Military Science

M.A. / M.Sc. [Previous]

SEMESTER-I

PAPER - I [Part A]

Evolution of Strategic Thoughts

Marks -85

Unit - 1.

- 1. Introduction Approaches to Study of Strategy, Elements and Early Concept of Modern Strategy.
- 2. Niccolo Machiavelli (1469-1527).
- 3. Gustavus Adolphus (1594-1632).

Unit - 2.

- 1. Sebastien Vauban (1633-1707).
- 2. Fredrick the Great (1740-1780).
- 3. Helmuth Karl Moltke.

Unit - 3.

- 1. Napoleon Bonaparte (1769-1821).
- 2. Antoine Henri Jomini (1779-1869).
- 3. Karl Von Clausewitz (1780-1831).

Unit -4.

- 1. Adam Smith (1723-1790).
- 2. Alexander Hamilton (1757-1804) & Friedrich List (1789-1846).
- 3. Karl Marx (1818-1883) & Freidrich Engels (1820-1895).

Unit -5.

- 1. Count Alfred Schlieffen (1833-1913).
- 2. Marshal Ferdinand Foch (1851-1929).
- 3. Hans Delbruck (1848-1929).

Books Recommended:-

1. Quincy Wright : Study of war Vol.-I.
2. Edward Meade Earl : Makers of Modern Strategy.

Taylor : The Art of War in Italy.
Clausewitz : On War.

4. Clausewitz : On War. 5. Jomini : The Art of War.

6. Engels & Marx : Military Concept of the Social Revolutionaries.

Winston Churchill
 Liddell Hart
 Second World-War.
 Strategy: The Indirect Approach.

9. Liddell Hart : Thoughts on War.

10. Brig. Rajendra Singh : Word of Wisdom on War.

11. Helprin : Contemporary Military Strategy.

12. John Bylis : Contemporary Strategy.

13. Abdul Hariss Nasutian : Fundamentals of Guerrilla-Warfare.

14. Lord Tedder : Air Power in War.

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Continue.... Evolution of Strategic Thoughts (SEMESTER-I)

15. Fuller J.F.C.	:	Conduct of War.
16. Howard Michael	1	Grand Strategy of World-War Second.
17 Palit D.K.	:	War in the Deterrent Age.
18. Rope, Theodore	:	War in the Modern World.
19. Cyrill Falls	:	Hundred Years of War.
20. Aror, Raymond	;	The Century of Total War.
21. Aror, Raymond	:	Peace and War.
22. Schwars, Lonis	:	American Democracy and Military Power.
23. V.D. Sokolovasky	:	Soviet Military Strategy.
24. Robert E. Osgood	:	Limited War, The Challenge to American Strategy.
25. Johari R.C.	:	Pashchatya Sainya Vicharak (Hindi).
26. B.R. Pandey & R.S. Pandey		Stratgiya Chintan (Hindi).
27. J.M. Shrivastava	:	Stratgiya Chintan (Hindi).
28. Lallan Ji Singh	:	Sainya Vicharak (Hindi).
29. G.C.Shrivastava	:	Battles of World War and Post War Development (Hindi)
30. Shekhar Adhikari		Modern Strategic Thoughts.
31. Franking Mark Osanka	:	Modern Guerrilla-Warfare.

Note: - Any other Books and Journals may be prescribed to enrich the Standard of Performance in the items Listed above under Theory Paper.

Military Science

M.A. / M.Sc. [Previous]

SEMESTER-I

PAPER - II [Part A]

History of Warfare in the West (From 1861-1945)

Marks -85

Unit - 1.

- 1. Industrial revolution and its influence on American imperialism.
- 2. Emergence of the theories of mass struggle as enunciated by Jomini, Clausewitz, Engels and Karl Marks.
- 3. Practical application of the concept of **Total-War** in the battle of Chattanooga (23-25 Nov. 1863) and subsequent development of the American Civil War.

Unit - 2.

- 1. Expansion of Prussia and the first Battle of Sedan (01 September to 04 September 1870) with special reference to the Strategic doctrines of Clausewitz, Bismarck and Moltke.
- 2. Increasing importance of Transport and Commutation, impact of the development of heavy Artillery on Warfare with special reference to the Siege of Port Author (08 February 1904-02 January 1905).
- 3. Foundations of the First World War (1914-1917), impact of Industrial and Commercial rivalry.

Unit -3.

- 1. Battle of Tannenburg (26-30 August 1914) and First Battle of Marne (05-12 September 1914) with special reference to the Application of the Strategic thoughts of I.S. Block and Gen. Foch.
- 2. Application of the Schlieffen-Moltke Plan in the Battle of the Tannenburg and Marne.
- 3. First Battle of Ypres (19 Oct. 1914-22 Nov. 1914), Second Battle of Ypres (22 April 1915-25 May 1915), Third Battle of Ypres (31 July 1917-10 Nov. 1917).

Unit - 4.

- 1. The Battle of Verdun (21 Feb. 1916-18 Dec. 1916).
- 2. The Battle of Somme (01 July 1916-18 Nov. 1916).
- 3. The Battle of Cambrai (20 Nov. 1917-04 Dec. 1917).

Unit - 5.

- 1. The Second Battle of Marne (15 July 1918-06 August 1918).
- 2. The End of Mobile Warfare and beginning of Siege warfare.
- 3. Impact of Siege Warfare till the Battle of Amiens (08 August 1918 to the end of the First World War).

Books Recommended:-

- 1. J.F.C. Fuller
- 2. J.F.C. Fuller
- 3. Montgomery
- 4. Liddell Hart
- 5. Lt.Gen. Francis Tuker
- 6 JFC Fuller
- 7 Vasim Ahmed Khan
- 8. Gyan Chandra Shrivastava
- 9 Major F.W. Sheppard

- The Decisive Battles of the Western World Vol.-III [To be used as a text book].
- The Second World-War.
- Normandy to Baltic.
- Rommel Papers
- The Pattern of War.
- A Military of the Western World.
- Vishva ke Prasiddha Yuddh. (Hindi).
- Battles of the World-War and Post War Development. (Hindi).
- The Study of Military History.

Note: - Any other Books and Journals may be prescribed to enrich the Standard of Performance in the items Listed above under Theory Paper

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Military Science

M.A. / M.Sc. [Previous]

SEMESTER - I

PAPER - III [Part A]

Disarmament, Arms-Control and Peace

Marks -85

Unit - 1.

- 1. Disarmament: Basic Concept, Meaning, Definitions, Historical Background. Aim and Types.
- 2. Nature and the Development of Disarmament.
- 3. Conditions of Disarmament and Disarmament Machinery.

Unit - 2.

- 1. Necessity of Disarmament.
- 2. Global Disarmament and Problems of Disarmament.
- 3. Arms-Aid and Arms Trade, Arms Regulation and Disarmament.

Unit -3.

- 1. Disarmament and International Security.
- 2. Role of India towards Disarmament.
- 3. Disarmament and Arms Control in International Relations.

Unit - 4.

- 1. Unilateral efforts towards Disarmament.
- 2 Bilateral efforts towards Disarmament.
- 3. Multilateral efforts towards Disarmament.

Unit - 5.

- 1. Arms-Control: Basic Concept, Definitions, Historical Background and the Development.
- 2. Necessity of Arms-Control, Regional Arms-Control and Confidence-Building.
- 3. Strategic Offensive Reduction Treaty (SORT).

Books Recommended:-

Headley Bull
 Brenan, D.G
 Levine, Robert, A
 Singer, J.D
 Edwards
 The Control of Arms Race.
 Arms Control and Disarmament.
 The Arms Debate.
 Deterrence Arms Control and Disarmament.
 Arms Control in International Politics.

Stone, J.H.: Containing the Arms Race.

7 Van Bostrand Dough Control for Late Sixties.
8 Beaton Neddox The Spread of Nuclear Weapons.

10. Raymond Arror The Imperial Republic.
10. Raymond Arror War and Peace.
11. Howard, Michael Study of War and Peace.
12. John Garrett (ed.) Theories of Peace and Security.

13. Morgenthau, Hans. J. Politics among the Nations – The Struggle for Power & Power.

14. Khopp, w. A History of War and Peace.
15. Sipri Arms Trade with the Third World.
16. Sipri Sipri Year Book –1983 & others.

 16
 Sipri
 Sipri Year Book -1983 & others

 17
 Harkabi, Y
 Nuclear War and Nuclear Peace.

 18
 Osmidf Helmut
 Defense of Retaliation.

19. Wilfrid Knapp A History of War and Peace (1939 -1965).

Note: - Any other Books and Journals may be prescribed to enrich the Standard of Performance in the items Listed above under Theory Paper

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Military Science

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SEMESTER-I

PAPER - IV [Part A]

Nuclear, Biological & Chemical Warfare

Marks -85

Unit - 1.

- 1. Nuclear Warfare: Historical Development, Meaning, Definitions and Types.
- 2. Consequences of Large Nuclear Warfare.
- 3. Nuclear Darkness and Nuclear Famine.

Unit - 2.

- 1. Limited Nuclear War and Nuclear Fallout.
- 2. Policy of Mutually assured Destruction.
- 3. Effect of the Global Nuclear War or Third World-War.

Unit - 3.

- 1. The Nuclear Device and Effects of Nuclear Device.
- 2. Defence against the Nuclear Device.
- 3. Delivery Systems and Hardware

Unit - 4.

- 1. The Nuclear Device in Action.
- 2. The Nuclear Balance and Nuclear Deterrence.
- 3. Conventional Deterrence in the Nuclear-Age.

Unit - 5.

- 1. Nuclear Strategy and Defence.
- 2. SDI- Strategic Defence Initiative (Star-War).
- 3. Nuclear Weapons and Security

Books Recommended:-

1. Frank Barnaby : Future War.

Col. Friedman Richard S
 Royal Swedish Academy
 Muclear War the Aftermath.

4. T. J. Gander : Nuclear, Biological and Chemical Warfare.

5. Stephen King Hall : Defence in the Nuclear Age.

6. Rajveer Singh : War and Peace in the Nuclear Age.

7. Subramniyam : Nuclear Pakistan.

8. Roman Kolko : Dilemmas of Nuclear Strategy.
9. Brassey's : Nuclear and Non -Nuclear Defence Options.
10. Nirmal Jindal : War as a Political Weapon in the Nuclear Age.
11. Dr. Indu Prakash : Nuclear Vishva-Yuddh aur Paryavaran. (Hindi).

11. Dr. Indu Prakash : Nuclear Vishva-Yuddh aur Paryavaran. (Hindi).
12. Dr. Indu Prakash : Paryavaran aur Rasayanik, Kitanu Yuddh. (Hindi).

13. Dr. Indu Prakash : Prakshepiki. (Hindi).
14. Dr. Indu Prakash : Yuddh ka Vigyan/Science of War. (Hindi).

14. Dr. Indu Prakash

15. Dr. Vishnu Kant Sharma

15. Rasayanik Yuddh ki Taknik. (Hindi).

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Continue.... Nuclear, Biological & Chemical Warfare (SEMESTER-I)

16. Dr. C. L. Garg & D. K. Garg
17. Geoff Plunkett
18. Dr. Hauk Ellison
19. K. Coleman
20. William J. Broad
21. Curt Wachtel &Fritz Haber
22. Donald A Cameron
25. Nabhikiya Astra-Shastra. (Hindi).
26. Chemical Warfare in Australia.
27. Chemical Warfare during the Vietnam War.
28. A History of Chemical Warfare.
29. Germs: Biological Weapons and America's Secret War.
29. Chemical Warfare.
20. Chemical Warfare.
20. Chemical Warfare.

23. Jonathan B. Tucker
 24. Paul R. Ziaya
 25. Stephen Endicott and Edward Hagerman
 26. War of Nerves Chemical Warfare from World War-I to Al-Qaida.
 27. Biological and Chemical-Warfare.
 28. United States and Biological-Warfare.

Note: - Any other Books and Journals may be prescribed to enrich the Standard of Performance in the items Listed above under Theory Paper.

Military Science

M.A. / M.Sc. [Previous]

SEMESTER-I

Practical Work [Part A]

Marks -50

A. CARTOGRAPH:

- 1. Study of Map & Map Reading.
- 2. Grid System & Map Reference.
- 3. Conventional Sign (Geographical & Military).
- 4. Scale and their transformation.
- 5. Index to Sheet No.
- 6. Enlargement and Reduction of Maps.

OR

REMOTE SENSING:

- 1. Study of Given Area in B/W, Infra Red Colour and Infra Red Colour Photographs.
- 2. Study of Multi-Spectral Photographs using Additive Colour Viewer.
- 3. Study of Land sat Imagery bond 4,5,6,7 and Visual interpretation.
- 4. Study of Thermal imagery and Drawing of Isotherm.
- 5. Study of RADAR Imagery and interpretation of Features.
- 6. Land use classification, Visual interpretation in Individual Bands/Colors.
- B. SPOTTING: Recognition of Tank and Gun Models.
- C. GROUP DISCUSSION: Conduct of Group Discussion with reference to the Syllabus of the I Sem.

<u>Note:</u> Group Discussion will be gone through in the Periods allotted on topic of the syllabus but at the time of the Practical Examination one of the given four from the syllabus be selected for the purpose of assessment by the External and Internal Examiners.

D. Lecturing on Current Topic.

Books Recommended:-

B.N. Maliwal Prayogatmak Sainya Vigyan Vol-1.
Narendra Singh Prayogatmak Sainya Vigyan.

Brig. Rajendra Singh Map Reading.

4 J.M. Srivastava : Prayogatmak Sainya Vigyan.

Balwant Singh Map Reading.

5 Tanks : Map and Survey. 7 Steers : Map Projections.

Bygott Map and Map Work.
Raize General Cartography.

10. Thomas Surveying.
11. Kanetkar Surveying & Leveling Vol-I.

 12. Andrew Bayed
 Atlas of World Affairs.

 13. Andrew Bayed
 For Spotting Summary.

 14. H.M.S. London
 Manual of Map Reading, Air Photo Reading and Field Sketching Part I, II & III.

15 N.P. Ayyar : Sarvekshan.

Note: - Any other Books and Journals may be prescribed to enrich the Standard of Performance in the items Listed above under Practical Paper.

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