

Devi Ahilya Vishwavidyalaya, Indore

Scheme of Examination

I Semester Session 2019-20 Onwords

M.A./M.Sc. Military Science

Paper	Name of Paper	Maximum Marks		Minimum Passing Marks	
		Theory	CCE	Theory	CCE
I	Evolution of Strategic Thoughts	85	15	28	05
II	History of Warfare in the west from 1861-1945	85	15	28	05
III	Disarmament Arms control and Peace.	85	15	28	05
IV	Nuclear. Biological & Chemical Warfare.	85	15	28	05
	Practical Work	50		17	

M.A./M.Sc. Military Science II Semester

I	Evolution of Strategic Thoughts	85	15	28	05
II	History of Warfare in the west from 1861-1945	85	15	28	05
III	Disarmament Arms control and Peace.	85	15	28	05
IV	Nuclear. Biological & Chemical Warfare	85	15	28	05
	Practical Work	50		17	

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M.A./M.Sc. Military Science III Semester

Session 2020-21 Onwords

Paper	Name of Paper	Maximum Marks		Minimum Passing Marks	
		Theory	CCE	Theory	CCE
I	Military History of India.	85	15	28	05
II	Military Psychology.	85	15	28	05
III	Area Study (Indian Ocean / Jammu & Kashmir/North East Hill States)	85	15	28	05
IV	Science & Techonology in War.	85	15	28	05
	Practical Work	50		17	

M.A./M.Sc. Military Science IV Semester

Session 2020-21

I	Military History of India.	85	15	28	05
II	Military Psychology.	85	15	28	05
III	Area Study (Indian Ocean / Jammu & Kashmir/North East Hill States)	85	15	28	05
IV	Science & Techonology in War.	85	15	28	05
	Practical Work	50		17	
	Project work	100			



विषय : स्वाध्यायी छात्रों के परीक्षा के संदर्भ में ।

एम.ए. एम.कॉम. एम.एस.सी. की सेमेस्टर परीक्षा उत्तीर्ण करने के लिए योजना निम्नानुसार रहेगी :-

1. प्रत्येक प्रश्न पत्र 100 अंकों का होगा। 33 प्रतिशत उत्तीर्णांक होगा।
2. कुल अंको (Aggregate marks) में 40 प्रतिशत अंक प्राप्त करने होंगे अर्थात् 160/400 अंक अर्जित करने होंगे।
3. प्रत्येक सेमेस्टर में दो विषयों में ए.टी./के.टी. की पात्रता रहेगी।

सरल क्रमांक	कक्षा	सैद्धांतिक/प्रायोगिक प्रश्नपत्रों के लिए निर्धारित		न्यूनतम प्राप्तांक	एग्रीगेट प्राप्तांक
		सैद्धांतिक अंक	प्रायोगिक अंक		
1.	M.A., M.Sc., M.Com. M.H.Sc. (सेमेस्टर प्रणाली नियमित)	85	15	28 05	40%
2.	प्रायवेट परीक्षार्थियों के लिए	100	—	33	40%
				Aggregate Marks 160/400	

(Gyan Prakash)

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

SCHEME OF EXAMINATION

MILITARY SCIENCE

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

Year ~~2019-2020~~ Onwards

There shall be Eight written Papers, with part A & B in four Semesters, 100 marks each Paper comprising 85 marks for Theory and 15 marks for C.C.E. Candidate shall be required project of 50 marks in the Fourth Semester and Practical 50+50 marks in the all four semester Exam.

The Candidate has the option 4 Paper in the Previous and 4 Paper in the Final Exam. Out of the following Papers and Practical + project (In Fourth Semester only).

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

SEMESTER - I & II

1. Evolution of Strategic Thoughts.
 2. History of Warfare in the west from 1861-1945.
 3. Disarmament. Arms control and Peace.
 4. Nuclear. Biological & Chemical Warfare.
- Practical Work.
C.C.E.

M.A. / M.Sc. [Final] 2020 - 2021

SEMESTER - III & IV

1. Military History of India.
 2. Military Psychology.
 3. Area Study (Indian Ocean / Jammu & Kashmir / North East Hill States).
 4. Science & Technology in War.
- Practical Work.
Project Work. (In Fourth Semester only).
C.C.E.

NOTE --

1. A Qualifying Pre-Admission Test may if necessary, be conducted for the Non Military Science candidates and onward admission should be given only on the merit basis of the conducted test in M.A. /M.Sc. Previous class of Military Science.
2. The course contents of each Paper have been divided into part A & B and divided into 5 units. There will be internal choice in each unit in place of overall choices.
3. Question asked in the past year/years may be repeated in the Examination of the current year.

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In

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

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. |
| 3. Taylor | : | The Art of War in Italy. |
| 4. Clausewitz | : | On War. |
| 5. Jomini | : | The Art of War. |
| 6. Engels & Marx | : | Military Concept of the Social Revolutionaries. |
| 7. Winston Churchill | : | Second World-War. |
| 8. Liddell Hart | : | 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	:	Grand Strategy of World-War Second.
17. Palit D.K.	:	War in the Deterrent Age.
18. Rope, Theodore	:	War in the Modern World.
19. Cyril 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.


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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

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 Arthur (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 | The Decisive Battles of the Western World Vol.-III [To be used as a text book] |
| 2. J.F.C Fuller | The Second World-War. |
| 3. Montgomery | Normandy to Baltic. |
| 4. Liddell Hart | Rommel Papers |
| 5. Lt.Gen. Francis Taker | The Pattern of War. |
| 6. J.F.C Fuller | A Military of the Western World |
| 7. Vasim Ahmed Khan | Vishva ke Prasiddha Yuddh. (Hindi) |
| 8. Gyan Chandra Shrivastava | Battles of the World-War and Post War Development. (Hindi) |
| 9. Major F.W Sheppard | 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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

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:-

- | | | |
|--------------------------|---|---|
| 1. Headley Bull | : | The Control of Arms Race. |
| 2. Brenan, D.G. | : | Arms Control and Disarmament. |
| 3. Levine, Robert, A | : | The Arms Debate. |
| 4. Singer, J.D | : | Deterrence Arms Control and Disarmament. |
| 5. Edwards | : | Arms Control in International Politics. |
| 6. Stone, J.H. | : | Containing the Arms Race |
| 7. Van Bostrand | : | Dough Control for Late Sixties. |
| 8. Beaton Neddox | : | The Spread of Nuclear Weapons. |
| 9. Raymond Aron | : | The Imperial Republic. |
| 10. Raymond Aron | : | 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. |
| 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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

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. |
| 2. Col. Friedman Richard S | : | Advanced Technology Warfare. |
| 3. Royal Swedish Academy | : | Nuclear 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). |
| 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). |
| 15. Dr. Vishnu Kant Sharma | : | Rasayanik Yuddh ki Taknik. (Hindi). |

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

16. Dr. C. L. Garg & D. K. Garg	:	Nabhikiya Astra-Shastra. (Hindi).
17. Geoff Plunkett	:	Chemical Warfare in Australia.
18. Dr. Hauk Ellison	:	Chemical Warfare during the Vietnam War.
19. K. Coleman	:	A History of Chemical Warfare.
20. William J. Broad	:	Germs : Biological Weapons and America's Secret War
21. Curt Wachtel & Fritz Haber	:	Chemical Warfare.
22. Donald A Cameron	:	Chemical Warfare: Poison Gas in the Coming War.
23. Jonathan B. Tucker	:	War of Nerves Chemical Warfare from World War-I to Al-Qaida.
24. Paul R. Ziaya	:	Biological and Chemical-Warfare.
25. Stephen Endicott and Edward Hagerman	:	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.

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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

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 band – 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.

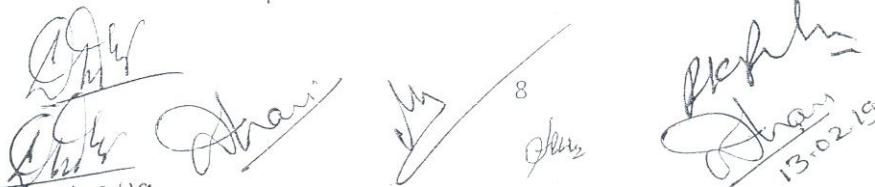
Note:- Group Discussion will be gone through in the Periods allotted on topic of the syllabus but at the time of the Practical Examination one of the given four from the syllabus be selected for the purpose of assessment by the External and Internal Examiners.

D. **Lecturing on Current Topic.**

Books Recommended:-

1. B N Maliwal	Prayogatmak Sainya Vigyan Vol-I.
2. Narendra Singh	Prayogatmak Sainya Vigyan.
3. Brig. Rajendra Singh	Map Reading.
4. J M Srivastava	Prayogatmak Sainya Vigyan.
5. Balwant Singh	Map Reading.
6. Tanks	Map and Survey.
7. Steers	Map Projections.
8. Bygott	Map and Map Work.
9. 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.



DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER – II

PAPER – I [Part B]

Evolution of Strategic Thoughts

Marks -85

Unit – 1.

1. Erich Friedrich-Wilhelm Ludendorff (1865-1937).
2. Capt. B.H. Liddell Hart (1895-1970).
3. Maj. Gen. J.F.C. Fuller (1878-1966).

Unit – 2.

1. Giulio Douhet (1869-1930), General William L. "Billy" Mitchell (1879-1936) & Alexander Seversky (1894-1974).
2. Alfred Thayer Mahan (1840-1914) & Douglas Mac Arthur (1880-1964).
3. Andre Beaufre (1902-1975).

Unit – 3.

1. Adolf Hitler (1889-1945).
2. Winston Churchill (1874-1965).
3. Henry Alfred Kissinger (1923-).

Unit – 4.

1. Halford J. Mackinder (1861-1947).
2. Karl Haushofer (1869-1946).
3. Rudolf Kjellen (1864-1922).

Unit – 5.

1. Sun-Tzu (544 B.C.-496 B.C.)
2. Vladimir Ilyich Ulyanov Lenin (1870-1924).
3. Mao-Tse-Tung (1893 - 1976) & Che-Guevara (1928-1967).

Books Recommended:-

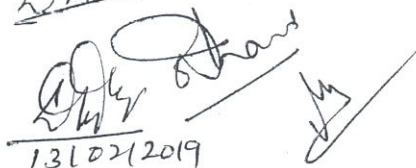
- | | | |
|--------------------------|---|---|
| 1. Quincy Wright | : | Study of War Vol.-I. |
| 2. Edward Meade Earl | : | Makers of Modern Strategy. |
| 3. Taylor | : | The Art of War in Italy. |
| 4. Clausewitz | : | On War. |
| 5. Jomini | : | The Art of War. |
| 6. Engels & Marx | : | Military Concept of the Social Revolutionaries. |
| 7. Winston Churchill | : | Second World-War. |
| 8. Liddell Hart | : | 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. |

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

13. Abdul Hariss Nasutian	:	Fundamentals of Guerrilla-Warfare.
14. Lord Tedder	:	Air Power in War.
15. Fuller J.F.C.	:	Conduct of War.
16. Howard Michael	:	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.




13/02/2019


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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER – II

PAPER – II [Part B]

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

Marks -85

Unit – 1.

1. The Russian Revolution impact of Class-Struggle and influence of Karl-Mark, Lenin's concept of Communism.
2. The Battle of Warsaw (13-25 August 1920).
3. Rise of third Reich and foundations of the Second World-War.

Unit – 2.

1. The Second Battle of Sedan (12-15 May 1940) and the fall of France.
2. The Battle of Siddi Barrani (09-11 December 1940).
3. Operation-Barbarossa and Lend-Lease Act.

Unit – 3.

1. The Battle of Moscow (02 October 1941-07 January 1941).
2. The Battle of El-Alamein (01-27 July 1942).
3. Foundations of Stalingrad Campaign and the Battle of Stalingrad (23 August 1942–02 February 1942).

Unit – 4.

1. Second Political Front.
2. The Battle of Normandy (06 June–25 August 1944).
3. Consequences of the Battle of Normandy.

Unit – 5.

1. War in the Pacific (07 December 1941–02 September 1945).
2. The Second World-War in Retrospect and Prospect.
3. Strategy and Tactics of the Second World-War.

Books Recommended:-

- | | | | |
|----|--------------------------|---|---|
| 1. | J.F.C. Fuller | : | The Decisive Battles of the Western World Vol.-III [To be used as a text book]. |
| 2. | J.F.C. Fuller | : | The Second World-War. |
| 3. | Montgomery | : | Normandy to Baltic. |
| 4. | Liddell Hart | : | Rommel Papers. |
| 5. | Lt.Gen. Francis Taker | : | The Pattern of war. |
| 6. | J.F.C. Fuller | : | A Military of the Western World. |
| 7. | Vasim Ahmed Khan | : | Vishva ke Prasiddha Yuddh. (Hindi). |
| 8. | Gyan Chandra Shrivastava | : | Battles of World-War and Post war Development. (Hindi). |
| 9. | Major E.W. Sheppard | : | 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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER – II

PAPER – III [Part B]

Disarmament, Arms-Control and Peace

Marks -85

Unit -1.

1. Bilateral efforts and Agreements towards Arms-Control.
2. Mutual Arms-Control & Multilateral Agreements towards Arms-Control.
3. India-Pakistan Arms-Race and Future of Disarmament and Arms-Control.

Unit -2.

1. Peace and its Maintenance, Historical effects for preservation of Peace through Balance of Power and Voluntary Units.
2. Liddell Hart's Eight Pillars of Peace.
3. Peace through the Strategy of Disarmament & Arms-Control.

Unit -3.

1. The building of confidence and Security at the negotiations in Stockholm and Vienna START-I & II.
2. The South Pacific Nuclear Free Zone.
3. Peace Keeping in International Politics.

Unit -4.

1. Peace through a World-State.
2. Peace through the Principles of Panchsheel and Non-Violence.
3. Gandhian Thoughts on Peace.

Unit -5.

1. Role and Organization of International Peace Keeping Forces.
2. Public Opinion on Peace and War.
3. Role of UNO towards Disarmament, Arms-Control and Peace.

Books Recommended:-

1	Headley Bull	:	The Control of Arms Race.
2	Brenan, D.G	:	Arms Control and Disarmament.
3	Levine, Robert, A	:	The Arms Debate.
4	Singer, J.D.	:	Deterrence Arms Control and Disarmament.
5	Edwards	:	Arms Control in International Politics.
6	Stone, J.H.	:	Containing the Arms Race.
7	Van Bostrand	:	Dough Control for Late Sixties.
8	Beaton Neddos	:	The Spread of Nuclear Weapons.
9	Raymond Aror	:	The Imperial Republic.
10	Raymond Aror	:	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 and Peace.
14	Khopp, w.	:	A history of War and Peace.
15	Sepri	:	Arms trade with the third world.
16	Sepri	:	Sipri Year book – 1983 & others.
17	Harkabi, Y.	:	Nuclear war and nuclear peace.
18	Osmidf Helmut	:	Defence 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.

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER – II

PAPER – IV [Part B]

Nuclear, Biological & Chemical Warfare

Marks -85

Unit –1. Biological Warfare:

1. Historical Development and Definition of Biological Warfare.
2. Delivery Systems and Hardware of Biological Warfare.
3. Biological Warfare Weapons in Action, Technology of Biological Warfare and Modern Biological Operations.

Unit –2. Biological Warfare:

1. Various Biological Agents and Protection from the Biological Agents.
2. Biological Balance and Biological Weapons Destruction.
3. Biological Weapons and Security & The effects of Global Biological Warfare.

Unit –3. Chemical Warfare:

1. Historical Development, Definition of Chemical Warfare.
2. Delivery Systems and Hardware of Chemical Warfare.
3. Various Chemical Agents: Nerve Agents, Blood Agents, Blister Agents, Vomiting Agents, Tear Agents and Other Agents.

Unit –4. Chemical Warfare:

1. Defence against Chemical Warfare.
2. Chemical Weapons / Agents, when Chemical became Weapons for War, Five most deadly Chemical Weapons for war.
3. Chemical Agents Detector and Chemical Weapons in Action.

Unit –5. Chemical Warfare:

1. Chemical Weapon Destruction.
2. The Chemical Balance and Chemical Weapons and Security.
3. The War Chemicals, Socio-Political Climate & Chemical Warfare, Effects of the Global Chemical Warfare.

Books Recommended:-

- | | | |
|----------------------------|---|---|
| 1. Frank Barnaby | : | Future War. |
| 2. Col. Friedman Richard S | : | Advanced Technology Warfare. |
| 3. Royal Swedish Academy | : | Nuclear 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. Subraminiyam | : | 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. |

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER –II

Practical Work [Part B]

Marks -50

A. CARTOGRAPH:

1. To find out North & Types of North.
2. Bearings and its Inter Conversion.
3. Representation of Relief and Section Drawing.
4. Map Projection :-
 - a. Conical with one and two Standard Parallels Projection.
 - b. Bones Projection.
 - c. Poly-Conic Projection.
 - d. Mercator Projection.
 - e. Zenithal Equal Distance and Zenithal Equal Area Map Projections.

OR

REMOTE SENSING:

1. Cultural detail Map from Land sat Imagery.
2. Study of Land sat Imagery.
3. Study of Additive and subtractive Colour Principles.

B. SPOTTING: Spotting of Various Types of Aircraft and Ship Models.

C. GROUP DISCUSSION: Conduct of Group Discussion with reference to the Syllabus of the II Sem.

Note :- 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:-

1	B N. Maliwal	Prayogtmak Sainya Vigyan Vol-I.
2	Narendra Singh	Prayogtmak Sainya Vigyan.
3	Brig Rajendra Singh	Map Reading.
4	J.M. Srivastava	Prayogtmak Sainya Vigyan.
5	Balwant Singh	Map Reading.
6	Tanks	Map and Survey.
7	Steers	Map Projections.
8	Bygott	Map and Map Work.
9	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.

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

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

SEMESTER –II

Practical Work [Part B]

Marks -50

A. CARTOGRAPHY:

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 - a. Conical with one and two Standard Parallels Projection.
 - b. Bones Projection.
 - c. Poly-Conic Projection.
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D. Lecturing on Current Topic.

Books Recommended:-

1	B.N. Malival	:	Prayogtmak Sainya Vigyan Vol-I.
2	Narendra Singh	:	Prayogtmak Sainya Vigyan.
3	Brig. Rajendra Singh	:	Map Reading.
4	J.M. Srivastava	:	Prayogtmak Sainya Vigyan.
5	Balwant Singh	:	Map Reading.
6	Tanks	:	Map and Survey.
7	Steers	:	Map Projections.
8	Bygott	:	Map and Map Work.
9	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.

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2020-2021

DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – III

PAPER – I [Part A]

Military History of India

Marks -85

Unit – 1.

1. Military History, Military Organization & the Art of Warfare of Vedic Period.
2. Military History, Military Organization & the Art of Warfare of Epic & Puranic Period.
3. Comparative Study of Indo-Greek Art of Warfare & Military Organization, with special reference to Alexander's invasion of India and the Battle of Hydaspes (326 B.C.)

Unit – 2.

1. Military Organization / System of Mauryas as described by Megasthenese and Kautilya's Philosophy of War.
2. Military Organization / System of Guptas and Chalukyas.
3. Military Organization of Harsh-Wardhan, the Battle of Somnath (1025 A.D.) & the fall of Hindu Military System.

Unit – 3.

1. Rajput Military Organization / System and the mode of fighting.
2. Military System of Sultanate Period (Turk Military System) and mode of fighting with reference to the armed clashes between Rajput & Turks, the First Battle of Tarain (1191 A.D.) and the Second Battle of Tarain (1192 A.D.).
3. Causes for the defeat of Rajput.

Unit – 4.

1. Campaigns of Alauddin Khilji: Conquest of Ranthambore and Chittor, South Indian Campaigns of Alauddin Khilji Led by Malik Kafoor.
2. Mongol Invasion during the reign of Military reforms of Alauddin Khilji and Gayasuddin Balban.
3. Causes for the defeat of Mongols.

Unit – 5.

1. Introduction of New elements in the art of fighting with special references to the first Battle of Panipat (21 April, 1526 A.D.) and the Battle of Kanwah / Khanwa (17 March, 1527 A.D.).
2. Sher Shah's Battles with Humayun, the Battle of Chause (26 June, 1539) and the Battle of Kannauze / Bilgram (17 May, 1540).
3. Military Organization of the Mughal Army under Akbar and the Second Battle of Panipat (5 November, 1556 A.D.) and the Battle of Haldighati (18 June, 1576 A.D.).

Books Recommended:-

- | | | |
|-------------------------|---|--|
| 1. Dr. P.C. Chakravarty | : | The art of war in Ancient India. |
| 2. Prof. A.R. Dikahitar | : | War in Ancient India. |
| 3. Dr. S.R. Singh | : | Ancient India Warfare. |
| 4. B.K. Majumdar | : | Military System of the Marathas. |
| 5. B.K. Majumdar | : | Indian Military System in Ancient India. |
| 6. Sir. J.N. Shankar | : | Fall of the Mughal Empire Vol. I & II. |
| 7. Sir. J.N. Shankar | : | Military History of India. |
| 8. J.F.C. Fuller | : | Alexander the Great. |

Continue..... Military History of India (SEMESTER – III)

9. Gautam Sharma	:	Indian Army through the Ages.
10. R.C. Kulshrestha	:	An Introduction to Dhanurveda.
11. R.C. Kulshrestha	:	Kautilya's Philosophy of War.
12. P. Sen. Sharma	:	Kurukshetra War.
13. Sarva Daman Singh	:	Ancient Indian Warfare with special reference to Vedic Period.
14. W. Irvine	:	The Army of Indian Mughal.
15. S.N. Sen.	:	Victory System of Marathas.
16. Gulcharan Singh	:	Battles of Panipat.
17. Alfred Devid	:	Indian Art of War.
18. I.H. Qureshi	:	Administration of Sultanate.
19. Col. Melleon	:	Decisive Battles of India.
20. R.D. Palsokar	:	Shivaji the Great Guerrilla.
21. R.D. Palsokar	:	Study of Generalship.
22. Karr	:	Military History of India.
23. Subramniam	:	Indian Military History.
24. K.M.L. Saxena	:	The Military System of India.
25. S.T. Das	:	Indian Military.

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – III

PAPER – II [Part A]

Military Psychology

Marks -85

Unit – 1.

1. Military Psychology: Meaning, Definition, Historical development, Role, Aim and Importance.
2. Relevance of Psychology in the Defense Problems.
3. The use of Psychology in the War and Seven Military uses of Psychology.

Unit – 2.

1. Personnel Selection and Classification for Defense Services, use of Intelligence Tests, Group Testing procedure and Personality Testing.
2. Application of the principles of Psychology in the Military Training.
3. General Ability Tests, Special Ability Test, Individual deference, Classification and Assignment.

Unit – 3.

1. The Eye as a Military Instrument, Visual Adaptation and Night Vision, Colour and Camouflage, Colour and colour Blindness, Camouflage and Counter Camouflage.
2. The Ear as a Military Instrument, Nature of Hearing, psychology of Hearing, Deafness and Communication, Effect of Noise, localization of objects by Hearing, Sound Camouflage, practical rules for Hearing.
3. The Nose as a Military Instrument: Smell in war, Sensitivity, Reorganization, war gases, Camouflage of odors.

Unit – 4.

1. Personnel Adjustment, factors in Adjustment during Army life, the recruits Adjustment to combat.
2. The psychological mechanisms of personal adjustment, Defence mechanisms and Escape mechanisms of personal adjustment.
3. The problem of Adjustment and the problem of Re-adjustment of Ex-Soldiers.

Unit – 5.

1. Group: Structure, types and their functions.
2. Formation of Social Norms and Group Problem Solving.
3. Motivation, Learning, Group and Individual Education, Frustration and psychological mechanism of frustration.

Books Recommended:-

1. Boring, Edwin G. : Psychology for the Armed Services.
2. Lienbarger : Psychological Warfare.
3. Mac, Cormack : Human Factor Engineering.

Continue..... Military Psychology (SEMESTER – III)

- | | | |
|-------------------------|---|--|
| 4. Bartlett, F.G. | : | Psychology and the Soldier. |
| 5. Mann, J. | : | Frontiers of Psychology. |
| 6. Henning's | : | Air War and Emotional Stress. |
| 7. Lifton. R.J. | : | Thought Reforms and Psychology of Tot-alter. |
| 8. Schein, E.H. | : | Coercive Persuasion. |
| 9. Brown, J.F. | : | Techniques of Persuasion. |
| 10. Second & Backman | : | Social Psychology. |
| 11. Grinker, R.R. | : | Man under Stress. |
| 12. Norman Copeland | : | Psychology and Soldier. |
| 13. Hasnain, Maj. Qamar | : | Psychology for the fighting man. |
| 14. Gupta, Parshuram | : | Sainya Manovigyan (Hindi). |

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – III

PAPER – III [Part A]

Area Study

(Indian Ocean)

Marks -85

Unit – 1.

1. Maritime History of the Indian Ocean: The Early Period, the Hindu Period and the Arabs.
2. The Advent of Europeans: The Portuguese, the Dutch, the French and the British.
3. The Rise and Decline/Downfall of Maratha Navy.

Unit – 2.

1. Geo-Political Importance of the Indian Ocean with reference to India.
2. Elements of Maritime Strategy.
3. Maritime Strategy for India.

Unit – 3.

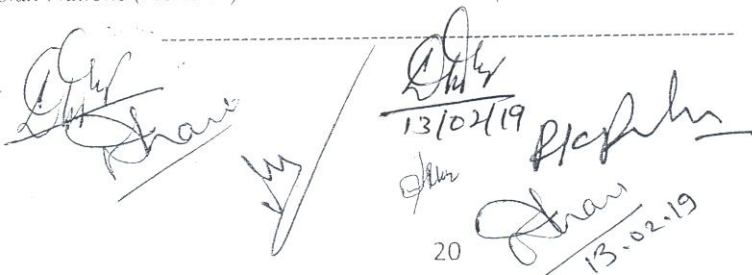
1. Foreign Bases in the Indian Ocean.
2. Diego-Garcia and its Strategic Importance in the Indian Ocean.
3. Potential threat to the South Asian countries.

Unit – 4.

1. Interests of major powers in the Indian Ocean with special reference to United States of America & Russia.
2. Power Struggle in the Indian Ocean Region and R.D.F. (Rapid Deployment Force).
3. Importance of Indian Ocean and Indian Navel Policy.

Unit – 5.

1. Peace Zone Proposal and the Indian Ocean.
2. Role of Iran, Indonesia, Pakistan and Australia in the Indian Ocean.
3. Role of South Asian Association for Regional Co-Operation (SAARC) and Association of South-East Asian Nations (ASEAN).

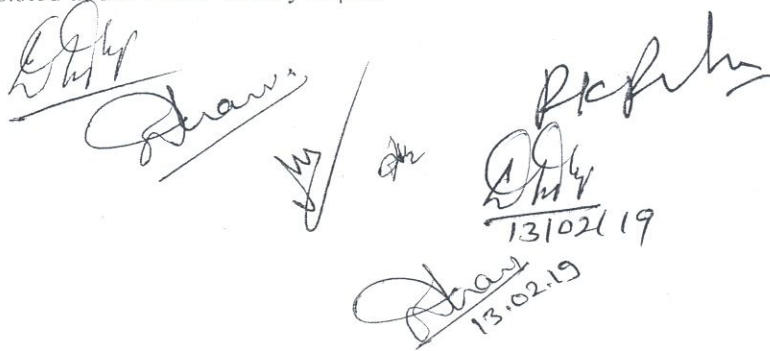
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Continue....Area Study/Indian Ocean (SEMESTER – III)

Books Recommended:-

1. Poullose, Dr. T.T. : Indian Ocean Power Rivalry.
2. Pannikar, K.M. : Geographical factors in Indian Ocean.
3. Pannikar, K.M. : India and Indian Ocean.
4. Vaidya, K.B. : Naval defence of Indian Ocean.
5. Martin, L.W. : Sea in Modern Strategy.
6. Admiral Kohli : Sea Power in the Indian Ocean.
7. Palsokar, R.D. : Power Rivalry in the Indian Ocean.
8. Singh, R.K. : Indian Ocean.
9. I.D.S.A. Journal : New Review on Indian Ocean Defence Journal –Vikrant and Chanakya.
10. Elwi, Verrier : Philosophy of NEFA.
11. Rahul, Ram : Himalayan Borderland.
12. Karan, P.P. : Himalayan Kingdom.
13. Srinivas, M.N. : Social Change in Modern India.
14. Nandi, S.N. : Agro-Economic Indications – A Comparative Study of North Easter States of India
15. Meeti, N.B. : Autonomy, Ethnic Politics and Conflicts in North-east India.
16. Horam, M. : Naga Insurgency: the last thirty years.
17. Hazarika, Sanjoy : Strangers of the Mist: Tales of War and Peace from India's North-East.
18. Nibedon, Nirmal : The Night of Guerillas.
19. Ben, Hayes : The other Burma – Conflict, Counter Insurgency and Human Rights in Northeast India.
20. East-West Central Washington : Working Papers No– 10 July 2007.
21. Namruta Goswami (IDSA) : India's North-East-2020: for Alternative futures.
22. Harisharan & Harsk K. Sinha : Hind-Mahasagar: Chunautiyan aur Vikalp.

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – III

PAPER – IV [Part A]

Science & Technology in War

Marks -85

Unit – 1.

1. Science and War in the History [500 B.C. to up to date].
2. Science and Society: Introduction of Science, Technology and Society in war and different content.
3. Impact of science and technology on human life with special reference to modern warfare.

Unit – 2.

1. Defence and Civil Technology, research and development, standardization of weapons system, economic factor of standardization, obsolescence factor and lots of effectiveness, essentials for standardization.
2. Effects of Science in diminution of sufferings, War and Environment.
3. War Science and Technology in India. Development of armament technology in India since [1962 to till date].

Unit – 3.

1. Historical development and role of Nuclear (Atom) Bomb, Hydrogen Bomb, Cobalt or Dirty Bomb, Reduced Residual Radiation Bomb (RRR Bomb), Electro Magnetic Pulse Nuclear Bomb (EMP Nuclear Bomb), X-Ray Laser, Gamma Ray Laser.
2. Effect of Atomic / Nuclear Explosion.
3. Spread of Nuclear Weapons.

Unit – 4.

1. Nuclear Fusion, Chain Reactions, Nuclear Reactor and the use of Nuclear Reactor.
2. Nuclear Fission, Difference between Nuclear Fusion and Nuclear Fission.
3. Nuclear Technology in India.

Unit – 5.

1. Indian Atomic / Nuclear Test and Present Technology.
2. Indian Atomic / Nuclear Research Centers.
3. Atomic / Nuclear minerals with special reference to India.

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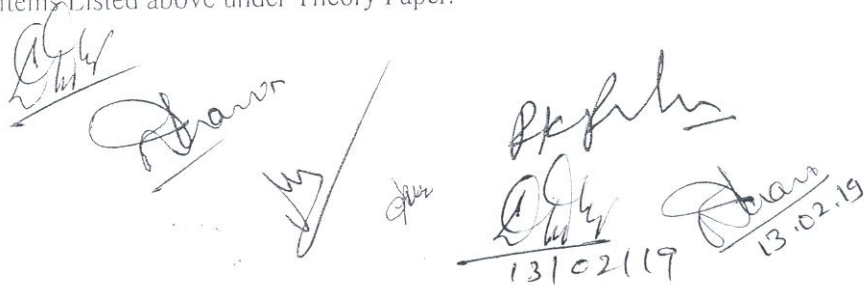
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Continue.....Science & Technology in War (SEMESTER – III)

Books Recommended:-

1. J.F.C. Fuller	:	Armament and History.
2. Sir Russell Bertrand	:	Science and Survey.
3. Partway Donald	:	Military Science Today.
4. Dow	:	Fundamentals of Advanced Missiles.
5. D.R. Bates	:	Space Research and Exploration.
6. Govt. of India Publication	:	Nuclear Explosion and their effects.
7. Robin Clerk	:	The War and Peace.
8. Christopher Lee	:	War in Space.
9. R.K. Jasbir Singh	:	Military Science and Armament Technology.
10. Military Year Book	:	Latest Edition.
11. Indu Prakash	:	Yuddh ka Vigyan/War Science. (Hindi).
12. Indu Prakash	:	Rasayanik aur Kitanu Yuddh. (Hindi).
13. Indu Prakash	:	Prakshepiki. (Hindi).
14. Manmohan Bala	:	Raksha Vigyan. (Hindi).
15. C.L. Garg	:	Nabhikiya Astra-Shastra. (Hindi).
16. C.L. Garg	:	Adhunik Astra-Shastra Aur Yuddh Vigyan. (Hindi).
17. Viren Gohil	:	Hathiyar: Barood se Atom Tak. (Hindi).
18. Mark Dartford	:	Modern Warfare.
19. Frosunda-Sweden	:	Sipri Year Book.
20. MC Graw Hill	:	Encyclopedia of Science and Technology.
21. C.L. Garg	:	Chamatkari Kiran LASER. (Hindi).
22. K. Parkins	:	Weapons and Warfare.
23. B.N. Pandey	:	Yuddh, Vigyan Avam Takniki. (Hindi).
24. Munesh Kumar	:	Suchna Takniki Avam Raksha Takniki. (Hindi).
25. G.K. Pandey	:	Yuddh me Vigyan Avam Takniki.(Hindi).
26. Frank Barnaby	:	Future War.
27. Maj. Gen. Raj Mehta	:	Encyclopedia of Missile Defense and Non-Proliferation–Vol. I &II.
28. Philip Alexander	:	Information Security.
29. M.N. Golvin	:	Conflict in Space.
30. Nels A. Parson Jo	:	Missiles and the Revolution in Warfare.

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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – III

Practical Work [Part A]

Marks -50

A. Psychological Experiments:

1. Association: (a) Free association and controlled association.
2. Attention: (a) Span of attention. (b) Division attention.
3. Learning: (a) Transfer of learning – Positive and Negative. (b) Trial and error and insightful learning.
4. Memory: (a) Immediate memory spans (Auditory). (b) Immediate memory spans (Visual).
5. Land use Classification, Visual interpretation in Individual Bonds / Colour.

B. Spotting: Recognition of Air Craft and Ship Models.

C. Group Discussion on Current Military Topics.

D. Lecturing on Current Topics.

Books Recommended:-

- | | | |
|--|---|---|
| 1. Collins | : | A fist laboratory guide in psychology. |
| 2. W.S. Hunter | : | Foundations of experimental psychology. |
| 3. H.S. Hines | : | Measuring intelligences (Harrap and Co. London, Calcutta) |
| 4. Phillip Basswood | : | Group Test intelligences published by Ballard. |
| 5. Competition Success review (Monthly). | | |

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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – IV

PAPER – I [Part B]

Military History of India

Marks -85

Unit – 1.

1. Central Asian Campaign of Shahjahan and the Battle of Delhi or Talkotra (28 March-1737 A.D.) and the Causes of the decline of Mughal Military System.
2. Military Organization / System of Marathas under Shivaji.
3. Shivaji's technique of fighting with special reference to the Siege of Surat.

Unit – 2.

1. Military System of Marathas after Shivaji.
2. The Third Battle of Panipat (14 January-1761).
3. The Battle of Assai (1803), Anglo-Maratha Wars (1805-1818) and Casus of the decline of Maratha Military System.

Unit – 3.

1. Sikh Military System of Guru Govind Singh & Military Organization of Sikh under Maharaja Ranjeet Singh.
2. Anglo-Sikh Wars (1845-1846 to 1848-1849 A.D.).
3. Causes of the decline of Sikh Military System.

Unit – 4.

1. The Battle of Plassey (23 June-1757).
2. The Battle of Baxar (22 Oct.-1764).
3. The Military Organization of East India Company.

Unit – 5.

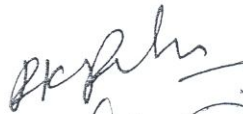
1. India's first Liberation-Movement for Independence (1857 A.D.) Causes of the Liberation-Movement & the Causes of the failure of Liberation-Movement.
2. Reorganization and reforms of the Army in India under the British Crown.
3. Indianisation of the Indian Armed Forces after Independence.

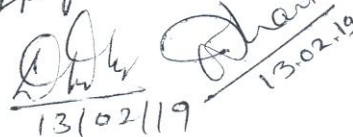






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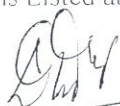




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Continue.....Military History of India (SEMESTER-IV)

Books Recommended:-

1. Dr. P.C. Chakravarty	:	The art of war in Ancient India.
2. Prof. A.R. Dikahitar	:	War in Ancient India.
3. Dr. S.R. Singh	:	Ancient India Warfare.
4. B.K. Majumdar	:	Military System of the Marathas.
5. B.K. Majumdar	:	Indian Military system in Ancient India.
6. Sir. J.N. Shankar	:	Fall of the Mughal Empire Vol. I & II.
7. Sir. J.N. Shankar	:	Military History of India.
8. J.F.C. Fuller	:	Alexander the Great.
9. Gautam Sharma	:	Indian Army through the Ages.
10. R.C. Kulshrestha	:	An Introduction to Dhanurveda.
11. R.C. Kulshrestha	:	Kautilya's Philosophy of War.
12. P. Sen. Sharma	:	Kurukshetra War.
13. Sarva Daman Singh	:	Ancient Indian Warfare with special reference to Vedic period.
14. W. Irvine	:	The Army of Indian Mughal.
15. S.N. Sen.	:	Victory System of Marathas.
16. Gulcharan Singh	:	Battles of Panipat.
17. Alfred Devid	:	Indian Art of War.
18. I.H. Quereshi	:	Administration of Sultanate.
19. Col. Melleson	:	Decisive Battles of India.
20. R.D. Palsokar	:	Shivaji the Great Guerrilla.
21. R.D. Palsokar	:	Study of Generalship.
22. Karr	:	Military History of India.
23. Subramnyam	:	Indian Military History.
24. K.M.L. Saxena	:	The Military System of India.
25. S. T. Das	:	Indian Military.

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – IV

PAPER – II [Part B]

Military Psychology

Marks -85

Unit – 1.

1. Fear: Meaning, Definition, Characteristics, Types, Reasons, Effect on Morale, Effects of Fear on Discipline with example, psychology of fear, control of fear in Defense, Attack and withdrawal, physical fatigue and fear. Methods to overcome fear.
2. Leadership: Meaning, Definition, Nature of Leadership, Types of Leadership, factions of Leader, Attributes of Leadership, purpose of Military Leadership.
3. Attitude: Attitude Organization, impact of Military life on the formation of Attitudes.

Unit – 2.

1. Moral: Meaning, Definition, Nature, Factors contributing to Morale or techniques of Boosting Morale, Effect of fear on Morale, and it's Significance in Defense.
2. Discipline: Meaning, Definition, Indices of Discipline, purpose of Discipline, Psychology of Discipline, Role of Drill and Organized Sports in Discipline, special problems of Discipline.
3. Emotion (Fear and Anger): Psychology of Emotion, Expression of Emotion, Fear and Emotion, Fighting-Fear, Emotion and Anger.

Unit – 3.

1. Courage: Definition, Meaning, Importance, Types and Effecting Elements.
2. Endurance: Meaning, Importance, Types and Effecting Elements.
3. Psychological Warfare: Nature, Techniques, Role and Importance of Psychological Warfare.

Unit – 4.

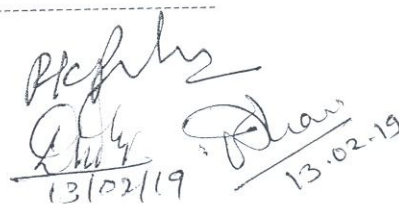
1. Propaganda: Elements, Aim Role and Importance of Propaganda, types of Propaganda, techniques of Military Propaganda and Combats Propaganda.
2. Rumor: Nature. Techniques, Merits and Demerits, use of Rumors in War, Control of Rumors, Psychology of Rumor.
3. Brain Washing: Structure, Theories and Techniques of Brain Washing, Determinants of Brain Washing.

Unit – 5.

1. Mental Health Problems and Soldier in War and Treatment.
2. Psychological Disorder and emotional strains imposed by War Hysteria, Conversions Hysteria, Anxiety, Collective Anxiety, Neurosis, and War Neurosis.
3. Predisposing conditions and methods of treatment.



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Continue.....Military Psychology (SEMESTER-IV)

Books Recommended:-

1. Boring, Edwin G. : Psychology for the Armed Services.
2. Lænbarger : Psychological Warfare.
3. Mac, Cormack : Human Factor Engineering.
4. Bartlett, F.G. : Psychology and the Soldier.
5. Mann, J. : Frontiers of Psychology.
6. Henning's : Air War and Emotional Stress.
7. Lifton, R.J. : Thought Reforms and Psychology of Tot-Alter.
8. Schein, E.H. : Coercive Persuasion.
9. Brown, J.F. : Techniques of Persuasion.
10. Second & Backman : Social Psychology.
11. Grinker, R.R. : Man under Stress.
12. Norman Copeland : Psychology and Soldier.
13. Hasnain, Maj. Qamar : Psychology for the fighting man.
14. Gupta, Parshuram : Sainya Mānovigyan (Hindi).

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – IV

PAPER – III [Part B]

Area Study

(Jammu & Kashmir and North-East Hill States)

Marks -85

Unit – 1.

1. Historical Background and Terrorism of the Jammu & Kashmir.
2. Strategical Location, Security aspects and Importance of the Jammu & Kashmir.
3. Role of Pakistan in Jammu & Kashmir and the security Problems of India.

Unit – 2.

1. Cross Border Terrorism in Jammu & Kashmir and the security Problems of India.
2. Role of China in Jammu & Kashmir and the security Problems of India.
3. China-Pakistan Common interest in the region of Jammu & Kashmir and its effect on India's Security.

Unit – 3.

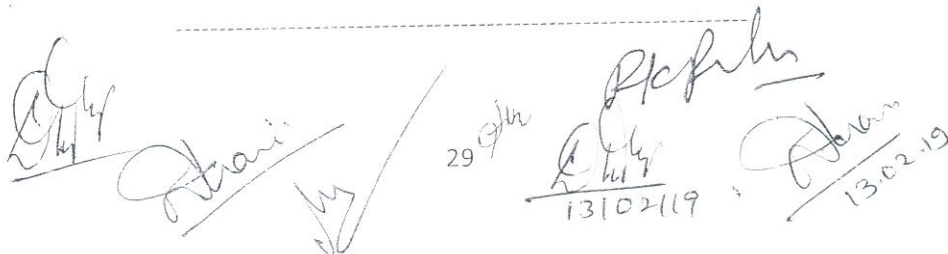
1. Historical Background and Insurgency of North-East Hill States (Sikkim, Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Tripura & Nagaland).
2. Strategical Location, Security aspects and Importance of North-East Hill States.

Unit – 4.

1. Natural resources and Defence potentials of North-East Hill State.
2. Logistics in the region of North-East Hill States.

Unit – 5.

1. Insurgency Problems in the North-East Hill State and Internal security problems of India.
2. China's role and Interest in the region of North-East Hill State and its effect on India's Security.


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Continue..... Area Study/Jammu & Kashmir and North-East Hill States (SEMESTER-IV)

Books Recommended:-

1. Poulse, Dr. T.T. : Indian Ocean Power Rivalary.
2. Pannikar, K.M. : Geographical factors in Indian Ocean.
3. Pannikar, K.M. : India and Indian Ocean.
4. Vaidya, K.B. : Naval defence of Indian Ocean.
5. Martin, L.W. : Sea in Modern Strategy.
6. Admiral Kohli : Sea Power in the Indian Ocean.
7. Palsokar, R.D. : Power Rivalry in the Indian Ocean.
8. Singh, R.K. : Indian Ocean.
9. I.D.S.A. Journal : New Review on Indian Ocean Defence Journal – Vikrant and Chanakya.
10. Elwi, Verrier : Philosophy of NEFA.
11. Rahul, Ram : Himalayan Borderland.
12. Karan, P.P. : Himalayan Kingdom.
13. Srinivas, M.N. : Social Change in Modern India.
14. Nandi, S.N. : Agro-Economic Indications – A Comparative Study of North Easter States of india.
15. Meeti, N.B. : Autonomy, Ethnic Politics and Conflicts in North-east India.
16. Horam, M. : Naga Insurgency: the last thirty years.
17. Hazarika, Sanjoy : Strangers of the Mist: Tales of War and Peace from India's North-East.
18. Nibedon, Nirmal : The Night of Guerillas.
19. Ben, Hayes : The other Burma – Conflict, Counter Insurgency and Human Rights in Northeast India.
20. East-West Central Washington : Working Papers No -- 10 July 2007.
21. Namruta Goswami (IDSA) : India's North-East – 2020: for Alternative futures.

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER – IV

PAPER – IV [Part B]

Science & Technology in War

Marks -85

Unit – 1.

1. Study of Missiles: History, Component and Structure, Classification of Missiles, different Guidance systems, Guidance system of Cruise Missiles & Guidance system of Ballistic Missiles system, Precision Guided Missiles or Munitions (PGMs).
2. Navigation of the Missile towards the Target, Anti Ballistic System and Anti Ballistic Missile (ABM), Multiple Independently Targetable Re-entry Vehicles (MIRVs), Global Positioning System (GPS).
3. Development Missiles in India.

Unit – 2.

1. Standoff Guidance, Command, Control, Communication, Computer, Intelligence, Surveillance and Reconnaissance (C4ISR).
2. War and Space, Space technology and Military role of space.
3. Military importance of Space technology & Star War (SDI) and India's Space Programme.

Unit – 3.

1. Remote Sensing and its application in security, Indian Remote Sensing Satellite.
2. RADAR: Working system or Methods, Military use of RADAR, Silent RADAR.
3. LASER: Development of Maser and LASER, Characteristics, types, War Science and LASER.

Unit – 4.

1. Remotely Piloted Vehicles (RPVs), Drone, Modern weapon System.
2. Electronic warfare: Aim, Role, Impact, Bodies of Electronic warfare-Electronic Support Measures (ESM), Electronic Counter Measures (ECM), Electronic Counter Counter Measures (ECCM).
3. Principles employed in Electronic warfare, Importance of Information Technology in Electronic Warfare,

Unit – 5.

1. Information / Cyber warfare: Meaning, Definition, Types, Role, Impact and Importance of Information / Cyber warfare in the modern warfare.
2. Changing nature of war technology [Night vision technology, Pilotless Aircraft, Low Light Television, Computer war gaming, Redemption change Coupled Imagers].
3. Computer and Information Processing.

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Continue.....Science & Technology in War (SEMESTER-IV)

Books Recommended:-

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| 1. J.F.C. Fuller | : | Armament and History. |
| 2. Sir Russell Bertrand | : | Science and Survey. |
| 3. Partway Donald | : | Military Science Today. |
| 4. Dow | : | Fundamentals of Advanced Missiles. |
| 5. D.R. Bates | : | Space Research and Exploration. |
| 6. Govt. of India Publication | : | Nuclear Explosion and their effects. |
| 7. Robin Clerk | : | The War and Peace. |
| 8. Christopher Lee | : | War in Space. |
| 9. R.K. Jasbir Singh | : | Military Science and Armament Technology. |
| 10. Military Year Book | : | Latest Edition. |
| 11. Indu Prakash | : | Yuddh ka Vigyan/War Science. (Hindi). |
| 12. Indu Prakash | : | Rashynik aur Kitanu Yuddh. (Hindi). |
| 13. Indu Prakash | : | Prakshepiki. (Hindi). |
| 14. Manmohan Bala | : | Raksha Vigyan. (Hindi). |
| 15. C.L. Garg | : | Nabhikiya Astra-Shastra. (Hindi). |
| 16. C.L. Garg | : | Adhunik Astra-Shastra Aur Yuddh Vigyan. (Hindi). |
| 17. Viren gohil | : | Hathiyar – Barood se Atom Tak. (Hindi). |
| 18. Mark Dartford | : | Modern Warfare. |
| 19. Frosunda-Sweden | : | Sipri Year Book. |
| 20. MC. Graw hill | : | Encyclopedia of LASER and Technolgy. |
| 21. C.L. Garg | : | Chamatkari Kiran LASER. (Hindi). |
| 22. K. Parkins | : | Weapons and Warfare. |
| 23. B.N. Pandey | : | Yuddh, Vigyan Avam Takniki. (Hindi). |
| 24. Munesh Kumar | : | Suchna Takniki Avam Raksha Takniki. (Hindi). |
| 25. G.K. Pandey | : | Yuddh me Vigyan Avam Takniki. (Hindi). |
| 26. Frank Barnaby | : | Future War. |
| 27. Maj. Gen. Raj Mehta | : | Encyclopedia of Missile Defense and Non-Proliferation–Vol. I &II |
| 28. Philip Alexander | : | Information Security. |
| 29. M.N. Golvin | : | Conflict in Space. |
| 30. Nels A. Parson Jo | : | Missiles and the Revolution in Warfare. |

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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DAVI AHILYA UNIVERSITY, INDORE [M.P.]

Military Science

M.A. / M.Sc. [Final]

SEMESTER -IV

Practical Work [Part B]

Marks -50

A. Psychological Experiments:

1. Fatigue: (a) Mental (b) Physical-Incentives on work and Fatigue.
2. Measurement: (a) Intelligence (b) Perseveration.
3. Reaction Time: Simple, Choice and discriminative reaction time for Visual.

B. Spotting: Recognition of Tank and Gun Models.

C. Group Discussion on Military Topics.

D. Lecturing on Current Topics.

Books Recommended:-

- | | | |
|--|---|--|
| 1. Collins | : | A fist laboratory guide in psychology. |
| 2. W.S. Hunter | : | Foundations of experimental psychology. |
| 3. H.S. Hines | : | Measuring intelligences (Harrap and Co. London, Calcutta). |
| 4. Phillip Basswood | : | Group Test intelligences published by Ballard. |
| 5. Competition Success Review (Monthly). | | |

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