



Semester – I

BRANCH	Subject Title	Subject Code
B.Sc. (Military Science – Major)	FUNDAMENTAL ELEMENTS OF MILITARY SCIENCE	MSM1

Fundamental Elements Of Military Science

Course Learning outcomes- After undergoing this course a student will be in a position to-

1. understand the introduction, scope & importance of Military Science subject.
2. understand the basic concepts of War, its various types, Art of War, and its elements.
3. understand the strand of war and principles of war and its importance in war.
4. understand the basic concept, tools, techniques, and characteristics of unconventional warfare.

CONTENT

Unit - 1

Conceptual Formulation of Military Science -

- (a.) Historical background in India's perspective
- (b.) Its scope and importance.
- (c.) Relation with other subjects.

Unit - 2

(a) strands of war

(b) Principles of war

Unit - 3

Art of war

- (a.) Strategy-concept and it's elements

- Base

- Line of Communications



- Strategic manoeuvre

(b) Types of strategy -

- Strategy of annihilation

- Strategy of exhaustion

- Strategy of direct approach

- Strategy of Indirect approach

Unit - 4

Tactics-

(a.) Tactic- its concept

(b.) Tactical manoeuvre

i. Blitzkrieg Tactics

ii. Web Defence Tactics

(c.) Logistics

Unit - 5

World war

(a) First World War- Brief introduction, Causes, Results, Advent of Gases, Tanks and Submarines in war.

(b). Second World War- Brief introduction, Causes, Results, Advent of Tank warfare, Air warfare and Naval warfare in war.

Unit - 6

Types of war

(a) Conventional War - concept and its nature

i. Limited war

ii. Total war



(b) Unconventional war- concept and Its nature

i. Brief introduction - Cold war, Economic war, Nuclear warfare, Biological warfare, Chemical warfare, Guerrilla warfare, Psychological warfare, Cyber warfare, Demographic warfare.

Practical

1. Maps: Definition and Features; Types, Marginal information of map, Classification and it's utility for military, enlargement and reduction of maps, map setting.

2. Convention signs: Military and geographical

3. Scale-

a. Definition, methods of representing scale

b. Inter-conversion of scale into Representative fraction construction of simple scale line and the comparative scale lines.

4. GRID System: Introduction, Four Figure, Six figure and Eight Figure Map reference

5. North: Types of North, Importance of North and Methods of North finding- The Pole Star Method; The equal altitude method; Watch method & Compass method.

6. Service Protractor- its features and uses.

7. Bearing- Definition, types & Inter conversion of bearings.

8. Find Position- map to ground, ground to map

9. Service Liquid Prismatic Compass- Its parts and uses

10. (A) Short presentation/ Group Discussion on current affairs related to National Security issues

(B) Local Educational visit at Defence monuments/museum/establishment.

11. Record and Viva Voice



Semester 2

BRANCH	Subject Title	Subject Code
B.Sc. (Military Science – Major)	MILITARY HISTORY OF INDIA	

Course learning outcomes

After undergoing this course a student will be in a position to-

1. Become familiar in evolution of art of warfare in India;
2. Learn and understand the Strategy, tactics, application of principles of war and causes of defeat and victory of various Indian, Mughal, Maratha and Sikh Generals.
3. Besides, in a position to appreciate and understand evolutionary changes in the art and science of war in India.

CONTENT

Unit – 1

(a). Comparative study of the Greek and Indian Military System.

(b) Battle of Hydaspes, 326 B.C.:

- i. Introduction- Opposing forces and their deployment
- ii. Description of the battle.
- iii. Analysis (Strategy, tactics, application of principles of war and causes of defeat and victory).

Unit - 2

Kautilya's Philosophy of War:

- (a) Strategy, Espionage, Army Organisation, War office, Mode of Warfare.
- (b) Forts- Types & Role.

Unit - 3

(a) Comparative study of the Rajputs and Turks Military System.

(b) Second Battle of Tarain, 1192 A.D.:



- i. Introduction- Opposing forces and their deployment
- ii. Description of the battle.
- iii. Analysis (Strategy, tactics, application of principles of war and causes of defeat and victory).

Unit - 4

- (a.) Military system of Mughal
- (b.) First battle of Panipat, 1526 A.D.:
 - i. Introduction - Opposing forces and their deployment
 - ii. Description of the battle
 - iii. Analysis (Strategy, tactics, application of principles of war and causes of defeat and victory).

Unit - 5

- (a) Military System of Maratha under Shivaji.**
- (b) Third Battle of Panipat 1761 A.D.:**
 - i. Introduction- Opposing forces and their deployment
 - ii. Description of the battle.
 - iii. Analysis (Strategy, tactics, application of principles of war and causes of defeat and victory).

Unit - 6

- (a) Military System of Sikh under Maharaja Ranjit Singh-**
- (b) Battle of Sobroan 1846 A.D.:**
 - i. Introduction- Opposing forces and their deployment
 - ii. Description of the battle.
 - iii. Analysis (Strategy, tactics, application of principles of war and causes of defeat and victory)

Unit - 7

Development of the Indian Army during British Period-



- (a) Military organization of East India Company in India- Presidency armies.
- (b) Reorganization of Indian Armies under British Crown- Command system
- (c) Indian National Army

Practical

1. Enlargement and Reduction of map
2. Contour Lines and it's Representation.
3. Hachuras and Representation
4. Gradients
5. Route Sketching and Route Reports
6. (A) Short presentation/Group Discussion on current affairs related to National Security issues.
(B) Local Educational visit at Defence monuments/museum/establishments
7. RECORD and VIVA VOCE