## NATIONAL CADET CORPS (N.C.C) - (CODE: 076)

## Class XI (2024-25) Max Marks - 70

## **Common Subjects**

#### Unit-1: The NCC

- Aims and Objectives of NCC
- Organization and Training and NCC Song
- Incentives

## Unit-2: National Integration and Awareness

- National Integration: Importance and Necessity
- Freedom Struggle and Nationalist Movement in India

## Unit-3: Drill

- Foot Drill
- Arm Drill

## **Unit-4: Weapon Training**

- Characteristics of a rifle and its ammunition
- Stripping, assembling, care and cleaning of 22 Rifle
- Loading, cocking and unloading
- Different positions for holding and aiming

# Unit-5: Personality Development and Leadership

- Introduction to Personality development
- Communication skills
- Leadership traits
- Time management

## Unit-6: Disaster Management and Civil Affairs

- Types of Emergencies and Natural Disasters
- Assistance during natural and other calamities: Floods, Cyclones, Earthquakes, Accidents

### **Unit-7: Social Awareness Community Development**

- Basics of Social Service and its needs
- Contribution of youth towards social welfare
- Civic responsibilities

## Unit-8: Health and Hygiene

- Hygiene and sanitation
- Infectious and contagious diseases and its prevention

### **Unit-9: Adventure and Obstacle Training**

Obstacle training

#### Unit-10: Environment Awareness and Conservation

- Natural resources conservation and management
- Water conservation and rain water harvesting

## Specialized Subject (Army)

#### **Unit 1: Armed Forces**

Aim: To acquaint cadets with the Armed Forces

Scope: Introductory and general information about the Armed Forces

- Basic organization of Armed Forces
- Organization of the Army

## Unit 2: Map Reading

Aim: To teach cadets elementary map reading

Scope: Basic understanding of map sheets and map reading instruments and development of capability to use them to carry out simple map reading

- Introduction to types of Maps and conventional signs
- Scales and grid system
- Topographical forms and technical terms
- Types of bearings and use of service protractor
- Prismatic compass and its use and GPS

#### Unit -3 Field Craft and Battle Craft

Aim: To teach cadets elementary field craft and battle craft

Scope: Basic field craft and battle craft

- Judging distance
- Description of ground

#### Unit-6: Communication

Aim: To introduce cadets to the latest trends in the field of communications

Scope: Types of communications and future trends

- Types of communication
- Characteristics of wireless technology (mobile, Wi-Fi etc.)

### **Unit-5: Military History**

Aim: To provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars

Scope: Introduction to biographies, famous Indian battles and gallantry awards

Biographies of renowned generals (Carriappa/ Manekshaw)

### Unit-6: Communication

Aim: To introduce cadets to the latest trends in the field of communications Scope: Types of communications and future trends

- Types of communication
- Characteristics of wireless technology (mobile, Wi-Fi etc.)

## **Specialized Subject (Navy)**

## **Unit-1: Naval Orientation and service subjects**

Aim: To impart basic knowledge about Navy

Scope: Basic knowledge, history, current organization and role of different branches

- History of the Navy pre and post-independence, gallantry award winners
- Organization of the Navy, NHQ, commands and fleets
- Types of War ships and role
- Rank of officers and sailors and their equivalent in other services

#### Unit-2: Naval Communication

Aim: To impart basic knowledge about naval communication

Scope: To impart basic knowledge about naval communication, semaphore and wearing of flags

· Introduction to modern naval communication, purpose and principles

#### Unit-3: Seamanship

Aim: To impart basic knowledge about navigation Scope: Basic navigation tactics and methods

Parts of Anchor, cable and its identification

## Unit-4: Rigging

Aim: To impart basic knowledge about ropes, rigging and shackles Scope: Basic rope work and introduction to ropes, bends and hitches

- Types of ropes and breaking strength stowing, maintenance and securing
- Practical bends and hitches

#### Unit-5: Boat Work

Aim: To impart basic knowledge about boats and its parts and steering of boats Scope: Introduction to boats and its parts including steering of boats and boat pulling

- Parts of a boat and parts of an oar
- Instructions on boat pulling

### Unit-6: Ship and Boat Modeling

Aim: To impart basic knowledge about ship modelling to the cadets

Scope: To impart basic knowledge about ship construction and boat modelling

Principles of Ship Modelling

### Unit-7: Search and Rescue

Aim: To impart basic knowledge about search and rescue

Scope: To impart knowledge about SAR organization and role of Coast Guard

• SAR Organization in the Indian Ocean

## **Specialized Subject (Air Force)**

#### **Unit-1: General Service Knowledge**

Aim: To impart basic knowledge of IAF Scope: History and Organization of IAF

- Development of Aviation
- History of IAF

## **Unit-2: Principles of Flight**

Aim: To introduce principles of flight

Scope: To impart knowledge about basic principles on which aviation is based

- Laws of Motion
- Glossary of Terms

## Unit-3: Airmanship

Aim: To introduce the concept of airmanship

Score: Airfield layout, Rules of the air, ATC procedures and basics of aviation medicine

- Airfield Layout
- Rules of the Air

### Circuit Procedure

## **Unit-4: Aero Engines**

Aim: To introduce basic knowledge of aero engines

Scope: Introduction to aero engines

#### Unit-5: Air frames

Aim: To introduce basic structure of an aircraft

Scope: Introduction to various aircraft controls and landing gear

- Aircraft Controls
- Landing Gear

#### **Unit-6: Instruments**

Aim: To provide knowledge of aircraft instruments Scope: To teach basics about flight instruments

Basic flight instruments

### Unit 7: AircraftParticulars

Aim: To provide knowledge of aircraft Instruments

Scope: Knowledge about the aircraft to be flown including checks and procedures

Aircraft particular type specific

## Unit-8: Aero-modeling

Aim: To provide knowledge about aero modelling

Scope: History of aero modelling, materials used in different types of models

- History of Aero-modelling
- Types of aero-models

## NATIONAL CADET CORPS (N.C.C) - (CODE: 076)

## Class XII (2024-25) Max Marks - 70

#### Common Subjects

## Unit-1: National Integration and Awareness

Aim: To inculcate sense of patriotism, secular values and motivate cadets to contribute towards nation building through national unity and social cohesion

Scope: The concepts of national interests, objectives and integration, unity in diversity and cultural heritage of India

- National Interests, Objectives, Threats ad Opportunities
- Problems/ Challenges of National Integration

#### Unit-2 : Drill

Aim: To inculcate a sense of discipline, improve bearing, smartness, ant turnout and to develop the quality of immediate and implicit obedience of orders

Scope: All important basic aspects of drill including ceremonial drill, drill with arms and words of command

### **Drill with Arms**

- Getting on parade with rifle and dressing at the order
- Dismissing and falling out
- Gun salute, Salami Shastra
- Squad drill
- Short/long trail from the order and vice-versa
- Examine arms

#### **Ceremonial Drill**

Guard Mounting

### **Unit-3: Weapon Training**

Aim: To give elementary knowledge about rifles

Scope: Basic knowledge about rifle and firing

- The lying position, holding and aiming
- Trigger operation and firing a shot
- Range precautions and safety precautions
- Theory of group and snap shooting

## **Unit-4: Personality Development and Leadership**

Aim: To develop an all-round dynamic personality with adequate leadership traits to deal/ contribute effectively in all walks of life

Scope: Basic subjects of leadership with emphasis on self-awareness, life/soft skills, time management and character building

- Self-Awareness-know yourself/ insight
- Inter personal relationship and communication
- Communication skills: group discussions/ lectures
- Time management
- Interview Skills
- Sociability: Social Skills

### Unit-5: Disaster Management

Aim: To train Cadets to assist Civil administration in performance of selective duties during disasters

Scope: Basic information about civil defense organization and its duties, maintenance of essential services and providing assistance to civil administration in various types of emergencies during national disasters

- Fire Service and Fire Fighting
- Assistance during natural/ other calamities: Flood/ cyclone/ earthquake/ accident etc.

### **Unit-6: Social Awareness Community Development**

Aim: To teach cadets the values and skills involved in providing voluntary Social Service

Scope: Understanding of social service and its needs, knowledge about the weaker sections of our society and their requirements, about NGOs and contribution of youth towards social welfare

- NGOs Role and contribution
- Drug abuse and trafficking
- Corruption
- Social evils viz. dowry/ female feticide/ child abuse and trafficking etc.

### Unit-7: Health and Hygiene

Aim: To instill respect and responsibility towards personal health and hygiene Scope: Basic information about maintenance of health and hygiene, sanitation, disease and an elementary knowledge of First Aid and Nursing

- Hygiene and sanitation (Personal and Food Hygiene)
- Basics of first aid in common medical emergencies
- Wounds and fractures

## Unit-8: Adventure Training and Obstacle Training

Aim: To inculcate a sense of adventure and develop confidence, courage and determination

Scope: To expose cadets to various adventure activities

Para sailing

#### **Unit-9: Environment Awareness and Conservation**

Aim: To sensitize the cadets on natural resource conservation and protection of environment

Scope: Basic understanding of environment in general and waste management in particular, energy conservation, pollution control and wildlife conservation in particular

- Waste management
- Pollution control water, air, noise, soil

## **Specialized Subject (Army)**

#### **Unit-1: Armed Forces**

Aim: To acquaint cadets with the Armed Forces Scope: Introductory and general information

about the Armed Forces

- Modes of entry in to army
- Honours and awards

## Unit-2: Map Reading

Aim: To teach cadets elementary map reading

Scope: Basic understanding of map sheets and map reading instruments and development of capability to use them to carry out simple map reading

- Cardinal points and types of North
- Types of bearings and use of service protractor
- Setting a map, finding North and own position

## Unit-3: Field Craft and Battle Craft

Aim: To teach cadets elementary field craft and battle craft

Scope: Basic field craft and battle craft

- Judging distance observation, camouflage and concealment
- Field signals

## **Unit-4: Introduction to Infantry Weapons and Equipment**

Aim: To introduce cadets to infantry weapon

Scope: Introduction to characteristics and capabilities of infantry weapons

 Characteristics of 5.56 INSAS rifle, ammunition, firepower, stripping, assembling and cleaning Organization of infantry battalion

## Unit-5: Military History

Aim: To provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars

Scope: Introduction to biographies, famous Indian battles and gallantry awards

- Indian Army War Heroes
- Study of Indo Pak wars of 1965, 1971 and Kargil

#### **Unit-6: Communication**

Aim: To introduce cadets to latest trends in the field of communications

Scope: Types of communications and future trends

Characteristics of walkie–talkie

## Specialized Subject (Navy)

## **Unit-1: Naval Orientation and Service Subjects**

Aim: To impart basic knowledge about Navy

Scope: Basic knowledge, history, current organization and role of different branches

- Organization of Ships and on board organization
- Naval customs and traditions
- Modes of entry into the Indian Navy

## Unit-2: Naval War fare and its Components

Aim: To impart basic knowledge about Naval Warfare

Scope: Overview of fleet operations to include aviation, submarine operations and missiles

Introduction to anti-submarine warfare

#### Unit-3: Naval Communication

Aim: To impart basic knowledge about Naval communication

Scope: To impart basic knowledge about naval communication organization, semaphore and wearing of flags

- Introduction to Semaphore
- Phonetic Alphabets

## Unit-4 : Navigation

Aim: To impart basic knowledge about navigation

Scope: Basic navigation tactics and methods and equipment used for navigation

- Navigation of ships—basic requirements
- Types of compass–gyro and magnetic, types of North
- Simple chart work
- Brief characteristics of its tides and its effects on ships

## Unit-5 : Seamanship

Aim: To impart basic knowledge about navigation

Scope: Basic navigation tactics and methods

Types of anchor, purpose and holding ground

#### Unit-6: Boat Work

Aim: To impart basic knowledge about boats and its parts and steering of boats Scope: Introduction to boats and its parts including steering of boats and boat pulling

- Demonstrate rigging of a whaler and enterprise boat and parts of a sail
- Instructions in enterprise class boat including elementary sailing rules

## Unit-7: Fire Fighting, flooding and damage control

Aim: Introduction to fire-fighting, flooding and damage control

Scope: Impart basic knowledge about fire-fighting, flooding and damage control of a ship

Causes of damage, flooding and damage control

## Unit-8: Ship and boat modeling

Aim: To impart basic knowledge about ship modeling to cadets

Scope: To impart basic knowledge about ship construction and boat modeling.

- Types of models
- Ship model competition
- Care and handling of power tools

## **Specialized Subject (Air Force)**

## Unit-1: General Service Knowledge

Aim: To impart basic knowledge of IAF

Scope: Organization of IAF

- Organization of Air Force
- Branches of Air Force

## **Unit-2: Air Campaigns**

Aim: To introduce Air Campaigns of Air Force Scope: An overview of important campaigns

- Indo Pak War 1971
- OP Safed Sagar

## Unit-3: Aircraft Recognition

Aim: To introduce various aircrafts of the Air Force Scope: Types, roles, variants of aircraft of the IAF

- Fighters
- Transports
- Helicopters

### Unit-4: Principles of Flight

Aim: To introduce principles of flight

Scope: To impart knowledge about basic principles on which aviation is based

- Bernauli's theorem and Venturi Effect
- Aerofoil
- Forces on an aircraft

## **Unit-5: Airmanship**

Aim: To introduce the concept of airmanship

Scope: ATC Procedures and basics of aviation medicine

- ATC/RT Procedure
- Aviation Medicine

### **Unit-6: Navigation**

Aim: To give basic knowledge of Air navigation

Scope: Fundamentals of map reading from the air

- Requirement of navigation
- Glossary of terms

### Unit-7: Meteorology

Aim: To emphasize the need for knowledge of meteorology in aviation.

Scope: Importance, various phenomena of weather and its effects on aviation

Importance of met in aviation

# **Unit-8: Aero engines**

Whole Unit deleted

# Unit-9 : Air frames

Whole Unit deleted

## **Unit-10: Instruments**

Aim: To provide knowledge of aircraft instruments

Scope: Introduction to Radars

# Unit-11 : Aero-modeling

Aim: To provide knowledge about aero modeling

Scope: Materials used in different types of models. Building /Flying of aero-models