Intext Questions

7.1

1. What is meant by geo-strategy?
2. Name any two sub-fields of geography.
3. Name the physiographical divisions of India.
4. State the length of India's coastline.
5. Describe any two advantages of demographic resources.



Note



Note

7.2 Energy Resources and Natural Resources are major contributor to the economy

Energy and natural resources are vital for the economy of any country. India has several such energy resources like coal, petroleum, hydro-electricity and atomic power. Similarly, India is gifted with various natural resources like vast river systems for generating hydro-electricity, natural vegetation, forests and a wide variety of mineral resources all of which potentially contribute for the economic power of the country. A country which has the gift of natural resources can be a powerful country and capable of maintaining strong defence forces. Let us now learn about the major energy resources and potential of India.

7.2.1 Energy Resources

The major power resources of the country can be categorized into four: 1) coal 2) petroleum 3) hydro-electricity and 4) atomic power.

- 1) Coal is still the principle source of power in India. India is the ninth largest coal producing country in the world. The main coal deposits are in Bihar, West Bengal, Madhya Pradesh and Andhra Pradesh. Do you know the use of coal? It is used in power generation for the country and also in other industrial productions like steel industry, cement industry etc.
- 2) Petroleum is a very valuable source of energy which has no waste and each one of its by-products have other use i.e. petrol, fuel oil, diesel, lubricating oil, grease etc. Without the by-products of petroleum land, sea and air forces would be immobilized and no modern war can be fought. Presently, India produces 14.3 million tons of oil. Important oil producing areas in India are Assam (Digboi, Sibsagar, Bappapung, Hansapung, Naharkatia & Moran), Gujrat (Cambay, Ankleshwar, Kopal), Punjab (Adampur, Janauri), UP (Ujhani), Besides this, the off-shore oil is produced in Bombay High, Basin strictures in the Arabian Sea and North Bay of Bengal. New oil explorations are going on in the deltas of Krishna, Cauvery and Mahanadi. We are dependent on oil and are forced to import about 70% of our need from oil producing countries such as USA, Iran and UAE. This affects our economy.
- 3) Hydro-Electric Power. This power is continuous and cannot be exhausted. Hydro-electric dams and power stations are vulnerable to air attack which may initiate disasters like sudden sheet floods. If hydro-power is important then it is also important to conserve and protect our water resources. An important aspect of strategy is 'Environment Security'.
- 4) Atomic Power is both destructive and constructive power in the world, capable of bringing doom and progress in the most isolated port. India has the raw

material (Uranium, Thorium and Monozite) as well as the ability to develop atomic energy. Atomic energy plants are set up at Tarapore, Rana Pratap Sagar, Kota and Kalpakkam in Madras.



Fig 7.1



Fig 7.2



Fig 7.3

Source : Commons wikimedia.org

7.2.2 Natural Resources

- **River systems:** As you know water is the main source of life and India is bestowed with several perennial rivers. There are three major river systems in India and the Himalayan mountains are a good source of one of the greatest river systems called the Himalayan rivers. They are: the Indus river systems, the Ganges and the Brahmaputra river systems all of which run to more than 2000 km. Besides this there are other major rivers like Mahanadi, Godavari, Krishna, Cauvery and Narmada rivers. As you will see, the river systems provide good source of power generation for the country.



ACTIVITY 7.1

Find out the difference between perennial and seasonal rivers. Write the names of at least two perennial and one seasonal river in your state.

- **Natural Vegetation:** The character of vegetation of a place depends on its temperature, rainfall, interference by man and soil. The vegetation is tropical



Note



Note

monsoon in character throughout India below a height of 900 meters. Owing to unequal amount of rainfall in various regions and varied conditions, India is rich in a number of species of plants which range from drought resisting thorny scrub to tropical wet evergreen forests.

The lofty Himalayas grow a large variety of vegetation, the zonal distribution of which varies from tropical to alpine types. India also has a variety of climatic regions. It has tropical rain forests found in the coastal plains and western Ghats and parts of North East India, tropical Savanna, Semi-arid, Tropical desert, humid sub-tropical climate with dry winters and mountainous climate in mountains above the range of 6,000 m such as the Himalayas and the Karakoram range of mountains.

- **Forests** are important resource of a country and play an important role in the country's economy. India has a very valuable asset in this varied wealth. It is considered that in a tropical climate, one third of the total area should be under forests for maintaining suitable climate conditions. The distribution of forests in our country is very uneven. This is largely because of irregular distribution of precipitation or rainfall. India's forest covers about 19% of the total geographical area. The distribution of forests in India is as follows:
 - (a) Tropical Moist forest - 23.30%
 - (b) Dry deciduous forest - 29.15%
 - (c) Tropical Thorn forest - 5.25%
 - (d) Tropical Wet Evergreen - 4.50%
 - (e) Sub Tropical (Pune) - 3.75%
 - (f) Moist Temp (Himalayan) - 2.70%
 - (g) Wet Temperate - 1.60%
 - (h) Others - 29.75%

7.2.3 Mineral Resources

Minerals form the basis of the industrial development of a country. India is fortunate to have rich deposits of some essential minerals. There are large reserves of coal, iron ore, mica, manganese ore, magnesite, bauxite and thorium. Coal is found in West Bengal, Orissa, Tamil Nadu, Madhya Pradesh and Chattisgarh. While these minerals are adequate and distributed throughout the country, some are inadequate.

Petroleum, phosphates, sulphur and potash fall considerably short of the requirement of the country. Hence, India is forced to depend on other countries for the supply of these minerals. The distribution of important mineral resources in India is as under:

- (a) Iron ore is located in Bihar, Orissa, A.P, M.P, Mysore and Tamil Nadu.
- (b) Manganese is located in Orissa, Karnataka, used for smelting process and India is the largest producer in the world next to Russia and Ghana.
- (c) Chromite is used for defence purposes and is located mainly in Mysore and Orissa
- (d) Mica is mainly located in Bihar, Rajasthan & AP. India is the largest producer of mica in the world.
- (e) Bauxite. Rich deposits of its ore found in Bihar, Gujarat, MP, Tamil Nadu & Orissa.
- (f) Gypsum is used in Cement and fertilizer industries and it is mainly found in Rajasthan and Tamil Nadu.
- (g) Uranium resources are also found in places like Jharkhand, Rajasthan, Andhra Pradesh and Karnataka. These are also used for military purposes particularly in the production of nuclear weapons.
- (h) Thorium is also used for weapon production and is found in the coast of Kerala and in the rocks of Aravalli hills in Rajasthan.
- (i) Gold is another major resource found in Karnataka and Andhra Pradesh



ACTIVITY 7.2

Take an outline political map of India. Using the information given in section 7.2.3, points (a) to (i), mark the places on the map where different minerals are found. You can use different colours or symbols for different minerals.



Intext Questions

7.2

1. Describe the major energy resources of India.
2. Highlight the three major river systems of Himalayas.
3. Name the various mineral resources of India.

7.3 Geo Economic and Economic Power

The economic power is the capacity of a country to use its economic resources and assets in order to achieve self-sufficiency. 'Geo Economics is a combination of Geography and Economic activities of a nation that determines how it conducts trade with other nations.' This is achieved through a set of activities that can be broadly divided into three categories: agriculture, manufacturing and industrial development, and services. In fact, economic growth is very important for a nation as the capacity of a nation to fight a war depends upon its economic potential and technological superiority.



Note



Note

Today, the nature of war is very different from that of ancient wars. Modern war is a total war in which the accepted rules of warfare, as fought during ancient times called 'Dharmayudh' are disregarded.

In modern wars the entire resources of a nation are devoted for the successful conduct. For example, one of the main reasons for the victory of allied powers during the last two World Wars was their superiority in resources, which ultimately determined war waging capability and resulted in victory. What does this mean to us? It means that resources should be utilized properly to make the country powerful. Here, in this section, we will study how the various natural resource potential of the country discussed above is utilized through the three major economic activities.

7.3.1 Agriculture

A nation that is self-sufficient in food and agriculture need not depend on other countries as it can support itself and feed the entire population. As far as India is concerned agriculture is the chief occupation of seventy percent of the population and forms the backbone of the country. Large number of people derive their livelihood by cultivating the soil. Agricultural activities in India are numerous and help feed the entire population of the country. India is self sufficient in rice and wheat production.

Besides rice and wheat several other important food crops are also produced such as jowar, pulses and maize. Other crops are also produced for commercial purposes such as sugarcane, cotton, groundnuts, tobacco, tea, jute etc. All of these earn considerable amount of foreign exchange for the country. It means that when these agricultural products are exported it brings foreign currency to the country, which can be used for enhancing defence capabilities of the country.

7.3.2 Industrial Resources

In recent years, India has made significant progress in industrial development. A variety of manufactured items are now produced in the country. Modern factories turning out all kinds of goods have been set up. Foreign collaborations have been made in establishing, particularly, metallurgical, engineering, electrical, chemical and pharmaceutical industries. This has laid the foundation of modern manufacturing industry in India.

Indian industries are manufacturing railways equipments, ship building, automobiles, aircraft, industrial machinery, electrical machinery and equipments. Chemical and paper industries have also made considerable progress after independence. As far as military is concerned, India is indigenously manufacturing missiles, tanks, helicopters, ships and other related weapon systems for use in defence. These are principally produced by several industries located throughout the country.

Some of the other major industries of India are: cotton textiles, woolen textiles, jute industry, sugar industry, leather industry, iron & steel, handicrafts and engineering industries.

7.3.3 Services

Services can be understood as those that provide support services to the economic activities of the country. These include services such as tourism, education, health care, engineering, communications, transportation, information technology, finance and management. The services sector in India, today, occupies a predominant share of India's economic activity.

These different activities promote economic growth, which in turn help increase the economic and military power of the country by way of increasing the manufacturing of defence equipments for the country.



Intext Questions

7.3

1. Explain the term 'economic power'.
2. Name two major food crops and two cash crops produced in India.
3. How can economic activities be categorised? Explain.
4. Write some example of Industrial resources.
5. How can industrial resources help in defence? Explain.
6. Name the various energy resources of India.
7. Give four examples of service industries in India.



What You Have Learnt

- Learning about geo-strategy is to learn about the link between geographical factors and strategy.
- With the help of geographical resources appropriate strategies are devised to achieve countries objectives and goals.
- Geographical resources do help in realizing the strategic needs of the country.
- The resources of India are plenty and varied. They help in the economic growth of the country and increase its military power potential in a big way.
- The maintenance of strong defence forces require strong economy and hence it is important to know the linkages between geographical factors and defence.
- Treaties and alliances are other dimensions of geo-strategy that countries enter into with other countries in order to maintain good relations and achieve peace



Note



Note

and development. The good examples of this being India's role of in SAARC and ASEAN.

In the next lesson you will learn how geo-strategy helps in political decision making.



Terminal Exercises

1. How does studying geography help in understanding strategy? Explain.
2. Describe the various natural resources of India.
3. Explain how does industrial production help in defence of a country.



Answers to Intext Questions

7.1

1. Geo-strategy deals with the strategy to use the physical features and natural resources of earth in a calculated plan of action in order to achieve national goals of the state.
2. Human Geography and Economic Geography
3. Mountains, Plains, Plateau regions and Islands of the South
4. 7516 km
5. Firstly, these provide manpower requirement of all three services of Indian Military - Army, Navy and Air force Secondly, these are a good source of economic activity

7.2

1. Coal, Petroleum, Hydro-electricity and Atomic Power
2. The Indus, Ganges and Brahmaputra
3. Iron ore, Chromium, Bauxite, Coal, Uranium, Thorium, Mica, Gypsum

7.3

1. Economic power is the capacity of a country to use its economic resources and assets in order to achieve self-sufficiency
2. Food Crops - Rice, Jowar, Pulses and Maize; Cash Crops - Cotton, Tea, Coffee, Sugar Cane, Tobacco
3. Agriculture, Industrial Resources and Services

4. Manufacturing railway equipments, ship building, automobiles, aircraft, industrial machinery, electrical machinery and equipments, chemical and paper industries
5. It helps in the manufacturing of defence equipments such as missiles, tanks, ships, aircrafts and other defence related equipments
6. Hydro electricity, Atomic Power and Coal, Sunlight
7. Tourism, education, health care, engineering, communications, transportation, information technology, finance and management



Note

Module - III

Security and Geo-Strategy



Note



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8

GEO-POLITICS

International relations describe the type of relations a country has with other countries. The relationship between two countries is based on the level of interactions on subjects such as economy, military, law, environment etc. Two or more countries can have 'strategic relation', 'economic relation', 'political relation', 'bilateral (between two countries) multi lateral' (between two or more countries) relation etc.

The type of relation depends upon each others' mutual interests and benefits. In the region called South Asia India is centrally located and geo-politics determines bilateral relations in the region. Land, location, terrain and other geographical factors have influenced political decisions in a big way. You will learn that geographic factors impact the political decision-making. Understanding the location of India's neighbours and the meaning of soft and hard power of a nation will help to understand the need to have good relations with all countries.



Objectives

After studying this lesson you will be able to:

- explain the meaning of geo-politics;
- locate India's neighbours and identify the differences in power potential among nations;
- differentiate between treaties and alliances and derive the inter-se importance;
- describe the strategic areas of relations between India and its neighbours and
- describe the Panchsheel and non-alignment policy of India.

8.1 What is Geo-politics?

Before we proceed to discuss India's relations with neighbouring countries it is important to understand the meaning of the term geo-politics and international relations. You have learnt in the previous lesson about India's vast geographic and natural resources.

The location of a country decides how it has to be prepared militarily to defend itself. For example, Great Britain used its location effectively to control the neighbouring and distant land by colonizing them through control of seas.

In the case of India too, geographical and natural resources have determined its power potential and how its power potential can be utilized to determine its relations with neighbouring and distant countries. In other words, as politics is about study of power, geopolitics refers to influences of geography on the relationships between nations.

8.2 India's Neighbours

India is centrally located in South Asia and is surrounded by smaller countries. We call this region the Indian sub-continent because of the enormous size of the region.

History reveals that the entire region was under the influence of India. For example, what we now call Pakistan and Bangladesh were once part of India. Similarly, the other countries of South Asian region such as Nepal, Bhutan, Sri Lanka and Maldives have at one point or other been under the influence of India. However, after the colonization by British, changes took place in the political and geographical features of the region.

The independence of India led to separation of Pakistan from India and Bangladesh was born in 1971. Today the South Asian region comprises eight countries. They are: Afghanistan, Bangladesh, Bhutan, Myanmar Nepal and Pakistan. Sri Lanka and Maldives shares maritime borders with India. China does share a big land boundary with India and hence it is India's northern neighbour but from a geo-political, historical and cultural point of view China is not included as part of South Asia.

India shares largest portion of its border with Bangladesh and shortest of it with Afghanistan. India shares a 699-km long border with Bhutan, 3323 Km (including LoC) with Pakistan. This border runs along the Indian states of Gujarat, Rajasthan, Punjab and Jammu & Kashmir. Located in the north of India, Tibet shares boundary with India's Jammu and Kashmir, Himachal Pradesh, Sikkim, Arunachal Pradesh and Uttarkhand.

8.2.1 India's Power

All countries have resources to be utilized as power. International relations are about how one country can influence the other to do what it wants. A country's power or Power is defined in terms of Hard power and Soft Power. Hard power is military power and soft power is the economy, culture etc.



Note



Note

8.2.2 Soft Power

India has a wide range of soft power resources. The country is keen to wield its soft power. Soft power includes promotion of Yoga, Indian arts and crafts, music and culture in general. The Bollywood-made cinemas are popular in many continents. India's Cricket and Hockey teams are also famous. Its vast variety from music to football to cuisine and diversity has attracted the west. India's Ministry of External Affairs has a special focus to exercise Soft Power.

The Indian Council for Cultural Relations (ICCR) has been a key partner to strengthen external relations in various ways. Ministry of Tourism and other governmental partners are devoted to exercising India's soft power.

Soft power is the use of a country's cultural, social and economic influence over other countries in order to persuade them to do something without the use of hard power.

India has been showcasing its social, political, and cultural assets abroad through various channels- directly and indirectly. In its neighbourhood, it has lent its support on various occasions to build friendly relations.

For example, soon after the massive earthquake in Nepal in 2015, India's Ministry of Home Affairs sent Indian Armed Forces and National Disaster Response Force. The operation was known as "Maitri". The Indian Air Force used Advanced Light Helicopters, Mi-17 and other aircrafts to rescue and distribute relief materials. India is the largest regional provider of humanitarian and reconstruction aid to Afghanistan.

Similarly, be it cyclone-hit Sri Lanka or Bangladesh, the Indian Government has used its soft and hard power to rescue people who were trapped in natural disasters and has sent large amounts of relief materials from time to time. The role of India in Sri Lanka is well known. During the time of Sri Lankan civil war India sent thousands of Peace Keeping Forces and constructed over 50,000 houses to give shelter to refugees.

Besides, the influence of Islam, Hinduism and Buddhism on its neighbours cannot be forgotten. Ethnic ties too strengthen India's Soft Power. The case of Tamil speaking Sri Lanka, Singapore or Bengali speaking Bangladesh is a good example of influence of language and culture. Philosophies of Mahatma Gandhi and other thinkers have also inspired many countries extremely.

In terms of Science and Technology India's achievements are huge as compared to its neighbours. India saw massive success in its Moon Mission. Indian Space Research Organisation (ISRO) is globally admired and has hundreds of successful missions to its credit. The Soft Power helps not only to shape Indian foreign policy but also other country's policy towards India.



Intext Questions

8.1

1. What is meant by geo-politics?
2. Name the India's neighbouring countries.
3. Explain the term Soft Power.
4. Why was Operation Maitri carried out?

8.2.2 Hard Power

Hard power is the use of military and economic means to influence the behavior or interests of other nations or political entities.

Hard power is the use of military and economic means to influence and change the behaviour of other countries the way you want it

Hard power is often aggressive and is most effective when imposed by one political body upon a weaker nation. India has successfully won many battles and has launched many military operations. In Operation Vijay in 1961, India freed Goa, Daman and Diu from Portugal. Following the war with Pakistan in 1965, India captured around 740 square miles of territory against Pakistan gaining 210 square miles of territory.

In 1971 India supported Bangladesh's Liberation War. Indian Army took nearly 93,000 Pakistani soldiers as prisoners. India removed the illegal encroachment by Pakistan in the Siachen Glacier following Operation MEGHDOOT. Indian Army successfully brought back near normalcy in Naxalite hit areas in the country. Operation Cactus in 1988 restored the government rule in Maldives.



Intext Questions

8.2

1. Explain the meaning of Hard Power.
2. Write is the full form of DRDO.

8.3 Treaties and Alliances

Treaties and Alliances refer to the International relations between countries. It refers to the Foreign Policy to be followed in order to have good and beneficial relationship. India, as an independent sovereign country, continues to cooperate with its neighbours and distant countries. It is important to develop good neighbourly relations which are strengthened by entering into treaties and alliances. What are these and how important



Note



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are these in bringing lasting peace and development? Let us learn more about treaties and alliances.

Treaties are written agreements entered into between independent states and legally binding on each other. They are referred to by various names such as international agreements, international conventions, international treaty, international pact and international accord etc., Basically there are two broad categories of treaties: bilateral and multilateral. Bilateral treaties are those that are signed between any two independent countries where as multilateral treaties are signed between two or more countries.

All treaties whether bilateral or multilateral are legally binding on the parties that have signed and accepted to be members to the treaty. However, alliances are different. They are formed for mutual benefit or support is for security considerations. Alliances are not legally binding.

Alliances are not for ever, they can change. Why are such bilateral and multilateral treaties entered into and for what reasons? You will learn this in the next section. Some examples of treaties are worth noting.

Examples of bilateral treaties are:

- 1) Indo - Sri Lanka Accord
- 2) Indus Water Treaty between India and Pakistan
- 3) India - Russia Friendship Treaty
- 4) India - U.S. Treaty on Nuclear Cooperation

Examples of Multilateral treaties are:

- 1) South Asian Association for Regional Cooperation (SAARC)
- 2) Association of Southeast Asian Nations (ASEAN)

World Organisations:

- 1) United Nations Organizations (UN)
- 2) World Trade Organizations (WTO)
- 3) World Bank (WB)

8.3.1 SAARC and ASEAN

Multilateral treaties through multilateral cooperation are strategies that countries adopt to co-exist and cooperate with other countries with the aim of development. One such attempt, the first of its kind in South Asian Region, is the formation of South Asian Association for Regional Cooperation (SAARC). The second was The Association of Southeast Asian Nations, or ASEAN. ASEAN is an association of all 10 countries

of SE Asia. Let us study some important details of these two organisations.

8.3.2 SAARC

The South Asian Association for Regional Cooperation is an economic and geo-political organization formed on 8 December 1985 in Dhaka, the capital of Bangladesh. It presently comprises 8 countries as members. They are: Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka and India. Afghanistan became the eighth member of SAARC in 2007.

The basic objective of SAARC is to develop the welfare of the people of South Asian region through cooperation in economic, cultural, technical, scientific and all other common aspects including security. The region is caught in poverty and security problems. Hence the idea of a multilateral cooperation at the regional level was initiated in order to solve such problems. Regular summit level meetings are held in various capital cities of member countries on rotation basis.

India has played a central role in SAARC. As you will learn in the next lesson, all countries of South Asia have been under the religious, cultural, economic, political influence of India. Hence India's role in this organization is important. However, even if these are welcome steps to cooperate to solve problems at the multilateral level you should understand that not all times they are successful. Sometimes political and security issues hinder the cooperation. For example, since partition, the hostility that Pakistan has shown towards India continues to be a hurdle in fully realizing the potential for better economic cooperation and development among member countries.

8.3.3 ASEAN

Southeast Asia is another close neighbourhood of India, which has also seen the religious, cultural and political influence of India for several centuries. Realizing the importance of this region and the need to strengthen economic power, India has now evolved a strategy to build close ties with countries of this region.

The policy originally was called 'look east policy' which, under the present government, has become "Act East Policy". The regional organization called the Association of Southeast Asian Nations (ASEAN) was formed on 8 August 1967 in Bangkok, Thailand. The founding members are Malaysia, Singapore, Indonesia, Thailand and Philippines. Today it includes all 10 countries of the region: Laos, Cambodia, Myanmar, Vietnam and Brunei.

The aim of this regional organization is to promote economic growth and provide regional peace and stability through cooperation. Although India is not a member of ASEAN, it has been a summit level partner since 2002 and now a strategic partner of ASEAN since 2012. India has also been building political, economic, and security



Note



Note

cooperation with ASEAN countries and has set up a separate diplomatic mission for ASEAN.



Intext Questions

8.3

1. Explain the term 'treaties'.
2. Provide two examples each of bilateral and multilateral treaties.
3. Name the members of SAARC and ASEAN.

8.4 Issues Between India and its Neighbours

India follows a policy of friendly cooperation with its neighbours. However, this has been difficult to achieve. There have been several hindrances in the past decades that have hampered bilateral ties. Here, in this section, you will learn how this has happened in three broad areas viz: political and diplomatic issues, and defence and economic issues. Political and diplomatic cooperation with neighbouring countries have been generally cordial with most of the neighbouring countries. However, as with the case of any two individuals, differences do crop up between countries. Let us examine each country and understand the issues.

8.4.1 Bangladesh

It was in 1971 that Bangladesh got its independence from West Pakistan with the help of India's military intervention. Thereafter relations have been cordial on all fronts as we share common cultural and language bonds. However, there are certain issues that have also affected thirelations. These are:

- **Illegal migration from Bangladesh:** The migrants have become an economic, political and security problem for India. Economically they have to be supported with food, shelter and medicines and security wise there is a possibility of these people turning to anti-India activities.
- **Porous Border:** Aporous border means that the border is not fenced or manned. India shares the longest boundary with Bangladesh, most of which are riverine plains. Hence it has been difficult to fence them and easy for illegal smuggling to take place. Moreover, the border between India and Bangladesh is porous leading to smuggling of goods including gold and other goods that affect security.
- **Presence of terrorist** outfits like Harkat-ul-Jihad-al-Islami, Jamat-e-Islam are active in those bordering areas. Drug dealers are increasingly using Bangladesh as a transit point. They smuggle heroin and opium to India from Burma and other countries through Bangladesh.

- Fake Indian currency notes are also transferred in large quantities along the border.
- Sharing of Teesta river water that flows through Sikkim and West Bengal and finally into Bangladesh is still an unresolved issue.

8.4.2 Pakistan

We share common historical, cultural, and linguistic ties with the people of Pakistan. Yet Relations with Pakistan have not been cordial and smooth. Several issues have hindered good neighbourly progress. Some of them are:

- **Kashmir:** This has been the most delicate issue between the two countries. While there was a political agreement with the then ruler of Kashmir Maharaja Hari Singh who signed the instrument of accession with India but was not accepted by Pakistan which sent its invaders to destabilize and take the region by force. The timely intervention of our armed forces prevented the hostile take over. Due to certain political actions at the time, some parts of Kashmir continue to be occupied by Pakistan, and remain under its control till today. Those areas are called Pakistan Occupied Kashmir or POK. Since then India and Pakistan have fought three major wars and one minor war at Kargil in 1999.
- **Terrorism:** This is another major political issue faced between the two countries. Having failed in the hostile take over during 1947-48, Pakistan has used terrorism as a instrument of state policy against India. Terrorists started infiltrating from Pakistan and started terror attacks on armed forces and government organisations. Separatist organisations were formed in Kashmir valley who started helping the terrorists. Such an action by a country against another is called proxy war. This is a major issue of concern affecting bilateral, political and economic relationships between the two countries.
- **Proxy wars:** Pakistan has been waging proxy war with India trying to destabilize India by way of supporting anti-Indian outfits in the country particularly in Kashmir region. This has led to strained relationship both politically and militarily.



DO YOU KNOW

Proxy Wars means war instigated by a country without directly involving its military and supporting hostile mercenaries, terrorists with weapons, training and money.



Note



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8.4.3 Myanmar

India shares 1643 km of its land boundary and maritime boundary in the Bay of Bengal. A large number of Indians have been living in the country even before British colonial rule in Myanmar, which was earlier called Burma. The presence of Indians in Myanmar has helped strengthen bilateral relations. Trade between the two countries has flourished. Myanmar is the gateway to South East Asia. Myanmar is also important because its help is needed to fight insurgency in Northeast India. Issues affecting ties are:

- The borders are not fenced and hence insurgents in both Myanmar and in Northeast India have become serious security issue. Within India, armed groups based in Nagaland, Manipur and Mizoram use Myanmar as safe haven to operate.
- The problem of illegal migration - Muslim Rohingyas in Myanmar have illegally migrated to India to escape the violence against them in their country.

8.4.4 Nepal

With Nepal too, India shares a common land boundary and has signed a friendship treaty in 1950. Nepal is a Hindu Kingdom and has seen a steady growth in bilateral relations in all spheres. Nepal is located in a strategically important area in the Himalayan region bordering Tibet and hence demanded closer attention and ties for India. However, there are some issues that have affected progress.

- Nepal is a land locked country and the access to sea ports are through India. This some times creates frictions.
- Issue of Madeshi population is again a cause of discord between the two countries.
- Issue of human trafficking. Thousands of Nepalese in India are believed to have been trafficked to India illegally.



DO YOU KNOW

Human Trafficking means the practice of illegally transporting people from one country to another for forced labor or exploitation

8.4.5 Sri Lanka

India is the only maritime neighbour for Sri Lanka and so generally speaking, there have been good neighbourly relations with the country. India helped Sri Lanka in solving the internal security problem from LTTE. It sent its peacekeeping force to maintain stability and peace in the country. India has also been an economic partner

for Sri Lanka supplying goods and services. It has signed economic and free trade agreements and bilateral trade ties have increased. In the area of security and defence too India has helped Sri Lanka in supplying some military equipment and provided training. However, there are issues that have also affected progress. These are:

- The issue of Tamil Nadu fishermen crossing Palk straits and entering waters of Sri Lanka for fishing is a daily problem.
- Kachchativu island located between India and Sri Lanka was given to Sri Lanka by India. It has become an area of dispute.
- Chinese naval base in Sri Lanka and construction of port facilities by China. This has strategic and security concerns because Chinese war ships can freely come to the port.

8.4.6 Maldives

Maldives is located in a geo-strategically important area in the Indian Ocean. It is the smallest country in South Asian region. Similar to other neighbouring countries, India-Maldives relations have also been generally cordial. India has been a development partner for Maldives and has assisted the country in all major areas particularly in capacity building, trade and commerce, etc. India has also helped with the security needs of Maldives and has signed defence cooperation agreements. However, the relations deteriorated in view of its close ties with China at the cost of India's security concerns. Maldives had signed its first ever Free Trade Area agreement with China. But with the change in government in Maldives, its 'India First Policy' is back on trade.



Intext Questions

8.4

1. What is meant by porous border?
2. Name the ruler of Kashmir during the time of independence.
3. Explain a Proxy War.
4. Where is Maldives located.
5. Mention any two problems that India faces with Sri Lanka.
6. What is meant by human trafficking? Explain.

8.5 Panchsheel and Non-alignment Policy of India: An Overview

Panchsheel is also called as the five virtues or what is popularly known as the "Five Principles of Peaceful Co-existence". This became the guiding principle in India's international relations as well as in the relations between other countries. In fact, this was independent India's very first foreign policy initiative towards China when both



Note



Note

countries signed an agreement on Trade and Intercourse between the Tibet Autonomous region and India on 29th April 1954.

The preamble of the agreement stated the five principles as follows:

1. Mutual respect for each other's territorial integrity and sovereignty
2. Mutual non-aggression
3. Mutual non-interference
4. Equality and mutual benefit and
5. Peaceful Co-existence

8.5.1 Effect of five principles (Panchsheel)

The five principles not only served as a policy between India - China relations but subsequently extended as a policy framework in the relations with other countries also. In due course of time, the principles were incorporated into the movement that came to be called "Non-aligned Movement" or NAM, which came into existence in 1961 when colonial rule collapsed and several Asian and African countries gained independence. The movement was spearheaded by India along with Egypt, Ghana, Yugoslavia and Indonesia who became the founding fathers of NAM. The five principles served as an important policy for the movement aiming to bring about world peace and security.



What You Have Learnt

- Geopolitics refers to influences of Geography on the relationships between nations. India is centrally located and is surrounded by countries - Nepal, Bhutan, Sri Lanka, Pakistan, Bangladesh, Maldives, Myanmar.
- Hard power is military power and soft power is the economy and culture etc. India has a wide range of soft power resources - like yoga, music, classical dances, cricket, hockey and different dishes. In case of hard power our army, airforce and navy has no match in the surrounding countries.
- Treaties and Alliances refer to the international relations between countries. India is also under obligation of many treaties - Indo-Sri Lanka accord, India-Russia friendship treaty, India-US treaty on Nuclear cooperation. Although India gives priority to its good relations with the neighbouring countries but different problems do affect these relations. Pakistan is a headache for India with problems of Kashmir, terrorism and different wars. Even in Sri Lanka the problems of Indian Tamils have affected the good relations.
- India has followed the principles of Panchsheel and Non-alignment.

- Each of them is different and needed to be addressed with different political, diplomatic and military strategy.



Terminal Exercises

1. How does geo-politics influence decision making?
2. What is meant by the term soft and hard power?
3. Name the neighbouring countries of India.
4. State the principles of Panchsheel.



Answers to Intext Questions

8.1

1. Geopolitics is nothing but influences of geography on relationships between nations
2. Afghanistan, Bangladesh, Bhutan, Myanmar Nepal, Pakistan, Sri Lanka and Maldives
3. Soft power is promotion of India's cultural values and tradition and includes promotion of Yoga, Indian arts and crafts, music and culture in general.
4. As a friendly gesture by India it provided massive humanitarian assistance during massive earthquake in Nepal in 2015.

8.2

1. Use of military and economic means to influence the behavior or interests of other nations or political entities.
2. Defence Research and Development Organization

8.3

1. Treaties are written agreements entered into between independent states and legally binding on each other.
2. Bilateral treaty examples are Indo - Sri Lanka Accord and Indus Water Treaty between India and Pakistan and example of multilateral treaty are South Asian Association for Regional Cooperation (SAARC) and Association of Southeast Asian Nations (ASEAN).
3. SAARC Members are: Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka, India and Afghanistan. ASEAN members are: Malaysia, Singapore, Indonesia, Thailand, Philippines, Laos, Cambodia, Myanmar, Vietnam and Brunei.



Note



Note

8.4

1. Borders between countries that are not fenced or manned are called porous borders.
2. Maharaja Hari Singh.
3. War instigated by a country without directly involving its military and supporting hostile mercenaries, terrorists with weapons, training and money.
4. Geo-strategically important area in the Indian Ocean.
5. Issue of Tamil Nadu fishermen crossing Palk straits and ownership of Kachativu islands.
6. Practice of illegally transporting people from one country to another for forced labor or exploitation

**Note****9**

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MARITIME SECURITY

Water is the major source of life. Even though water occupies a major portion of earth's surface, it is the geographical location and resources in it that makes them important. We can categorise this water as oceans and seas. Ocean is a large water body of saline water where as seas are large body of water which may or may not be connected. Most of the seas are fully or partially enclosed by land.

Till date we have explored only five percentage of total area covered by oceans. And today, the economic growth of countries depend on oceans because it is through these large water bodies that trade is conducted and import and export of products, oil, etc., are shipped.

Hence securing such activity is called maritime security. In view of its importance nation states give lot of importance to securing the sea lanes of communication to protect their economy, borders, protect trade routes and also to show their strength.



Objectives

After studying this lesson you will be able to:

- explain the different aspects of maritime security of our country;
- explain and assess the importance of maritime security to India and
- identify the various agencies associated with maritime security of India.

9.1 Maritime Security

Maritime security involves protecting the nation's sovereignty from threats arising from the oceans and seas. It includes protecting coastal areas, safeguarding the available ocean resources such as fish, offshore oil and gas wells, port facilities, etc. It also means maintaining freedom at sea for movement of our ships and facilitating and protecting trade. Following are the elements of maritime security:

- International and national peace and security
- Protection of sea lanes of communication



Note

- Sovereignty, territorial integrity and political independence
- Protection from crime at sea
- Access and security to the resources at sea
- Security of seafarers and fishermen
- Environmental protection.

Just as we have threats on our land borders, we have threats in the oceans and seas. These are:-

Maritime Threats

- Illegal maritime arrivals/terrorists.
- Illegal exploitation of natural resources.
- Illegal activity in protected areas.
- Marine pollution.
- Prohibited imports and exports (Smuggling).
- Compromise to biosecurity.
- Piracy, robbery or violence at sea.
- Maritime terrorism.



Intext Questions

9.1

1. Explain the meaning of maritime security.
2. Name any three maritime threats.
3. Name any three elements of maritime security.

9.1.1 Maritime Zones

States that have access to the sea are called coastal state. India is a peninsula because it has huge water ways surrounding its land on three sides. Such states have sovereign rights to use all its surrounding water ways for various purposes. Essentially the purposes are:

- To explore, exploit, and manage its natural resource in the sea bed for economic purposes.
- Establish rights over use of artificial islands and installations and structures for marine scientific research.

The maritime zone recognized under international law includes internal waters, territorial sea, the contiguous zone, the exclusive economic zone, the continental shelf and the high seas. Let us see them briefly here.

- **Internal water:** Internal waters are the waters on the landward side of the baseline from which the distance of the territorial sea is measured. States have full sovereignty over its internal waters. Internal waters are considered as a part of land territory.
- **Territorial Sea:** States can claim twelve nautical miles from its baseline. The coastal state has the authority over the territorial sea, the air space above it, and the seabed and subsoil beneath it.
- **Contiguous Zone:** Each coastal state can claim a contiguous or adjacent zone. It is beyond the territorial sea and extends seaward up to 24 nm (nautical miles) from its baseline. In this zone coastal states can exercise customs, fiscal, immigration or sanitary laws.



DO YOU KNOW

Nautical mile is a unit of measurement at sea or air. One Nautical Mile is equal to 1852 metres or 1.852 km

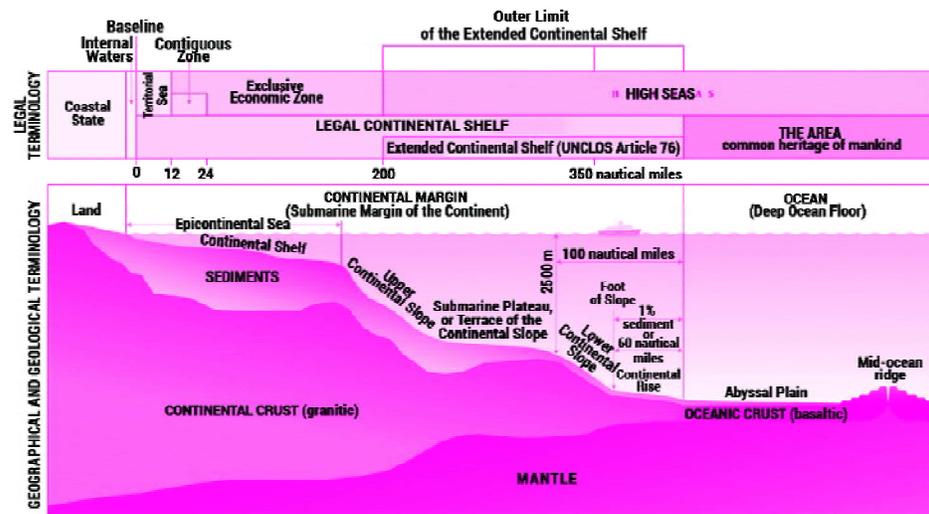
- **Exclusive Economic Zone:** Coastal states can claim an Exclusive Economic Zone (EEZ) beyond and adjacent to its territorial sea that extends up to 200nm towards sea from its baseline or out to a maritime boundary with another coastal state. You can find the graphical representation of maritime zone below.
- **High Seas:** The High Seas lie beyond 200 nautical miles from shore and are open and freely available to all countries. On the High Seas, no state can act or interfere with others using the seas. The law gives freedom of activity in six areas: Navigation, over flight, laying of cables and pipelines, artificial islands and installations, fishing, marine scientific research.



Note



Note



Maritime zones and rights under the 1982 United Nation Convention on the Law of the Sea (UNCLOS)

Fig 9.1 - Maritime Zones- Geographical Representation



Intext Questions

9.2

1. Explain the law of sea.
2. Explain the meaning of the maritime zones.
3. Describe the rights of a coastal state.
4. Explain the 'high seas'.

9.2 Importance of Maritime Security for India

Maritime trade occupies an important place in India's economy and energy security. Most of India's trade and energy supply pass through the Indian Ocean Region (IOR). It is estimated that most of the India's trade is done through the ocean. Hence securing the maritime area is non-negotiable. Apart from this reason, the geography of India also makes maritime security an important concern for Indian policy makers.

India has a coastline of 7,517 kms. Out of this 5,422 kms are with main land. Andaman and Nicobar have a coastline of 1962 kms and Lakshadweep has 132 kms of coastline. This vast coast line presents numerous security challenges like piracy, illegal landing of arms and explosives, infiltration, use of sea and off shore islands for criminal activities, drug and human trafficking and smuggling. Absence of physical barriers on the coast and presence of vital industries like port and important defence installations like RADARs and nuclear reactors enhances the risk and the need to protect its maritime region.

Besides, there is the need to protect the resources of the ocean in a sustainable manner. The traded goods and services are brought to land through the use of ports that are located in different parts of the country all along the coastline. Let us learn about them.

9.2.1 Ports in India

As mentioned above a big part of India's trade is conducted through oceans. India is planning to build 14 coastal economic zones. At present there are 12 major ports and 200 minor and intermediate ports in India. The 12 major ports of India are spread throughout the western and eastern coasts of India. These points are -

- Chennai
- Ennore
- JNPT
- Kochi
- Kolkata
- Mangaluru
- Mormugao
- Mumbai
- Paradip
- Tutucorin
- Vishakapattanam



ACTIVITY 9.1

Locate all the major parts mentioned in section 9.4 on a blank political map of India.



DO YOU KNOW

Sagar Mala

Sagaramala is an initiative by government of India to develop and modernize ports and coastal economic zones. It also includes costal community developmental programmes through skill development and livelihood generation activities like fisheries development and coastal tourism.

Below is the list of 200 more notified ports in different parts of India.

No.	State	Number of Ports
1.	Maharashtra	48
2.	Gujarat	42



Note



Note

3.	Kerala	17
4.	Tamilnadu	15
5.	Karnataka	10
6.	Odisha	13
7.	Andhra Pradesh	12
8.	Goa	5
9.	Lakshadweep	10
10.	Daman and Diu	2
11.	Pondichery	2
12.	Andaman and Nicobar	23

Blue Economy

Oceans not only help us in transportation of goods and services but also enable us to use the vast resources such as oil and natural gas and other minerals besides fisheries. Around 38 million people in the world depend on the fisheries from the oceans.

Hence, oceans provide enormous economic opportunities for the people as well. Blue economy is the sustainable use of resources of the oceans in a way to help the coastal community people in their economic and social development.

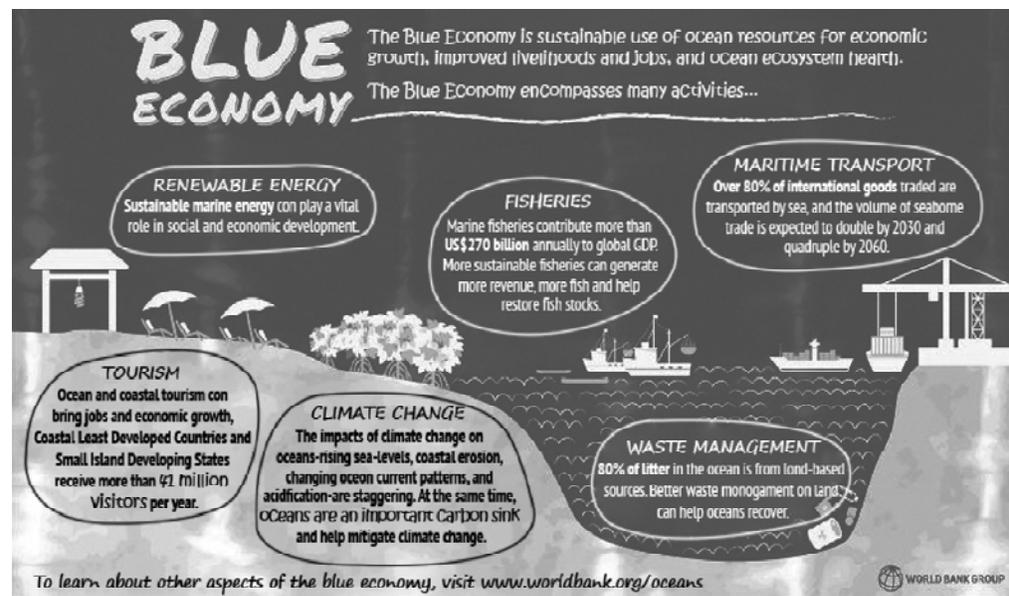


Fig 9.2 - Diagrammatic Representation



Intext Questions

9.3

1. Why is maritime security important for India? Explain.
2. Explain the term 'blue economy'.
3. Name any five major ports in India.
4. Explain the term Sagarmala.



Note

9.2.2 Strategic Importance of Maritime Boundaries

The Indian Ocean Region (IOR) is of immense strategic importance to India. Most of the country's oil and gas is imported through the sea. There is continuous increase in trade with the countries that surround the Indian Ocean region. Besides, the sea lanes, the Indian Ocean is considered as the most strategically important in the world because more than 80 % of the world's seaborne oil trade goes through the Indian Ocean choke points - 40 % passes through the Strait of Hormuz, 35 % through the Strait of Malacca and 8 % through the Bab el-Mandab Strait.



DO YOU KNOW

A chokepoint refers to a point of natural congestion along two wider and important navigable passages. Maritime choke points are naturally narrow channels of shipping having high traffic because of their strategic locations and these can be blocked by the navy.

More than half the world's armed conflicts are presently located in the Indian Ocean region. Also, terrorism and piracy add to the tensions. Apart from these competition between China and India to get supremacy in this region makes this region strategically important.

Some of the major choke points in the Indian ocean region are -

- Strait of Horminz
- Malacca and Singapore Straits
- Sunda Strait
- Lombok Strait
- Cape of Good Hope
- Mozambique Channel
- Ombai and Wetar Straits
- Bab-el-Mandeb



Note



Intext Questions

9.4

1. What is a maritime chokepoint?
2. Name any two major choke points in the Indian ocean region.

9.3 Agencies and Institutions of Maritime Security

In India, maritime security is not only responsibility of a single ministry or department. It is a combined effort of several ministries departments and agencies. There are four ministries in India which take care of the maritime issues. They are:

1. Ministry of Defence
2. Ministry of Home affairs
3. Ministry of Fisheries and
4. Ministry of Shipping
5. Other main stake holders are:
 - Ministry of External Affairs
 - Ministry of Communication and Information Technology

9.3.1 Forces for Sea Borders Protection

Forces responsible for protection of our sea borders are The Indian Coast Guard, Border Security Force (Rann of Kutch is Protected by BSF) and Central Industrial Security Force (CISF). CISF looks after the security of the major ports. State governments including island territories of India which have coastal regions employ the following agencies:

1) Forces

- State marine police
- State marine home guards (e.g. Tamil Nadu)
- State coastal security committees
- District coastal security committees

2) Intelligence agencies

- National Technical Research Organisation.
- Research and Analysis Wing
- Intelligence Bureau
- Narcotics control bureau

- Directorate of revenue intelligence
 - Defence intelligence agency
 - Directorate of navy intelligence
- 3) **Research and Development organizations**
- Indian Space Research Organisation
 - Defence Research & Development Organisation
 - National Centre of Excellence in Technology for Internal Security (NCETIS), IIT Bombay
- 4) Land Ports Authority of India (LPAI), Ministry of Home Affairs
- 5) Central Board of Excise & Customs, Ministry of Finance
- 6) National Committee for Strengthening Maritime and Coastal Security (NCSMCS)
- 7) National Marine Police Training Institute (MPTI) (Planning)
- 8) Central Marine Police Force (Planning)

9.3.2 Indian Coast Guard

Indian Coast Guard (ICG) is responsible for the security of coastal and territorial waters. It was formally established on 18th of August 1978 by the Coast Guard Act, 1978. Do you remember Exclusive Economic Zone? The ICG is responsible for maritime surveillance across India's 2 million sq.kms of Exclusive Economic Zone. ICG is also responsible for the overall coordination between central and state agencies in the matters relating to coastal security.

According to the 1976 Indian Maritime Zone Act the maritime zones of India are divided into 5 coastal regions which have their headquarters as follows:.

No:	Regions	Headquarters
1	North West	Gandhinagar
2	West	Mumbai
3	East	Chennai
4	North East	Kolkata
5	Andaman and Nicobar	Port Blair



Note



Note

These regions are further divided into 12 coast guard districts - one each in the nine coastal states, two in Andaman and Nicobar Islands, and one in Kavaratti in Lakshadweep and Minicoy Islands.

9.3.3 Indian Navy

Another main agency which is looking after the maritime security is the Indian Navy. The new maritime strategy of Indian navy is based on the concept of ensuring secure sea lanes of communication. Indian Maritime Security Strategy follows two key aspects. First, the rise in sources, types and intensity of threats. Second, in order to provide 'freedom to use the seas' for India's national interests, it is necessary to ensure that the seas remain secure.

9.3.4 International Ship and Port Facility Security Code (ISPS)

The international ship and port facility security code (ISPS) is a comprehensive set of guidelines and regulations established for the security of ships and port facilities.

International maritime Organisation

IMO is the specialized agency of UN. It is responsible for setting up global standard for security, safety and environmental performance of international shipping.

It is developed by International Maritime Organisation. Post 9/11 they brought strict regulations in the area of maritime security and safety. The code is constituted in the International Convention for Safety of Life at Sea (SOLAS). There are 148 signatories. The purpose of this code is to establish a standardised frame work across international ports and ships. This then allows governments to efficiently evaluate risks and offset threats to security level and undertake the security measure prescribed by the code. India implemented this code in 2004 and 10 minor ports are working under this code.



Intext Questions

9.5

1. What is IMO and ISPS?
2. Name the ministries and agencies working for the maritime security in India.
3. Write a brief description of the India Coast Guard.



What You Have Learnt

- Maritime is very important for a country like India, which is surrounded by water on three sides.

- From a strategic point of view India witnessed two major terrorist attacks - the Mumbai blast and the Mumbai terror attack through sea routes.
- Besides, India is also facing challenges from China through its increasing naval activity in the Indian Ocean and establishment of naval basis at awadar in Pakistan etc.
- Piracy, terrorism and drug-trafficking are other major threats that arise from the seas.
- Economically, the Indian Ocean is of immense strategic value as a large portion of India's trade is conducted through the Indian Ocean. Hence it is vital to secure the sea lanes of communication and protect the coastal regions, ports, industries and other facilities.
- For this purpose, India has established institutions and agencies such as Coast Guard, Indian Navy and other military agencies that provide constant support and security.



Terminal Exercises

1. Why is maritime security important? Explain.
2. Highlight the importance of blue economy.
3. Describe the role of Coast Guard and Indian Navy in maritime security.



Answers to Intext Questions

9.1

1. Maritime security involves protecting the nation's sovereignty from threats arising from the oceans and seas
2. Illegal maritime arrivals; Illegal exploitation of natural resources; Illegal activity in protected areas and Marine pollution.
3. International and national peace and security
 - Protection of sea lanes of communication
 - Sovereignty, territorial integrity and political independence
 - Protection from crime at sea
 - What are the elements of maritime security? Name any three.

9.2

1. Laws that regulate the use of sea for transshipment and other purposes by countries of the world.



Note



Note

2. Includes internal waters, territorial sea, the contiguous zone, the exclusive economic zone, the continental shelf and the high seas.
3. Sovereign rights to use all its surrounding water ways for various purposes for the purpose of exploring and exploiting its natural resource in the sea bed for economic purposes and to establish rights over use of artificial islands and installations and structures for marine scientific research.
4. The High Seas lie beyond 200 nautical miles from shore and are open and freely available to all countries. On the High Seas, no state can act or interfere with others using the seas.

9.3

1. Because an estimated 95 % of India's trade is conducted through oceans and hence securing the maritime is important for India. Why is maritime security important for India?
2. Blue economy is sustainable use of resources of the oceans in a way to help the coastal community people in their economic and social development.
3. There are 12 major ports in India. Some of them are: Kolkata, Paradip, Vishakapattanam, Ennore, Chennai, Tutucorin.
4. Sagaramala is an initiative by government of India to develop and modernize ports and coastal economic zones. It also includes coastal community developmental programmes through skill development and livelihood generation activities like fisheries development and coastal tourism.

9.4

1. A chokepoint refers to a point of natural congestion along two wider and important navigable passages. Maritime choke points are naturally narrow channels of shipping having high traffic because of their strategic locations
2. Straits of Malacca and Strait of Hormuz.

9.5

1. International Maritime Organization and International Ship and Port Facility Security Code.
2. Ministry of Defence, Ministry of Home affairs, Ministry of Fisheries and Ministry of Shipping. Agencies are as follows: National Technical Research Organisation, Research and Analysis Wing, Intelligence Bureau, Narcotics control bureau, Directorate of revenue intelligence
3. Indian Coast Guard (ICG) is responsible for the security of coastal and territorial waters. It was formally established on 18th of August 1978 by the Coast Guard Act, 1978.