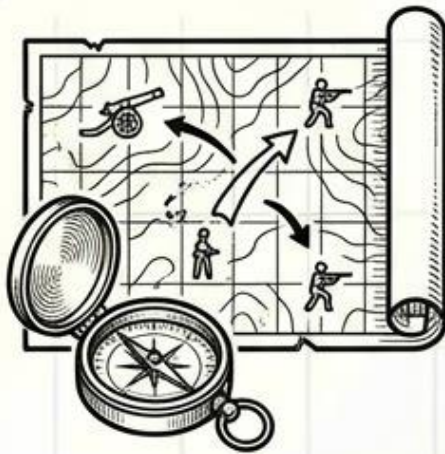




# MILITARY STUDIES (374)

## CHAPTERWISE NOTES



## MILITARY STUDIES

Sl. No.	Module	Chapters (Public Examination)	Marks
1	<b>Module 1 : Military Studies</b>	L-1: Importance of Military Studies	13
2	<b>Module 2 : Structure and Role of the Forces</b>	L-6: Paramilitary Forces	7
3	<b>Module 5: Warfare and Its Types</b>	L-12: Nuclear Warfare L-15: Cyber Warfare	20

Component	Details	Marks
<b>Public Exam (Selected Modules 1,2,5)</b>	Total Chapters : <b>4</b>	40
<b>Practical Exam</b>	NA	00
<b>TMA</b>	Tutor Marked Assignment	20
<b>Final Possible Marks</b>		<b>60</b>
		<b>Marks</b>

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## 1

## Importance of Military Studies

### Introduction :

**Importance Of Military Studies** -It tells us that Military Studies is not just about fighting. It is a subject that teaches us how a country protects itself, how its army is organized, and why every citizen should be disciplined. It also explains that to win a war, understanding the ground (terrain) and having a clever plan (strategy) is very important.

### Introduction to Military Studies :

It is the study of military organizations, the analysis of a country's security threats, the art of war, and the method of using armed forces to protect the nation.

### Why should we study Military Studies?

- **For Soldiers** : A soldier needs constant training and practice to become professional and skilled in using weapons.
- **Readiness** : A country's forces must be ready and trained for war at all times.
- **Morale** : A well-trained soldier has high morale and fights the war with confidence.
- **For Leaders and Bureaucrats** : In a democracy, political leaders and officers need military education to plan military organization and national security.

### The Army :

- **Importance of Training**: An army is known by the training of its soldiers; only a trained army has the confidence to win a war.
- **Study of Military Organization**: In ancient times, the army started with foot soldiers and later developed into *Chaturangbala* (chariots, elephants, cavalry, and infantry).
- **National Security**: Its analysis helps decide how big the army should be and how it should be organized to fight threats.



**The Art of War :** War is defined as an activity fought between two armies, using different strategies and tactics to win.

## TOP 5 QUESTIONS

**Q1. Define Military Studies and explain its importance.**

**Ans-** Military Studies is the study of military organizations, security threats, and the art of warfare. It is important because it makes citizens aware of national security and helps leaders make better decisions for defense.

**Q2. Differentiate between 'Tactics' and 'Strategy'.**

**Ans -** Strategy is a large-scale and long-term plan made by high-level commanders to achieve overall victory in a war. Tactics are the specific methods, movements, and immediate actions used by soldiers on the battlefield to defeat the enemy in a particular situation.

**Q3. Who all should study Military Studies and why?**

**Ans -** Students should study this subject to explore career opportunities in the defense sector. Political leaders must study it to make informed decisions about national security and defense budgets. Furthermore, common citizens should also learn it because it instills a sense of discipline and national pride. It helps every individual understand the challenges faced by our soldiers and the efforts required to maintain peace within the country.

**Q4. Why is the study of 'Terrain' crucial in military operations?**

**Ans -** Terrain refers to the physical features of the land, such as mountains, rivers, and forests. In military studies, understanding terrain is crucial because it dictates how a battle will be fought. It helps commanders decide where to station troops, how to move heavy machinery, and where to hide from the enemy. A correct assessment of the terrain allows the military to formulate successful strategies and ensures smooth logistics during operations.

**Q5. What is the code of conduct for soldiers during war?**

**Ans -** Soldiers follow a strict code of conduct based on the ethics of warfare. During a war, they are strictly prohibited from killing or harming elderly people, women, children, and disabled soldiers who cannot fight. Additionally, any enemy soldier who has surrendered must be treated humanely and not be killed. This code ensures that even in the violence of war, human rights and moral values are respected by the armed forces.



## 2

## Paramilitary Forces

### Introduction :

Paramilitary forces focus on India's Central Armed Police Forces (CAPF). These organizations are semi-military and work together with the main army. Their main job is to protect our international borders during peacetime, stop illegal entry, and maintain peace within the country during riots, elections, or natural disasters. They are the backbone of our internal and border security system.

### Definition of Paramilitary Force :

- It is a semi-military force whose structure, tactics, and training are similar to a professional army.
- It is not officially part of the state's main armed forces.
- During war, some forces (like the BSF) work under the army and perform tasks like the infantry (foot soldiers).

### Central Reserve Police Force (CRPF) :

- It is India's largest Central Armed Police Force.
- Its main job is to help states and union territories maintain law and order and fight against militancy.
- **RAF** (Rapid Action Force) : A special branch of the CRPF meant to deal with communal riots.
- **COBRA** (Commando Battalion for Resolute Action) : A specialized unit trained for jungle warfare against Naxalites.

### Assam Rifles :

- It is India's oldest paramilitary force, established in 1835 as the 'Cachar Levy.'
- It is under the control of the Ministry of Home Affairs (MHA), but its officers are provided by the Indian Army.
- Its main job is to guard the India-Myanmar border and carry out anti-militancy operations.



### Indian Coast Guard :

- It was established on August 18, 1978, and works under the Ministry of Defence.
- Its job is to protect sea interests, help fishermen, and stop smuggling.

### Sashastra Seema Bal (SSB):

- It currently guards the India-Nepal and India-Bhutan borders.
- Its goal is to promote a sense of security and brotherhood among the people living near the borders.

## TOP 5 QUESTIONS

### Q1. What is a Paramilitary Force and what is its role?

**Ans** - A paramilitary force is a semi-militarized organization that is trained and organized like a professional army but is not part of the state's formal armed forces. Their primary role is to assist the Indian Armed Forces in guarding the borders during peace and maintaining internal security during riots or insurgencies. During a full-scale war, these forces usually come under the operational control of the Army to perform secondary infantry tasks.

### Q2. List the names of major Paramilitary and CAPF forces in India.

**Ans** - India has several specialized forces for different security needs. The major ones include the Assam Rifles, which is the oldest force, the Special Frontier Force (SFF), and the Indian Coast Guard. Under the Central Armed Police Forces (CAPF), we have the Border Security Force (BSF), Central Reserve Police Force (CRPF), Central Industrial Security Force (CISF), Indo-Tibetan Border Police (ITBP), and the Sashastra Seema Bal (SSB), which guards the borders.

### Q3. Describe the main responsibilities of the Indian Coast Guard.

**Ans** - The Indian Coast Guard is responsible for protecting India's maritime interests and sea borders. Its main tasks include the safety of offshore oil terminals and artificial islands, providing assistance to fishermen in distress, and protecting the marine ecology. They also work with the Customs Department to prevent smuggling in territorial waters and ensure national defense during hostilities at sea, making them a vital part of our coastal security system.

### Q4. What is the Special Frontier Force (SFF)?

**Ans** - The Special Frontier Force (SFF), also known as 'Establishment 22', is a specialized paramilitary force raised under the Cabinet Secretariat. It is led by officers from the Indian Army and is primarily used for



covert and strategic military operations. The force was originally created to handle sensitive missions along the borders. Due to its unique training and secretive nature, it plays a critical role in India's national security during specialized high-risk assignments.

**Q5. How does the BSF function during peace and war?**

**Ans** - During peacetime, the Border Security Force (BSF) is responsible for guarding India's international borders, preventing trans-border crimes like smuggling, and ensuring the sense of security among people living in border areas. However, during wartime, the BSF shifts its role and comes under the operational command of the Indian Army. It assists the regular army by guarding secondary lines of defense, managing prisoners of war, and performing infantry-like roles in specific sectors.



## 3

# Nuclear Warfare

## Introduction :

"Nuclear Weapons" refers to the most powerful weapons known to mankind. It explains the science of nuclear energy and the huge destruction caused by nuclear explosions. This chapter highlights immediate effects like heat and blast, and long-term dangers of radiation. It also teaches the necessary safety steps that individuals and groups must take to survive a nuclear attack.

## Energy Amount of a Nuclear Explosion :

- **Yield** : This is the amount of explosive energy produced by a nuclear weapon, measured in TNT equivalent.
- **1 Kiloton (KT)** : Energy equal to 1,000 tons of TNT.
- **1 Megaton (MT)** : Energy equal to 10 lakh (1 million) tons of TNT.

## Characteristics of a Nuclear Explosion :

- Extremely bright flash.
- Fireball.
- Thermal radiation (heat).
- Pressure wave (shockwave).
- Electromagnetic effects.
- Mushroom-shaped cloud.

## Effects of a Nuclear Explosion :

- **Dazzle** : Temporary loss of vision due to the very bright light.
- **Eye Damage** : Burning of the retina, which can cause permanent blind spots.



**Blast and Shock :**

- Falling of buildings and flying debris (rubbish/broken pieces).
- Overturning of vehicles and equipment.

**Nuclear Effects :** Dangerous radiation is released at the time of a nuclear explosion, which causes harm immediately and also has long-term effects. This radiation makes air, water, and land poisonous. It has a bad effect on the human body, causing illnesses like headaches, vomiting, and hair loss. It also affects electronic devices - sometimes damaging them for a short time and sometimes stopping or destroying them completely.

## TOP 5 QUESTIONS

**Q1. Explain the process of a Nuclear Chain Reaction.**

**Ans -** A nuclear chain reaction starts when a neutron hits a heavy atom like Uranium, causing it to split and release energy along with more neutrons. These new neutrons then strike other atoms, causing them to split as well. This process repeats rapidly in a very short time, leading to a massive explosion. In a controlled environment, this reaction produces power, but in a bomb, it creates an uncontrolled, devastating release of energy.

**Q2. What are the immediate effects of a nuclear explosion?**

**Ans -** A nuclear explosion has four main immediate effects. First is the 'Thermal Flash', a blinding light and heat that can melt objects. Second is the 'Fireball' which creates a massive fire at the center. Third is the 'Blast Wave' or shockwave that can flatten buildings for miles. Lastly, 'Initial Radiation' is released, which consists of harmful rays like Gamma rays that cause immediate sickness or death to living beings in the area.

**Q3. Distinguish between Nuclear Fission and Nuclear Fusion.**

**Ans -** Nuclear Fission is the process where a heavy nucleus, such as Uranium, is split into two smaller nuclei, releasing a large amount of energy. Nuclear Fusion, on the other hand, is the joining of two light nuclei, like Hydrogen, to form a heavier nucleus. Fusion releases much more energy than fission and is the process that powers the sun. While fission is used in traditional atomic bombs, fusion is the basis for more powerful hydrogen bombs.



**Q4. What are the individual protective measures against nuclear radiation?Ans** - To protect oneself from radioactive dust and rays, specialized individual equipment is required. This includes wearing a 'Two-piece Over-garment' that covers the whole body and a mask for respiratory protection to prevent inhaling radioactive particles. Protective gloves and over-boots must also be worn to avoid skin contact with fallout. These measures ensure that the radioactive particles do not enter the human body or settle on the skin, reducing the risk of radiation sickness.

**Q5. Explain 'Collective Protection' in the context of nuclear warfare.**

**Ans** - Collective protection refers to measures taken to protect a large group of people from a nuclear attack. This involves building reinforced underground shelters that can withstand blast waves and heat. These shelters must be equipped with special filtration systems to provide clean air, as well as enough stored food, water, and medicines. People must stay inside these shelters until the radiation levels outside drop to a safe limit, which could take several days or even weeks.



## 4

# Cyber Warfare

## Introduction :

In the age of Information Technology, cyberspace has become a new field of war. This chapter gives details about attacks through computer networks, their types, identifying attackers, and policies followed for the country's digital security. It explains how countries try to destroy each other's digital systems. It also provides information about India's cyber security policies and agencies like CERT-In.

## Definition of Cyber Warfare :

- **Cyber Warfare** : Action taken by a nation-state with the aim of damaging or blocking another nation's computers or networks.
- This can also include non-state actors like terrorist groups, hackers, and criminal organizations.
- **Cyber Crime** : A crime that requires the use or knowledge of a computer to cause harm.
- **Cyber Security** : Developing policies and processes to protect one's information and information systems.

## Types of Threats :

- **Cyber Attacks** : Intrusions (breaking in) where the main goal is to cause immediate damage or disturbance.
- **Cyber Espionage** : Breaking into systems to get secret information (spying).
- **Cyber Sabotage** : Blocking or damaging important basic systems like military systems, power grids, water supply, or transport.
- **Cyber Propaganda** : Using social media and digital platforms to influence public opinion and fight psychological wars.

## Cyber Attackers :

- **Insider**: An unhappy employee of an organization who can steal or destroy sensitive data.
- **Terrorists**: Those who use the internet to stop government work or to scare the public.



**CERT and National Cyber Security Policy :**

- **CERT-In (2004)** : The main agency in India chosen to manage and coordinate crises to stop cyber attacks.
- **NCIIPC** : A department created to protect the important information systems of sensitive sectors like energy, transport, banking, and defense.

## TOP 5 QUESTIONS

**Q1. Define Cyber Warfare and explain its objectives.**

**Ans** - Cyber warfare is the use of computer technology to penetrate and disrupt or damage the information systems of an adversary nation for strategic or military purposes. The main objectives include disrupting communication networks, destroying sensitive data, and paralyzing critical infrastructure like power grids or banking systems. By attacking these systems, a nation can weaken its enemy without firing a single bullet, making it a powerful tool in modern warfare to gain a strategic advantage.

**Q2. What are the four main types of cyber threats?**

**Ans** - Cyber threats are categorized into four types.

- (1) 'Cyber Attacks' involve hacking into systems to cause damage.
- (2) 'Cyber Espionage' is the act of spying and stealing secret government or military data.
- (3) 'Cyber Sabotage' involves destroying or disabling physical infrastructure using malicious software.
- (4) 'Cyber Propaganda' is the use of social media and the internet to spread fake news and misinformation to influence the public's opinion or demoralize the citizens of an adversary nation.

**Q3. Differentiate between 'Hackers' and 'Crackers'.**

**Ans** - Hackers and Crackers both gain unauthorized access to computer systems, but their intentions are different. A Hacker is generally an individual who gains access to a system to find flaws or weaknesses, sometimes for fun or to improve security. However, a Cracker is a malicious user who breaks into computer systems specifically to steal sensitive information, commit fraud, or cause serious damage to the network. Crackers are always considered criminals because they intend to harm others.



**Q4. What is the role of CERT-In in protecting India's cyberspace?**

**Ans** - The Indian Computer Emergency Response Team (CERT-In) is the national nodal agency for responding to computer security incidents. Its role is to collect and analyze information on cyber attacks, provide early warnings about potential threats, and coordinate remedial measures when an attack occurs. It works 24/7 to protect India's critical information infrastructure and provides guidelines to government and private organizations on how to secure their networks from international hackers and viruses.

**Q5. Explain the concept of 'Cyber Sabotage' and 'Cyber Propaganda'.**

**Ans** - Cyber Sabotage is the use of malicious software to destroy or disable the physical infrastructure of a state, such as disrupting a power plant or a water supply system. Cyber Propaganda, on the other hand, involves using the internet and social media platforms to spread biased information, rumors, or fake news. The goal of propaganda is to influence the thoughts of the public, create confusion during a crisis, or damage the reputation of the opponent government to cause internal instability.

