

**NATIONAL CADET CORPS (N.C.C) – (CODE: 076)**

**Class XI (2023-24) Max Marks - 70**

**Common Subjects**

<b>Unit-1 : The NCC</b> <ul style="list-style-type: none"><li>• Aims and Objectives of NCC</li><li>• Organization and Training and NCC Song</li><li>• Incentives</li></ul>
<b>Unit-2 : National Integration and Awareness</b> <ul style="list-style-type: none"><li>• National Integration: Importance and Necessity</li><li>• Freedom Struggle and Nationalist Movement in India</li></ul>
<b>Unit-3 : Drill</b> <ul style="list-style-type: none"><li>• Foot Drill</li><li>• Arm Drill</li></ul>
<b>Unit-4 : Weapon Training</b> <ul style="list-style-type: none"><li>• Characteristics of a rifle and its ammunition</li><li>• Stripping, assembling, care and cleaning of 22 Rifle</li><li>• Loading, cocking and unloading</li><li>• Different positions for holding and aiming</li></ul>
<b>Unit-5 : Personality Development and Leadership</b> <ul style="list-style-type: none"><li>• Introduction to Personality development</li><li>• Communication skills</li><li>• Leadership traits</li><li>• Time management</li></ul>
<b>Unit-6 : Disaster Management and Civil Affairs</b> <ul style="list-style-type: none"><li>• Types of Emergencies and Natural Disasters</li><li>• Assistance during natural and other calamities: Floods, Cyclones, Earthquakes, Accidents</li></ul>
<b>Unit-7 : Social Awareness Community Development</b> <ul style="list-style-type: none"><li>• Basics of Social Service and its needs</li><li>• Contribution of youth towards social welfare</li><li>• Civic responsibilities</li></ul>
<b>Unit-8: Health and Hygiene</b> <ul style="list-style-type: none"><li>• Hygiene and sanitation</li><li>• Infectious and contagious diseases and its prevention</li></ul>
<b>Unit-9 : Adventure and Obstacle Training</b> <ul style="list-style-type: none"><li>• Obstacle training</li></ul>
<b>Unit-10 : Environment Awareness and Conservation</b> <ul style="list-style-type: none"><li>• Natural resources – conservation and management</li><li>• Water conservation and rain water harvesting</li></ul>

## 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: Aircraft Particulars**

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 (2023-24) 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 and Opportunities
- Problems/ Challenges of National Integration

### **Unit-2 : Drill**

Aim: To inculcate a sense of discipline, improve bearing, smartness, and 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

<ul style="list-style-type: none"> <li>• Organization of infantry battalion</li> </ul>
<p><b>Unit-5 : Military History</b>  Aim: To provide knowledge of renowned Military Generals, PVCs and Indo-Pak Wars  Scope: Introduction to biographies, famous Indian battles and gallantry awards</p> <ul style="list-style-type: none"> <li>• Indian Army War Heroes</li> <li>• Study of Indo Pak wars of 1965, 1971 and Kargil</li> </ul>
<p><b>Unit-6 : Communication</b>  Aim: To introduce cadets to latest trends in the field of communications  Scope: Types of communications and future trends</p> <ul style="list-style-type: none"> <li>• Characteristics of walkie-talkie</li> </ul>

### Specialized Subject (Navy)

<p><b>Unit-1 : Naval Orientation and Service Subjects</b>  Aim: To impart basic knowledge about Navy  Scope: Basic knowledge, history, current organization and role of different branches</p> <ul style="list-style-type: none"> <li>• Organization of Ships and on board organization</li> <li>• Naval customs and traditions</li> <li>• Modes of entry into the Indian Navy</li> </ul>
<p><b>Unit-2 : Naval Warfare and its Components</b>  Aim: To impart basic knowledge about Naval Warfare  Scope: Overview of fleet operations to include aviation, submarine operations and missiles</p> <ul style="list-style-type: none"> <li>• Introduction to anti-submarine warfare</li> </ul>
<p><b>Unit-3 : Naval Communication</b>  Aim: To impart basic knowledge about Naval communication  Scope: To impart basic knowledge about naval communication organization, semaphore and wearing of flags</p> <ul style="list-style-type: none"> <li>• Introduction to Semaphore</li> <li>• Phonetic Alphabets</li> </ul>
<p><b>Unit-4 : Navigation</b>  Aim: To impart basic knowledge about navigation  Scope: Basic navigation tactics and methods and equipment used for navigation</p> <ul style="list-style-type: none"> <li>• Navigation of ships–basic requirements</li> <li>• Types of compass–gyro and magnetic, types of North</li> <li>• Simple chart work</li> <li>• Brief characteristics of its tides and its effects on ships</li> </ul>
<p><b>Unit-5 : Seamanship</b>  Aim: To impart basic knowledge about navigation  Scope: Basic navigation tactics and methods</p> <ul style="list-style-type: none"> <li>• Types of anchor, purpose and holding ground</li> </ul>
<p><b>Unit-6 : Boat Work</b>  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</p> <ul style="list-style-type: none"> <li>• Demonstrate rigging of a whaler and enterprise boat and parts of a sail</li> <li>• Instructions in enterprise class boat including elementary sailing rules</li> </ul>

**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