

Rayat Shikshan Sanstha's
Yashvantrao Chavan Institute of Science, Satara
(Autonomous)
Syllabus for B.Sc. Part – I

1. **TITLE:** Military Science (NCC)

2. **YEAR OF IMPLEMENTATION:** 2019-2020

3. **PREAMBLE:** Military science (National Cadet Corps) designed to develop students proficiency, in leading, planning, executing and to face the complex operations, as well as functioning as member of a army staff and providing leadership performance to subordinates. This course provide students with situational opportunities to assess risk and analysis military history, make ethical decision and provide mentoring to fellow military science students. Student enrolled in military science will participate in army physical training for ones a week and field training exercise in each semester with four days classroom teaching in a week.

4. **GENERAL OBJECTIVES OF THE COURSE:**

- 1) To impart the knowledge of military science to the pupils.
- 2) To make the pupils to use the knowledge in their daily life.
- 3) To make the pupils aware of natural disasters and environmental issues.
- 4) Application of knowledge in military science for enrollment in entry in armed forces
- 5) To provide practical experiences which form a part of their learning processes in the field area.
- 6) To develop aptitude for scientific work & ability to face any natural calamity .
- 7) To encourage the pupils to make a carrier in a armed forces and various jobs in MPSC , UPSC and various Corporate sectors.
- 8) To make the pupils fit for the society.

5. **DURATION:** The course shall be full time course. • The duration of course shall be three years.

6. **PATTERN:** Pattern of Examination will be semester system .

7. **MEDIUM OF INSTRUCTION:** English, Hindi, Roman English.

8. **STRUCTURE OF COURSE:**

1) SEMESTER I----- (NO. OF PAPERS 2)

B.Sc. I

Subject- Military Science

	I-Term	II-Term	Total
1 Paper-I	50	+50	=100
2 Paper-II	50	+50	=100
3 Practical	25	+25	=50
Total =	250		

2) SEMESTER II----- (NO. OF PAPERS 2)

B.Sc. I –

Subject- Military Science

	I-Term	II-Term	Total
1 Paper-III	50	+50	=100
2 Paper-IV	50	+50	=100
3 Practical	25	+25	=50
Total =	250		

2) **Structure and Titles of Papers of B.Sc. Course :**

Year	Paper No and Name	Contact hours	Credits	Marks
1	Sem I			
	B NCCT 101			
	Paper I - BASIC TRAINING IN NCC	36	2	50
	B NCCT 102			
	Paper II - HYGIENE, SANITATION, LEADERSHIP AND FIRST AID	36	2	50
	B NCCP 103			
	PRACTICAL BASED ON PAPER I & II	40	2	25

	Sem II			
	BNCCT 201- Paper III MAP READING, ADVENTURE TRAINING	36	2	50
	BNCCT 202- Paper IV- CIVIL DEFENCE, SELF DEFENCE AND NATIONAL INTEGRATION	36	2	50
	B NCCP 203: Based on Paper No. III- IV	40	2	25
	Total	224	12	250

SYLLABUS

B.Sc. I Semester I

B. Sc. PART – I SEM – I PAPER – I NCC (MILITARY SCIENCE) DSC BASIC TRAINING IN NCC (BNCC T 101)

- Unit – I : Military History (7)
- a) War – History, Reasons of war and kinds of war
 - b) War tactics – Ancient and Modern
 - c) India-Pakistan wars
 - d) India-China war
- Unit –II : NCC Organization (11)
- a) History of NCC
 - b) General Introduction to defense services- Army, Navy, Air Force
 - c) Organization of NCC, Motto, Objectives, NCC Flag and Song
 - d) Incentives of NCC to NCC cadets.
- Unit – III : Drill and Weapon Training (10)
- a) Attention, stand at ease and stand easy, turning
 - b) Sizing, forming up in threes, open and close order march, dressing
 - c) Characteristics of rifle and its ammunition
 - d) Stripping, assembling, care and cleaning
- Unit – IV : Field Craft and Battle Craft (8)
- a) Description of ground – Introduction
 - b) Judging Distance – Importance and types
 - c) Field Signal- Introduction and types
 - d) Section Formation – Introduction and types

Learning Outcomes:

Unit 1: Student learn military history

Unit 2: Student learn NCC organization and opportunities

Unit 3: Student learn basics in drill and various types of weapons in army

Unit 4: Student understand battle craft and field craft tactics

Recommended Books: (Unit wise)

1. Handbook of NCC- Maj. Dubal, Capt. Gaikwad
2. Précis of OTA Nagpur
3. Handbook of defense studies by army headquarter
4. Adhunic Bhartacha Itihas- Dr. A.P .Choudhary

B. Sc. PART – I SEM – I PAPER – II
NCC (MILITARY SCIENCE) DSC
HYGIENE, SANITATION, LEADERSHIP AND FIRST AID
(BNCC T 102)

- Unit –I : Hygiene, Sanitation and Posture Training (10)
- a) Personal hygiene and preventive measures
 - b) Purification of water and its storage
 - c) Causes of bad posture, remedial and preventive measures
 - d) Correct standing and Exercise
- Unit – II Leadership (8)
- a) Discipline and duties
 - b) Duties of a good citizen
 - c) Leadership traits
 - d) Man Management
- Unit – III Social Services (12)
- a) Types of social services – Tree plantation Blood donation, AIDS awareness, Adult education, Anti dowry awareness
 - b) Aid during natural calamities
 - c) Fire fighting and equipment's for it
 - d) Home guard services
- Unit IV – First Aid (6)
- a) Introduction
 - b) Types of bandages
 - c) Types of fractures
 - d) Methods of hospitalization (GHAYAL VYAKTI KO LE JANEKA TARIKA)

Learning Outcomes:

Unit 1: Student learn about self and community hygiene and importance of exercise for posture training

Unit 2: student inculcate leadership traits

Unit 3: Student learn various social services and their importance

Unit 4: Student learn various types of first aids after accidents

Recommended Books: (Unit wise)

1. Handbook of NCC- Maj. Dubal, Capt. Gaikwad
2. Précis of OTA Nagpur
3. Handbook of defense studies by army headquarter
4. Adhunic Bhartacha Itihas- Dr. A.P .Choudhary

B. Sc. PART – I SEM – II PAPER – III
NCC (MILITARY SCIENCE) DSC
MAP READING, ADVENTURE TRAINING
(BNCC T 201)

Unit I : Drill and Weapon Training (7)

- a) Saluting at halt, Getting on parade, falling out and visarjan
- b) Marching in quick time and halt
- c) Loading Unloading & bolt operation
- d) Holding and trigger operation, firing.

Unit : II Map Reading (11)

- a) Introduction to map & conventional signs
- b) Cardinal Points & finding north
- c) Service protractor, Prismatic Compass and its use
- d) Setting of map and finding own position

Unit : III Adventure Training (10)

- a) Aims
- b) Advantages
- c) Various type of Adventure Training
- d) Parasailing
- e) Rock Climbing

Unit IV – Disaster Management (8)

- a) Disaster - Natural and Man Made
- b) Essential services and their maintenance
- c) Setting up of relief camp
- d) Collection and distribution of Aid material

Learning outcomes:

Unit 1: Student learn about aims and objective of drill.

Unit 2: Student trained for map reading and to find their own position in field

Unit 3: Student learn various types of adventure training for developing confidence

Unit 4: Student learn manmade and natural disaster and learn how to face them

Recommended Books: (Unit wise)

1. Handbook of NCC- Maj. Dubal, Capt. Gaikwad
2. Précis of OTA Nagpur
3. Handbook of defense studies by army headquarter
4. Vidhyan Tantradhyan- Dr. Paranjape

B. Sc. PART – I SEM – II PAPER – IV NCC (MILITARY SCIENCE) DSC

CIVIL DEFENCE, SELF DEFENCE AND NATIONAL INTEGRATION

(BNCC T 202)

Unit : I Civil Defense (8)

- a) Basic requirements
- b) Organization
- c) Various Services
- d) Panic, Rescue

Unit II : Self Defense (10)

- a) Definition and basic requirements
- b) Vulnerable Parts of Body
- c) Various Attacks
- d) Basic throws

Unit III : National Integration (9)

- a) Meaning & Importance
- b) Necessity
- c) Factors affecting National Integration
- d) Remedies

Unit IV – Environment Awareness and Conservation (9)

- a) Natural Resources – Conservation and Management

- b) Water conservation and rain water harvesting
- c) Energy conservation
- d) Wildlife conservation and projects in India

Learning Outcomes:

Unit 1: Student learn about Civil deference and their activities

Unit 2: Student learn about self defense for self protection and help to others

Unit 3: Student can develop qualities for national integration

Unit 4: Student trained for conservation of nature and environmental awareness issues

Recommended Books: (Unit wise)

1. Handbook of NCC- Maj. Dubal, Capt. Gaikwad
2. Swarakshan Shatra- Dr. A. P Choudhary
3. Handbook of defense studies by army headquarter
4. Adhunic Yudhakala- Dr. B.D. Todkar
5. Chh. Shivaji Maharajanchi Yudhakala (Gorila War) – Dr. Archana Choudhari

EQUIPMENTS REQUIRED :

1. Kote equipment
2. Field equipment's
3. .22 Rifle(DP)
- 4.7.62 LMG (DP)
5. Prismatic compass
6. Service protractor
7. Necessary charts, models for theory and practicals

(PRACTICAL-I SEM I

(BNCC P 103)

1. Introduction to kit items
2. Wearing of uniform
3. SAVDHAN and VISHRAM positions, Turning
4. Marching
5. Saluting at halt
6. Dahina salute Baya salute
7. Introduction to .22 Rifle with technical data
8. Introduction to SLR, Names of various parts, Technical data
9. Stripping and assembling of . 22 Rifel
10. Rifle Drill- Baju Shastra, Bagal Shastra and Salami Shastra.

Books Recommended :

1. Drill and Weapon training- OTA Kamtee
2. Handbook of NCC- Khanna

PRACTICAL-II SEM-II

(BNCC P 203)

1. Map reading, Introduction to Map.
2. To find own position.
3. Conventional Signs.
4. Slow March, Cane Drill.
5. Fire fighting demonstration.
6. Guard of Honor 6 x 2 Guard.
7. Introduction to .22 Rifle with technical data
8. Introduction to SLR, Names of various parts, Technical data
9. Stripping and assembling of 7.62 mm SLR
10. Loading, Unloading & bolt operation

Books Recommended :

1. Drill and Weapon training- OTA Kamtee 1.
2. Handbook of NCC- Khanna