

**Vidyasagar University**  
**Curriculum for B. Sc (General) in**  
**Military Science**  
**[Choice Based Credit System]**

**Semester-III**

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week			Credit	Marks
				L	T	P		
<b>DSC-1C</b>		<b>DSC1CT:</b> Military History of India and Military Geography	Core Course	4	0	0	6	75
		- Practical		0	0	4		
<b>DSC-2C</b>	TBD	<b>DSC-2C (other Discipline)</b>	Core Course				6	75
<b>DSC-3C</b>	TBD	<b>DSC-3C (other Discipline)</b>	Core Course				6	75
<b>SEC-1</b>		<b>SEC1T:</b> Defence Production in India <b>Or</b> Road safety & Road Rights <b>Or</b> Introduction to Journalism	Skill Enhancement Course-1	1	1	0	2	50
<b>Semester Total</b>							<b>20</b>	<b>275</b>

**L** = Lecture, **T** = Tutorial, **P** = Practical, **CC** = Core Course, **TBD** = To be decided, **SEC** = Skill Enhancement Course.

**DSC-1** = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

**DSC-3** = Discipline Specific Core of Subject-3.

**Semester-III**  
**Core Course (CC)**

**DSC-1C (CC-3): Military History of India and Military Geography**

**Credits 06**

**DSC1CT: Military History of India and Military Geography**

**Credits 04**

**Course Contents:**

**Unit- I: Military History of India**

a. Definition, concept, scope and significance to study military history. Military systems of India in the Vedic era to modern India. Kautilya's philosophy of war organization and art of war, weapons and interstate relation. Maurya's military system.

b. A brief survey of the military tradition of India. Historiography of military history of India.

c. Weapon, Battle Dress, war patterns and tactics during following periods: Pala Periods, Moghol Periods, Maratha Periods, Sikh Periods, Fort administration of Shibaji and Ranjit Singh – a comparative study.

d. Modern India – Armed forces under East India Company, Indian war of independence 1857 A.D., Armed forces under the crown, Presidency armies and Indianisation of Armed forces, amalgamation of presidency armies and Kitchener's reforms.

e. Study of the following Important Battle with its background, causes, events, result and its review in Indian Military History and military lesson : Battle of Panipath (1526AD), Battle of Plessey (1757AD), Third Battle of Panipath,(1761 AD), Battle of Chillianwalla ( 1849 AD), Kashmir conflict (1947), Operation Polo, 1948, invasion of Goa,(1961), Operation of Mizo National Front,(1966), Indo- China Boarder Conflict(1962 ), Indo-Pak Boarder Conflict(1965 ) Indo – Pak war (1971 ), Operation Cactus,(1988) Sri Lanka Mission, (1987-1990), Kargil war( 1999).

**Unit-II: Military Geography**

**Introduction:** Meaning, nature, scope and elements of Military Geography. Man and Environment. Role of geography in military application. Military geography in India and defense problem. Role of geography in different warfare. Role of geography in Land warfare, sea warfare and air warfare.

**Evolution of Military Geography:** a) History & Development. b) Founders of Military Geography - F. Ratzal, A.T. Mahan, c) Sir. Halfred Mackinder, Karl Haushofer, N.J. Spykman

**Inter-State relations & Geographical factors:** a) Frontiers and Boundaries of India - meaning & differences; types; boundary making & function. Frontiers of India: Land frontiers, coastal frontiers, air borders, strategic importance of Himalaya. b) Communication routes- land, sea and aerial- strategic scope. c) Population and Power d) Military geography of India and defense problem - Military importance of Border States of India: location - significances, resources available, transport and communication

**Geography and Foreign Policy of India:** a) India's Geo-strategic significance. Analysis of geo strategy and geo – political importance of Jammu & Kashmir and Indian Ocean. b) India's borders. c) Indian Ocean territory and strategic significance.

**Applied Military Geography:** Brief idea on a) Global Positioning System (GPS). b) Global Information System (GIS). c) Remote Sensing.

### **Unit -III: Map Reading**

Theoretical aspects of Map Reading: Introduction to types of Maps and Conventional Signs. Scales & Grid System. Topographical forms and technical terms. Relief, Contours and Gradients. Cardinal points and Types of North. Types of bearings and use of Service Protractor. Prismatic compass and its use & GPS. Setting a Map, finding North and own position. Map to Ground, Ground to Map. Point to Point March

**DSC1CP: Drill, Military Geography and Military History (Practical)**

**Credits 02**

#### **A. Drill with Arms:**

- a. Getting on parade with rifle and dressing at the order.
- b. Dismissing and falling out.
- c. Ground / take up arms
- d. General salute, salami shastra
- e. Squad drill
- f. Short / long tail from the order and vice-versa
- g. Examine arms

#### **B. Military Geography**

1. Maps – civil and military.
2. Conventional signs – Civil and Military
3. Topographical sheets.
4. Preparation of index to sheet.
5. Determination and construction of different types of scales – Linear, R.F. – Conversion of Scale

6. Map references: i) Latitude and longitude, ii) Four and six figure references, iii) Use of Romer
7. Compass: Liquid prismatic compass – uses of compass during day and night
8. Cardinal points and types of bearing – its conversion - uses of service protractor
9. Representation of Relief features in Map – Hill shading, Hachure, Contour lines and their uses
10. Determination of inter-visibility: By applying the methods of: a) Contour, b) Gradient and c) Sum of simple Proportion methods
11. Determination of visibility on survey maps of hilly region by comparing gradient and section drawing method
12. Determination of own position on a grid map by applying resection and intersection method
13. Location and identification of objects from ground to map and vice-versa
14. Field sketching, Eye and Memory sketching
15. Preparation of Night March Chart
16. Preparation of weather chart.

### **C. Sketching of different strategically information on maps of world and India:**

ASEAN, Border Roads of India, European Union, G-14 and G-15. Nuclear power station of India, NATO, NAM Countries, Nuclear Nations, Nuclear power Station of India, OPEC, SAARC and UNO Countries.

### **D. Military History**

1. Prepare sand models of Battle formations of the following Battles: i) Battle of Plassey, 1757, ii) Battle of Chillianwalla, 1849, iii) Three battles of Panipath, iv) Indo-Pak wars of 1947, 1962, 1971; v) Kargil war, 1999.
2. Draw sketches of the of Battle formations of the following Battles on plain papers: i) Battle of Plassey, 1757, ii) Battle of Chillianwalla, 1849, iii) Three battles of Panipath, iv) Indo-Pak wars of 1947, 1962, 1971; v) Kargil war, 1999.

### **E. Field Visit**

Field visit to military establishment for the demonstration of different weapons, armaments and weapon carriers. Based on the field study the students have to prepare their respective tour reports and the candidate would be examined at the time of practical examination of the subjects.

### **F. Laboratory Note Books**

Students will be required to maintain records of all works done in connection with the topics taught in this paper.

*Skill Enhancement Course (SEC)*

**SEC-1: Defence Production in India**

**Credits 02**

**SEC1T: Defence Production in India**

**Course Contents:**

**1. Defence Production and Organization in India**

a) Department of Defence Production in the Ministry of Defence (Structure and Functions). b) Industrial potential of Expansion of Military Strength. c) Defence Production Organization (Main).

**2. Defence Production Industries in India:**

a) Defence Public sector Undertakings (DPSU), b) Private Sector and small scale Industries (Link with Logistics), Interaction with Industry

**3. Defence Research and Development Organization (DRDO):**

a) Structure b) Development c) Role.

**4. Arms and Ammunition Production and Ordnance Factories:**

a) Small Arms b) Artillery c) Tanks and Combatant Vehicles d) Ammunitions

**5. Engineering and Electronic Equipment Production in India**

**6. Technology in India:**

a) Missiles Technology b) Nuclear Establishments c) Space Technology and Development

**Or**

**SEC-1: Road safety & Road Rights**

**Credits 02**

**SEC1T: Road safety & Road Rights**

**Course Contents:**

**1.** Conceptual framework – i) Introduction, ii) Meaning, iii) Concept, iv) Need.

**2.** i) Road Safety & National Security. ii) Importance of Study of Road Safety.

3. Road Infrastructure & Road Safety – i) Quality of Road. ii) Use of Techniques & Material for road building.
4. Inspection System.
5. Road network and its impact – i) Types of roads, ii) Road signs
6. License system of vehicles and Motor Vehicles Act and Rules, WB ... Safe Drive –Save Life

**Or**

**SEC-1: Introduction to Journalism**

**Credits 02**

**SEC1T: Introduction to Journalism**

**Course Contents:**

**Unit - I: Basics of Journalism:**

- a) Meaning, Definition and the concept of Journalism
- b) Qualities of a Journalism
- c) Ethics of Journalism.

**Unit - II: Journalism – History and Trends:**

- a) Growth and milestones in Journalism, b) Industrialization of the press: 1880 – 1920, c) Electronics and electronic changes: 1920 – 1950.

**Unit – III: The Press council of India:**

Emergence of the press council of India, Powers and functions of the press council of India. Role of the press council in India.

**Unit – IV: Press Freedom and the Governments:**

- a) James Augustus Hicky and Bengal Gazette
- b) Press and Freedom Struggle
- c) Press Freedom since Independence .

**Unit – V: Terminology of Modern Journalism.**