

NCC CELL
KOHIMA SCIENCE COLLEGE (AUTONOMOUS),
JOTSOMA

REVISED SYLLABUS
FOR
UNDER GRADUATE
CHOICE BASED CREDIT SYSTEM
GENERIC ELECTIVE NCC
(NATIONAL CADET CORPS)
AIR WING
2021

**GENERIC ELECTIVE
NCC AIR WING**

SEMESTER	COURSE	COURSE NAME	COURSE CODE	CREDIT
I	Generic Elective 1	NCC (Theory)	NCG 1.11	4
		FOOT DRILL (Practical)	NCG 1.12	2
II	Generic Elective 2	NCC (Theory)	NCG 2.11	4
		NCC (Practical)	NCG 2.12	2
III	Generic Elective 3	NCC (Theory)	NCG 3.11(b)	4
		NCC (Practical)	NCG 3.12(b)	2
IV	Generic Elective 4	NCC (Theory)	NCG 4.11(b)	4
		NCC (Practical)	NCG 4.12(b)	2

SEMESTER - I

GENERIC ELECTIVE 1 NCC (THEORY) Paper No.: NCG1.11

Contact Hours:60
Credit: 4

UNIT I NCC ORGANIZATION

Aims and objectives of NCC, Organizational structure of NCC, NCC Song, Incentives of NCC Cadets, Certificate Examination in NCC; Honours and Awards, Youth Exchange Programme (YEP) and YEP Countries, Introduction to SSB Interview, Duties, responsibilities and conduct on NCC Cadets.

UNIT II BASIC FOOT DRILLS

Aims and objectives of learning the drill commands and its importance, General word of commands, attention, stand at ease, turning left, right and inking at halt; Sizing, forming three ranks and numbering, open and close march order, dressing the squad; Saluting at halt, getting on Parade, dismissing and falling out.

UNIT III FOOT DRILL II

Marching, length of pace and time in marching in quick time and halt, slow march and halt, side pace, pace forward and to the rear; Turning on the march and wheeling, saluting on the march, Marching timing, forward march and halt in quick march; changing step, formation of squad and squad drill.

UNIT IV ADVENTURE & OBSTACLE TRAINING

- a) Adventure training tips, Para sailing and its principles; Slithering, Rock climbing, cycling and trekking and their impacts on physical health.
- b) Obstacle training: aim, types and importance.

UNIT V PERSONALITY DEVELOPMENT

Introduction to personality development, Factors influencing/shaping personality, Self-Awareness, Empathy, Critical and creative thinking, Communication Skills, Decision making and problem solving, Coping with stress and emotional stress, Importance of changing mindset, Time management, Sociability: Social Skills, Etiquettes and manners, Importance of Group/Teamwork, Interview Skills.

Recommended Books and References:

1. Cadets training handbook common subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Femida Handy, Kassam Meenaz, Ingold Sharjah Jillian , Ranade , Bhagyashree (2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage.
5. R Gupta ; NCC National Cadet Corps A, B & C Certificate Examination Book; Ramesh Publishing House, 2018.
6. Singh, Neeraj; A Hand Book of NCC; Kanti Prakashan Publisher
7. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)
8. Cadet training hand book specialised subjects (2017)

SEMESTER - I

GENERIC ELECTIVE 1

NCC

Foot Drill (Practical)

Paper No.: NCG1.11

Contact Hours: 30

Credit: 2

UNIT I BASIC FOOT DRILLS

General word of commands, Attention, stand at ease, turning left, right and inkling at halt. Sizing, forming three ranks and numbering; Open and close March, dressing the squad; Saluting at halt, getting on Parade, Dismissing and falling out.

UNIT II FOOT DRILL II

Marching, length of pace and time in marching in quick time and halt, slow march and halt, side pace, pace forward and to the rear; Turning on the march and wheeling, saluting on the march, Marching timing, forward march and halt in quick march; changing step, formation of squad and squad drill.

Recommended Books and References:

1. Cadets training handbook common subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Femida Handy, Kassam Meenaz , Ingold Sharjah Jillian , Ranade , Bhagyashree(2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage.
5. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)

SEMESTER -II

GENERIC ELECTIVE 2
NCC (THEORY)
Paper No.: NCG 2.11

Contact Hours:60
Credit: 4

UNIT I INDIAN MILITARY ORGANIZATION

History of Indian Military; Organizational structure of Indian Military(Army, Airforce and Navy), Mode of entry to Defence Service.

UNIT II LEADERSHIP

Leadership traits, Indicators of good leadership, Leadership and motivation, Moral values & character traits, Honour code concept, Case studies: leadership in NCC, Vivekananda, Kiran Bedi & M S Dhoni.

UNIT III FIRST AID, HEALTH & HYGIENE

a) Aims and Motto of First Aid, List of items in First Aid Box, Types of Bandages, Types of Fracture, Dislocation, Types of Wounds, Burns and Scalds, Sprain, Asphyxia, Drowning, Poison, Shock, Snake bite, Sun and Heat Stroke, Insect bite, Dog bite, Hanging, Artificial respiration, Haemorrhage, Carriage of sick and wounded.

b) Structure and functioning of Human body, Hygiene and Sanitation, Physical and mental health, Infections and contagious diseases and its preventions, introduction to yoga and exercises.

UNIT IV ENVIRONMENTAL AWARENES

Ecology and Environment, Biodiversity, Environment conservation, Waste Management, Water conservation, Rain water conservation and harvesting, Pollution control and types of pollution; Methods of Purification of drinking water; Latrine types, Urinal types; Wild life conservation projects in India.

UNIT V SOCIAL AWARENESS & COMMUNITY DEVELOPMENT

Basics of social service and its needs, Rural development programmes, role of NGO's & NCC Cadets, Civic responsibilities, Social evils-drug abuse & drug trafficking, HIV/AIDS, corruption, RTI & RTE and protection of child (POCSO Act 2012).

Recommended Books and References:

1. Cadets training handbook common subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Femida Handy, Kassam Meenaz, Ingold Sharjah Jillian , Ranade , Bhagyashree (2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage.
5. R Gupta ; NCC National Cadet Corps A, B & C Certificate Examination Book; Ramesh Publishing House, 2018.
6. Singh, Neeraj; A Hand Book of NCC; Kanti Prakashan Publisher
7. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)
8. Cadet training hand book specialised subjects (2017)

SEMESTER -II

GENERIC ELECTIVE 2
NCC (PRACTICAL)
Paper No.: NCG 2.12

Contact Hours:30
Credit: 2

UNIT I FIRST AID, HEALTH & HYGINE

- a) Identification of First Aid items/instruments/equipment's.
- b) Types of bandages, Basics of home nursing and first aid in common medical emergencies.

UNIT II TENT PITCHING & TREKKING

Recommended Books and References:

1. Cadets training handbook common subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. United Nations Volunteers (2011). Inspiring Youth. UNV Annual Report 2010
5. United Nations Volunteers (2011). The State of World Volunteerism Report. Available on the UNV website <http://www.unv.org/en/swvr2011.html>

SEMESTER - III

GENERIC ELECTIVE 3
NCC (THEORY)
Paper No.: NCG 3.11(b)

Contact Hours:60
Credit: 4

UNIT I PRINCIPLES OF FLIGHT AND MODERN TRENDS

Introduction, Laws of Motion, Glossary of Terms, Bernoulli's Theorem and Venturi Effect, Aerofoil, Forces on an Aircraft, Lift & Drag, Flaps & Slats, Stalling, Thrust, modern Trends in aviation, basic knowledge of modern equipment used in aviation.

UNIT II AIRCRAFT RECOGNITION AND AIRMANSHIP

Aircraft recognition: Fighters, Transport, Helicopters & Foreign Aircraft. Concept of Airmanship, Airfield layout, Rules of Air, Circuit procedure, ATC/RT Procedures, Basics of aviation medicine and survival techniques.

UNIT III AIRFRAMES AND INSTRUMENTS

Aircraft controls, fuselage, main and tail plane, Ailerons, Elevators and Rudder, Landing gear, Basic Flight Instruments, Introduction to Radar, Instrument Battery

Test (Introduction to PABT)

UNIT IV NATIONAL INTEGRATION

Heritage of India, Freedom struggle & Nationalist movements in India, National Integration importance & necessity, factors affecting National Integration, Unity in Diversity, Slogans and images of National integration, Role of NCC in Nation building, NCC & National integration.

UNIT V BASICS OF WEAPON TRAINING

The stripping, assembling, loading, unloading of Rifle, Light Machine Gun and Stern Machine Carbine; Characteristics of weapons (Rifles, LMG, & Stern), Safety procedures; Loading, cocking and unloading of weapons; Positions in shooting and its advantages, Trigger control and firing a shot; Theory of group and snap shooting, short range firing and aiming.

Recommended Books and References:

1. Cadets training handbook Specialised subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Femida Handy, Kassam Meenaz, Ingold Sharjah Jillian , Ranade , Bhagyashree (2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage.
5. R Gupta ; NCC National Cadet Corps A, B & C Certificate Examination Book; Ramesh Publishing House, 2018.
6. Singh, Neeraj; A Hand Book of NCC; Kanti Prakashan Publisher
7. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)

SEMESTER - III

GENERIC ELECTIVE 3
NCC (Practical)
Paper No.: NCG 3.12(b)

Contact Hours:30
Credit: 2

UNIT I DRILL WITH ARMS

Guard mounting, Guard of Honour, Platoon/Coy drill, Instructional Practice.

UNIT II Standard Operating Procedure (SOP)

Recommended Books and References:

1. Cadets training handbook Specialised subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)
5. Femida Handy, Kassam Meenaz , Ingold Sharjah Jillian , Ranade , Bhagyashree(2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage Publications.
6. Air wing Cadets training hand book specialised subject (SD/SW) (2015)

SEMESTER - IV

GENERIC ELECTIVE 4
NCC (THEORY)
Paper No.: NCG 4.11(b)

Contact Hours:60
Credit: 4

UNIT I METEOROLOGY (MET) and AERO-ENGINES (AE)

Importance of MET in aviation, Atmosphere, Clouds and Precipitation, Visibility, Humidity and Condensation; Introduction to Aero engines, Types of Engines, Piston Engines, Jet Engines, Turboprop Engines, Consolidation.

UNIT II NAVIGATION AND AIR CAMPAINGS

Requirement of Navigation, Glossary of Terms, Maps, Map Reading. Indo-Pak war 1971, Op Safed Sagar, Famous Air Heroes, Motivational Movies

UNIT III AERO MODELLING

History of Aero modelling, Material used in Aero modelling, Types of Aero Models, Flying/Building of Aero-Models.

UNIT IV CIVIL DEFENCE & DISASTER MANAGEMENT

Disaster management organisation- NDMA and NDRF, types of disasters, essential services and maintenance, traffic control during disaster under police Supervision, Assistance during Natural Disasters, Do's and don'ts for NCC cadets performing Disaster management duties, Fire services and fire fighting, Civil Defence organisation and their Duties; Air raid system of warning and home guard duties, rescue parties and their organization.

UNIT V INTRODUCTION TO INDIAN CONSTITUTION

Preamble to constitution of India, Description of the Preamble, Fundamental rights and duties, Directive Principles of State Policy in the Indian Constitution, National Flag, National Emblem, National Anthem, National Song, Other National Symbols

Recommended Books and References:

1. Cadets training handbook Specialised subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Femida Handy, Kassam Meenaz, Ingold Sharjah Jillian , Ranade , Bhagyashree (2011). From Seva to Cyberspace: The Many Faces of Volunteering in India. Sage.
5. R Gupta ; NCC National Cadet Corps A, B & C Certificate Examination Book; Ramesh Publishing House, 2018.
6. Singh, Neeraj; A Hand Book of NCC; Kanti Prakashan Publisher
7. United National Volunteers, India (2012). Volunteering in India: Contexts, Perspectives and Discourses (under publication)

SEMESTER - IV

GENERIC ELECTIVE 4
NCC (Practical)
Paper No.: NCG 4.12(b)

Contact Hours:30
Credit: 2

UNIT I MAP READING.

UNIT II PROJECT REPORT

Report writing on NCC activities and its impact on cadets or an awareness campaign.

Recommended Books and References:

1. Cadets training handbook Specialised subjects (2017), D.G NCC Delhi-110030
2. Pamphlets issued by the ministry of Defence
3. DG, NCC Training directive
4. Jayapalan, N., Human Rights (New Delhi: Atlantic Publishers, 2000)
5. Mohanti, M., Human Rights Education (New Delhi: Deep and Deep, 2000) 5. NHRC, Know Your Rights Series (2005) 6. NHRC, Human Rights Education for Beginners (2005)
6. Air wing Cadets training hand book specialised subject (SD/SW) (2015)