

MILITARY STUDIES

M. A. (Previous) Examination.

paper I

Theory and Practice of war

SECTION (A).

The Military thinkers of the east and west; thoughts on war and contribution to the concept and art of warfare of the following :

Kautilya, Sinto, Conghizkhan, Epaminondas, Gustavas, Adolphus, Machiavalli, Fredarick, Napoleon, Vauban, Jomini, Clausewitz, Mahan, Douhet, Hitler and Liddell hart, Fuller.

SECTION (B).

Military history : A brief survey of the military events, Military organisations, formations, Arms strategy & Tactics, and Military consequences of :—

1. French Revolution
2. American Civil War
3. World War I
4. World War II

Paper II

Military Psychology

1. Introduction, development of military psychology, its functions and problems.

2. Human Factor in fighting forces.
 - a. Individual differences, its importance for fighting forces.
 - b. Vocational fitness; right soldier for a right job : placement.
 - c. Methods of selection; job analysis, interview, its merits and demerits, questionnaire; aptitude test, Personality and Interest Inventories.
3. Fatigues : Its nature; physiological and psychological aspects of fatigue; measurement of fatigue, boredom and monotony; factors responsible for causing fatigue; nature of work; its durations and rest pause, its allocation; method of work including preparation of training efficiency log.
4. Motivation : its influence; kinds of motivation-financial and national patriotic Incentives; motivation during war.
5. Aptitude and morale : The effect of aptitude on fighting skill, factors influencing morale, supervision and man management, leadership, food discipline; sex; emotions of fear and rage.
6. Mental Measurement : (Elementary Treatment only).
 - a. Measurement of personality, all cadets including trainees.
 - b. Measurement of intelligence, sub-normal and supernormal trainees.
 - c. Measurement of special abilities and achievement.
7. Tools of psychological Warfare : brain washing, mob and panic; rumour; technique of propaganda; coercive-persuasion.
8. Mental Hygiene :
 - a. Mental health of combatants, its relation to fighting efficiency, problem soldiers, desertion its causes and remedies.
 - b. Condition of efficiency, physical and social environment training and welfare.

Paper III

Civil and Military Relations

1. Civil Military relations as a political problem, Military influence on national policy, Political control over military decisions. The officer corps in various kinds of society : Military Coup-d'etat.
2. Social and constitutional responsibilities of the Armed Force.
3. Relationship of defence establishment to national government in the following countries :

1. India.
2. U. S. A.
3. U. S. S. R.
4. U. K.

PAPER IV :

International Law :

1. International Law of Peace :-Nature and function of international law. Historical development of International Law. Subjects of International Law. Status domain; Limitation of State; Oversight agreements; settlements of disputes. War in general; Characteristic of War; the law of war, the belligerents; Enemy character.
2. Warfare of Land :-Violence against enemy persons; treatment of wounded, the sick and the dead; capacity; appropriation and use of enemy public and private property, Assault, siege and bombardment. Espionage: Occupation of enemy territory.

3. **War at Sea** :—Attack and seizure of enemy vessels, Appropriation and destruction of enemy merchantment; Prize courts and private enemy vessels. Treatment of the wounded and the ship wrecked.
4. **Air Warfare** :—Rules of air warfare in relation to rules of war on land and sea; aerial bombardment; attack on enemy civil air craft; Liability of civil air craft on capture. Nuclear warfare and the law of war.
5. **Non-Hostile relation of Belligerents** :—Truce; Capitulation surrender; armistice. Means of securing legitimate warfare; reprisals, punishment of crimes; hostages Legal controls of international conflicts; attempts to prohibit war (from pact of Paris to the Charter of United Nations.)
6. **Neutrality** :—Relations between belligerents and neutrals, Rights and duties of neutrals; violations of neutrality.
7. **International Law and the Conduct of War** :—Blockade, Conception, Establishment and Breach. The long distance blockades. Contraband Conception; absolute and conditional contraband; direct circuitous and indirect carriage; penalties. Unneutral services; carriage of persons; transmission of intelligence; and other forms of penalties.

Visitation, Capture and trial of neutral vessels, right of visitation and search of convoys.

Modern developments and the law of neutrality.

Paper V

International Relations. (From 1914 to present day).

1. The World War I (1914-18) and the peace settlement of 1919; the league of Nations, work of the league, the mandate system, the problems of disarmament.
2. The rise of Hitler and Nazism; the break-down of the league system.

3. World War II :— Important conference during the war period. The United Nations and, its various origin of the cold war; development of European Corporation; Regionalism and Great Powers; Asian Nationalism, the problem of the, Middle East, South East Asia and the Far-East the Suez Crisis.
4. War in Nuclear age :-Different forms of war, their nature and functions; Nuclear war, Conventional and Unconventional Wars, War of Intervention; Spread of Nuclear Weapons; Strategy of Deterrence.
5. War and International System :-Concept of Power; Balance of Power, collective security. Alliances and Military blocks; Neutrality and Non-alignment.
6. War and Foreign Policy :-War as an instrument of foreign policy. Role of force in the Nuclear Age.
7. Peace and its Preservation :-Peace keeping in international politics, Pillars of Peace; Causes, Abolition and control of Wars. Disarmament & Arms Control (Brief Study).

Paper VI

War Economics & War Finance.

- A. Introduction : Basic economic theories, Defence as an Economic Problem, Economic Judgement in Military decision making.
- B. The Nature of problem of resource limitations in the developing and the developed countries; Assessment of war potential (resources of war) Problems of defence budgeting planning; The expansion programme.
- C. Mobilization of resources for defence :—
 - i. Domestic resources—Direct methods. Increasing duration of working hours, additional employment, curtailing vacational time. Fiscal and Monetary control methods.

Taxation and borrowing.

Economic implication of technical aspect of defence production in India.

- ii. Foreign resources—Private foreign capital, foreign capital in Govt; Institutions and capital import from the international Agencies. Problem of imported technology in defence production.
- iii. War time mobilization—priority in transfer of resources, Emergency nature of the above mentioned problems, Techniques of Control and rationing with reference to production, consumption and distribution.

D. Economic Warfare :—Scope and Content of Economic warfare, Denial of resources to the enemy. Role of Foreign Aid, Economic Warfare and disarmament with reference to Hot War and Cold War cases.

E. Effects of War :—Problem of an inflationary economy, Balance payments, Exhaustion of Economic resources.

F. Special problems and reconstruction :—Problems of reconstruction and rehabilitation, Institutional, Technological and industrial development due to war.

Books Recommended :

1. Studies in Economic Warfare by Dr. D. I. Jack.
2. Ways and means of War by Geoffery Growther.
3. The Economic problems in war and peace by L. R. Robinson.
4. India Economy-Its nature and problems by Alak Ghosh.
5. Political Economy of war by A. C. Pigou.
6. Economics in defence by Hitch & Mekeen.
7. The New Economics of National Defence by J. J. Clark.
8. The Theory and working of Union finance in India by R. N. Bhargava.
9. Mobilising resources of war by Tarshish, Shaw & Scilovasky.
10. Monetary theory and fiscal policy by Hansen.

paper VII :**Operational Research :**

- A. Definition and origin; scope and limitation, different types of models, their construction and general method of solution; stimulation methods.
- B. Operational research accused during the World War II.
- C. Linear programming; transportations and simplex techniques application to assignment problems; Non linear programming, Dynamical programming.
- D. Theory of games; Its application to the defence problems.
- E. Introduction to information theory and cybernatics.
- F. Inventory control and search theory.

PRACTICAL (M.A./M.Sc. Previous Examination) :—

Introduction :—The anatomy of the human brain (Elementary treatment only).

- A. Experiments :—
 - i. Learning—verbal & motor.
 - ii. Attention—span of apprehension.
 - iii. Effect of Set on perception.
 - iv. Reaction time—simple and choice.
 - v. Ergography—Measurement of muscular fatigue.

- B. Psychological testing :—

- i. Mental fatigue—the effect of rest pauses on mental work.
- ii. Interest tests.
- iii. Aptitude tests.
- iv. Adjustment Inventory.
- v. Intelligence tests—Verbal & Non-verbal.
- vi. YAT OR RORSCHACH.

C. Current Affairs :—

A speech for 15 minutes.

Marks for practical at post—graduate level be assigned as follows :—

M.A./M.Sc. Previous

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|---|-----------|
| 1. News paper clippings on current national and international affairs with a summary in own handwriting : | 15 Marks. |
| 2. Experimental Psychology. | 25 Marks. |
| 3. Lecture | 25 Marks. |
| 4. Viva | 20 Marks. |
| 5. Sessional Work | 15 Marks. |

Total — 100 Marks.

Note :—Paper I & II Compulsory. Two papers are to be offered from rest of the papers.

M.A./M.Sc. Final Examination

Paper I

Insurgency And Counter-Insurgency

Revolutionary wars and Guerilla warfare. History of Guerilla warfare; Theory and policy of Guerilla warfare; Their intagibles; Time. Space and will. Characteristics of Guerilla warfare. Unconventional warfare in the Nuclear era : Special criteria governing Guerilla warfare; Environment, Unity of movement, Community support, Security, Division of functions and proximity.

Strategy and Tactics of Guerilla warfare. Thought of Lenin, Mao-Tse Tung and 'Che' Guevara. Modern concept, counter Insurgency :-Basic Principles, Success of counter-Insurgency in the Mountains of Greece and in the Jungles of Malaya; Defeat in the Jungles of Indo-China and Vietnam.

Paper II**National Security (With Special Reference to India)****A. Essentials for National Defence :—**

- i. National problems in general with special reference to India since 1947.
- ii. Principles of sound National Defence. Relations of National Defence to political, geographical and economic structure.
- iii. National utility; good foreign relations : secure frontiers.
- iv. Importance of Indian ocean.

B. Modern Trends :—

Historical back ground. Defence policy and India's frontiers; Armaments and Defence Pacts as affecting India's Defence. War Potential of a nation.

Scientific research; Industrial capacity; manpower. Strategical location of India.

Armaments as deterrents to war; relations with neighbouring countries.

Non-alignment as a defence policy; neutrality of non alignment relations with neighbouring countries; political status and prestige; world opinion and its effect on non alignment. (Propaganda and diplomatic channels) Arms Control and disarmament as it affects a national security; nature of international obligations.

paper III**Disarmament, Arms Control & Peace :**

The theory of disarmament and arms-control, Basic concept of the subject; varying forms of disarmament and arms control historical and political, criteria for the appraisal of arms-control. Disarmament and arms-control to internal security.

Negotiation of disarmament; History of disarmament conferences, especially since 1945; the disarmament policies of the major powers and the factors affecting them, Technical and procedural problems of negotiations. The relationship of disarmament and arms control policies to national strategic Interests. The political and diplomatic side of disarmament negotiations.

Peace and its maintenance : Historical effects for preserving of peace thorough empire building. Power balance and voluntary unions. Strategy of peace; principles of Panchsheel and non violence.

Paper IV

Military Geography and World Problems :

1. Pattern of world resources.
2. Geonomic problems; The world problems of conservation. Petroleum in war and peace. The world industrial Districts. Changes in Transport and Communication technology and Geographical changes.
3. Geo-political problems : The Geographical factor in diplomacy, geography and war strategy, geographic terrain and war tactics.–Logistics Geography and war supplies, Geography & National making. International boundaries and causes of conflict among nations. Resources & World Peace. Theory of World Power and Control.
4. Geo-cultural problems; The distribution of population. The city in war and peace, current events and contemporary geography.

paper V :

Geostrategy and Geopolitics :

1. The political pattern of the world youth, Adolosecence. Maturity, Old Age inference.
2. The changing world : Territorial changes since 1900 with special reference to North America, Latin America, Europe, Africa, Asia, Near East, Far East.
3. Study of colonialism and colonization with special reference to Britain, France, Germany and Japan.
4. Geostrategy of South West Asia, India & Pakistan, S. E. Asia, the far East, The South Asia, The High Asia.

Paper-VI**Technology of Nuclear & Ballistic Missiles:-**

Fission and fusion weapons; Uranium and Plutonium Production. Weapon design, construction, and testing, weapon effects. Aircrafts and Missiles-types and capabilities; guidance and propulsion. Force levels and deployment. Spread of Nuclear weapons, Defence against Nuclear weapons, India's Nuclear potential, India and the Bomb, Concept of space and its military political aspects.

paper VII :-**Essay or Dissertation :-**

Note :- i. In M.A./M. Sc. Final in Military Studies in lieu of one of the optional papers a student may, if permitted by the Head of the Deptt. undertake writing of dissertation under the supervision of a member of the department, provided he has secured a minimum of 55% marks in the previous examination. Two copies of the dissertation typed according to the required-specifications shall be submitted by the student at least a week before the commencement of the Final Examination.

ii. The evaluation of the dissertation shall be done independently by the external and internal examiners. The average of marks awarded by both the examiners shall be the actual marks of the paper awarded to the students.

PRACTICAL**M. A. / M. Sc. Final Examination in Military Studies :-**

- A. i. Classification of Maps and History of Maps in general.
- ii. Cartography.
- iii. Scales-Simple & Comparative.
- iv. Enlargement and reduction of maps.

- v. System of Map reference-indexing of topographical sheets. British modified system, Grid System.
 - vi. Study and interpretation of topographical sheet with special reference to India.
 - vii. Relief and representation with section drawing with a view to find out intervisibility between two points.
 - viii. Intervisibility on map and ground.
 - B. Map projection with special emphasis on the following principles:-
 - i. Conical with one and two parallels.
 - ii. Bonne's
 - iii. Polysonic
 - iv. International
 - v. Mercator
 - vi. Zenithal Equidistant
 - vii. Zenithal equal area.
 - C. i Elementary tactics upto infantry company level on major operations of war
ii Military appreciation of the situation upto Coy. level.
 - D. i. Photo reading and company sketching.
ii. Surveying by Chains, Comprehensive exercises on plane table, Clinometer, Prismatic Compass, Telescopic Alidade.
- Marks for practical at P. G. level be assigned as follows :—

M. A./M. Sc. Final

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|--|-----------|
| 1. Newspaper clipping on current National & International affairs with a summary in own handwriting. | 15 Marks. |
| 2. Cartography. | 25 Marks. |
| 3. Appreciation. | 25 Marks. |
| 4. Viva. | 20 Marks. |
| 5. Sessional Work. | 15 Marks. |
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Total :- 100 Marks.

Note :—Paper I & II are compulsory. Two papers are to be offered From rest of the papers.