

B.A./B.Sc I

Ist PAPER

THE ART OF WAR IN INDIA (UPTO 1947)

UNIT I

1. Military System in Vedic & Epic period.
2. Indo-Greek art of war with special reference to the Battle of Hydaspes, 326 B.C.
3. Kautilya's philosophy of war : Military organisation, art of war and inter-state relations.
4. Maurya Military System as described by Greek historians.

UNIT 2

5. Hindu Military System during the age of Guptas and Harsh with reference to the decline of chariots and the rise of cavalry upto 7th century AD.
6. Rajput Military System and Turk pattern of warfare with special reference to the battle of Somnath & Terrain upto 12th Century AD.

UNIT 3

7. Army organisation during Sultanate period. Military & Economic reforms of Allauddin Khilji.
8. Invasion of Babur with reference to battle of Panipat & Khanwa. A Mughal Military System under Akbar.

9. Maratha Military System under Shivaji and weaknesses of Maratha Military System after Shivaji with reference to the third battle of Panipat, 1761 AD.

UNIT 4

10. Development of Presidency Army under East India Company, Anglo-Maratha War with reference to Battle of Assaye, 1803 AD.
11. Sikh Military System under Dal Khalsa & Ranjit Singh, Battle of Sobraon 1846 AD.
12. Indian War of Independence 1857.

UNIT 5

13. Amalgamation of Presidency Armies and Kitchner Reforms.
14. Reorganisation of Indian Army under the Crown.
15. Indianisation and Partition of Armed Forces.

BOOKS RECOMMENDED

- | | |
|-------------------|---|
| 1. Singh, S.D. | Ancient India Warfare with special reference to the Vedic Period. |
| 2. Majumdar, B.K. | Military system in Ancient India. |
| 3. Majumdar, B.K. | Bhartiya Sena Ka Itihas. |
| 4. Fuller, J.F.C. | Generalship of Alexander the Great. |
| 5. Kangle, R.P. | Kautilya Arthashastra. |
| 6. Sarkar, J.N. | Military History of India. |
| 7. King Lucas | Memoirs of India. |
| 8. Irvin, I. | Bhartiya Mughalon Ki Sainya Vyavashtha, translated by R. Tiwari. |
| 9. Sen, S.N. | Military System of Marathas. |
| 10. Duff, Grant | Marathon Ka Itihas. |
| 11. Bajwa, F.S. | Military System of Sikhs. |

B.A./B.Sc I
IIInd PAPER
STUDY OF WAR AND PEACE
(since 1945)

UNIT 1

1. ✓ Concept and definitions of War.
2. ✓ Causes of War : Political, Economic, Social, Psychological, Military and Allied aspects.
3. ✓ Types of War : Total, Limited, Revolutionary, Unconventional, Specialised Wars (Mountain, Desert and Jungle).
4. ✓ War as an instrument of National Policy.
5. ✓ Nuclear War : Development and Strategy.
6. ✓ Chemical and Biological War.

UNIT 2

7. ✓ Emergence of World order after Second World War.
8. ✓ Cold War : (Brief study) Causes and Characteristics of First & Second Cold Wars, Post cold war developments.
9. ✓ War and Economy : Problems of resource constraints, Defence Budgeting with special reference to India, Arms aid and trade.
10. ✓ War and Psychology : Role and importance of Psychology in the armed forces ; Psychological Warfare—Propaganda, Rumour and Brain Washing.

UNIT 3

- ✓ 11. World Government, Liddel Hart's Eight Pillars of Peace.
- ✓ 12. Settlement of Disputes : Pacific and coercive methods.
- ✓ 13. Legal control of arms conflict.
- ✓ 14. Arms control and disarmament : concept and ways of disarmament, Non Proliferation Treaty (NPT), Comprehensive Test Ban Treaty (CTBT).

UNIT 4

UNO

- ✓ 15. United Nations Organisation : Structure, Role of security council, achievements and maintenance of International peace and security.
16. Balance of Power, Collective Security, Collective defence.
- ✓ 17. Non aligned Movement : aim, approaches for peace, principles, conferences, validity in modern times.

UNIT 5

18. Diplomacy and confidence building measures as an instrument of peace.
- ✓ 19. Impact of Globalisation of economy on peace and security.
- ✓ 20. Revolution in Information Technology as an instrument of peace and security.

BOOKS RECOMMENDED

1. Quincy Wright Study of War.
2. David . Zieglar War, Peace and International Politics.
3. L.L. Bernard War and Its causes.
4. G. Blainey Causes of War.

B.A./BSc. First Year

PRACTICAL

Map Reading

- (a) MAP—Definition. Types and Scope. ✓
- (b) Marginal Informations of Topographical Map. ✓
- (c) Conventional Signs. ✓
- (d) Grid System ✓
- (e) Map Reference—Four, Six and Eight Figure Reference. ✗
- (f) Scale—Definition and Representation (By Statement, Representative Fraction and Scale Line) ✓
- (g) Types of Scales—Distance and Time ✓
- (h) Bearing—Definition and Types, Measurement on Topographical Sheet.
- (i) Inter-conversion of Bearings. ✓
- (j) Resection and Intersection. ✗
- (k) Ground Features—Contours and Slopes. ✗
- (l) Gradient—Definition and its use.
- (m) Intervisibility. ✗
- (n) Prismatic Compass.

Note : The students would be required to attempt the exercise on Topographical Sheets of Survey of India.

B.A./B.Sc II

Ist PAPER

ART OF WAR IN INDIA
(1947 UPTO DATE)

UNIT-1

- (1) Partition of India and the armed forces ; Background
- (2) Military operations in Kashmir (1948)
- a. Kashmir dispute : Genesis and progression
 - b. Military Operations with special reference with the battle of Zojila (1948)
 - c. Role of Air Force

सामान्य
UNIT-2

- (3) Sino-Indian Conflict (1962)
- a. Background of the Sino-India Border Dispute
 - b. Military operations with Special Reference to the battle at Nanka Chu River of Thagla Ridge (1962)
 - c. Politico-Military Lessons

UNIT-3

- (4) Indo-Pakistan Conflict (1965)
- a. Background and causes with reference to Kutch operations (1965)
 - b. Military operations with special reference to the battle of Khem Karan
 - c. Role of Navy and Air Force
 - d. Politico-Military lessons

UNIT-4

(5) Indo-Pakistan Conflict (1971)

- a. Genesis and Causes
- b. Military operations on the Western Front with special reference to the battle of Shakargarh
- c. Military operations on the Eastern Front
- d. Role of Air Force and Navy in the Military operations
- e. Emergence of Bangla Desh
- f. Politico-Military lessons

UNIT-5

- (6) Indian Defence : Contemporary scenarios with special reference to LIC and Terrorism, Problems of internal security — In J & K, North East and Kargil Conflict, 1999
- (7) Defence research and development (R. & D.) in Indian context

BOOKS RECOMMENDED

1. Singh, Nagendra The theory of force and organisation of Defence in Indian Constitutional History
2. Longer, V. Red Coat to Olive green
3. Prasad, B. The Indian Armed Forces in World War II
4. Sen, S.N. Eighteen Fifty Seven
5. Chopra, M.K. India-The search for power
6. Gupta, Shishir Kashmir
7. Singh, Bhupinder Indo-Pak Conflict over Kashmir
8. Akbar, M.J. India-The siege within the Indian Army
9. Cohen, S.P. The Pakistan Army
10. Dalvi, J.P. Himalayan Blunder

- | | |
|----------------------|-------------------------------------|
| 11. Kaul, B.M. | <u>The Untold Story</u> |
| 12. Sinha, S. | The Chinese Aggression |
| 13. Maxwell, N. | <u>India and China war of 1962</u> |
| 14. Mankekar, D.R. | <u>Twenty two fateful days</u> |
| 15. Singh, Harbaks | <u>Indo-Pak Conflict 1965</u> |
| 16. Palit, D.K. | <u>The lightening campaign</u> |
| 17. Singh, S. | <u>Liberation of Bangladesh</u> |
| 18. Akhtar, J.D. | The Saga of Bangladesh |
| 19. Thompson, J. | <u>War and Peace</u> |
| 20. Kavic, L.J. | India's Quest for Security |
| 21. Saigal, J.R. | <u>Unfought War of 1962</u> |
| 22. Kaul, T.N. | <u>Diplomacy in Peace and War</u> |
| 23. Subrahmanyam, K. | <u>Indian Security Perspectives</u> |
- Other books as recommended by the teacher.

B.A./B.Sc II
IIInd PAPER

Sing (कवतल)

WORLD ART OF WAR SINCE 1786

UNIT-1

1. Impact of Science and Technology on warfare with special reference to the reforms of Gustavus Adolphus and Frederick the Great.
गुस्तावस
2. Revolution in Tactics with special reference to the French Revolution.
3. Principles and defects of Napoleonic warfare with special reference to battle of Trafalgar (1805) and Waterloo (1815).
नेपोलियोनिक
4. American Civil War (1861-65) and new military trends.

UNIT-2

5. First World War : 1914-1918

(a) Causes - कृत

(b) Strategy, Stalemate, Restoration of mobility with special reference to the battles of Ypres and Somme. I worldwar

(c) Role of air Force and navy.

UNIT-3

6. Second World War : 1939-1945

(a) Causes

(b) Allied and Axis objective and strategy.

(c) Armoured and Mechanised Warfare with special reference to Gazala Line and El-Alamien. अलम - अलम

(d) Role of Air Power with special reference to the battle of Britain. अलम

(e) Role of Navy with special reference to the battle of Leyte Gulf (1944). अलम

7. Advent of Nuclear Weapons and its impact on warfare.

UNIT-4

8. Crisis in Korea - (a) Strategy, Tactics and Weapons system.

(b) Political and military lessons.

9. (c) War in Indo-China with special reference to the battle of Dien Bien Phu. अलम

(d) Causes of the French defeat and political and military lessons.

10. Emergency in Malaya 1948-60.

(a) Causes of communist insurgency.

- (b) Counter insurgency Operations.
- (c) Political and Military lessons.

UNIT-5

11. Middle East Conflict ; स्वेज
- (a) Causes with reference to Suez Crisis and Arab-Israel Conflict (1956).
 - (b) Six Day War (1967).
 - (c) Yom Kippur War (1973). याम, कियुल
 - (d) Current developments.
12. Iran-Iraq Conflict :
- (a) Causes, Strategy and Tactics during the military operations.
 - (b) Political and Military lessons.
13. Gulf Conflict (1991).
14. International Terrorism.

SELECTING READINGS

1. Agwani, M.S. Politics in the Gulf
2. Agwani, M.S. The West Asian Crisis
3. Alexander, F. International Terrorism, National, Regional and Global Perspective
4. Barnaby, C.F. Preventing the Spread of Nuclear Weapons
5. Bealo and Maddox, J. The Spread of Nuclear Weapons
6. Dewan, B.N. War and Peace in West Asia
7. Bellock, H. The French Revolution
8. Belgrami, S.J.R. Arms Race and Disarmament
9. Bryant, A. The Turn of the Tide-1939-43
10. Bryant, A. Triumph in the West-1943-46
11. Butter, J.R.M. History of the World War II

PRACTICAL

B.A./BSc. Second Year

1—Sand Model Exercises

(a) Battle of Panipat, 1526 A.D.

X (b) Battle of Assaye, 1803 A.D.

2—Sketching of the Charts of Indian Battles

X (a) Battle of Zojilla, 1948. J&K

(b) Battle of Thagla Ridge, 1962.

(c) Battle of Khem Karan, 1965.

X (d) Battle of Shakargarh, 1971.

(e) Kargil Conflict, 1999

3—Sketching of Charts of Western Battles

(a) Battle of Trafalgar, 1805.

(b) Battle of Somme, 1919. 916 (03 July 1916 - 18 Nov 1916)

(c) Battle of El-Alamin,, 1942.

(d) Arab-Israel War, 1967.

4.—TEWTs

Tactical Exercise without Troops

(a) Organization of an Infantry Batallion.

(b) Organisation and tactical use of weapons and Equipment upto Platoon level.

(c) Elementary knowledge of modern tactics—Fieldcraft and Patrolling

(d) Appreciation on the Sand Model of Attack and Defence.

B.A./B.Sc. III

Ist PAPER

MODERN STRATEGIC THOUGHT: MACHIAVELLI TO NUCLEAR AGE

UNIT-I

1. Machiavelli The Renaissance of the Art of War.
2. Clausewitz On War
War its relationship with politics Strategy
Tactics.
3. Jomini Concept of Mass Army
Strategy
Tactics & Logistics.

UNIT-2

4. Engles & Marx Military concepts of the Social
Revolutionaries.
- ⑤ Moltke & The Prussian-German School of
Schlieffen Strategic Thought.
- ⑥ Foch Principles of War, The French School
- ⑦ Allied Strategy in W.W.II
8. Ludendorff German Concept of Total War.
9. Lenin Soviet Concept of War.
Trotsky
Stalin
- V.D. Sokolovski The Making of Soviet Strategy.

UNIT-3

10. Liddell Hart The doctrine of limited liability and
Mobile Defence.
11. J.F.C. Fuller Concept of Mobile Warfare, Advent of
Tanks and decline of Trench warfare.
12. A.T. Mahan Theory of Sea Power.

KCMCB

sequence

(I) Peace Keeping (शान्ति बनाये रखना)

(II) Peace Making (शान्ति बनाना)

(III) Peace Building (शान्ति बढाने का प्रयास)

13. Halford Mackinder Continental doctrine of Sea Power.
Naval Strategy.
14. Douhet, Mitchell Heartland Theory
Theories of Air Warfare and Sevversky
15. Hitler The Nazi concept of War.

UNIT-4

16. Mao Tse Tung Chinese Concept of War.
Strategy & Tactics of Guerilla Warfare.
17. Che Guevara & Rejis Debrey Concept of Revolution and principles
of Guerrilla Warfare.
18. Development of the Concept of Urban Guerrilla
Warfare.

UNIT-5

19. Concept of Nuclear Deterrence and Defence with
special reference to Recent Thinking.
20. Conventional warfare in Nuclear Age.
21. Development of Concept of Disarmament & Arms
Control.
22. Peace Making, Peace Building, Peace Keeping theory.

BOOKS RECOMMENDED

1. Adie, W.A.C. Chinese Strategic Thinking under Mao-Tse-Tung.
2. Alperovitz, G. Atomic Diplomacy : Hiroshima and Potsdam.
3. Anand, M.K. Terrorism and Security.
4. Appordorai, A. The Use of force in International Relation.
5. Aspray, R.P. War in the Shadow : The Guerrilla in History.
6. Beaufre, A. An Introduction to Strategy with Particular reference to Problem of Defence, Politics, Economics and diplomacy in Nuclear Age.

**B.A./B.Sc. III
IInd PAPER**

NATIONAL SECURITY

UNIT-I

1. Conceptual framework of National Security in the contemporary strategic thinking.
2. Evaluation of National security thinking and problematics.
3. Theories of National Power:
 - a. Definitive framework of National Power.
 - b. The imprecision of power as a concept.
 - c. Power profile of Nation-states.
 - d. Non-power influence.
4. Elements of National Power

(i) *Tangible Elements* :

Geography, Population, Extent of territory, National Resources, Industrial Capacity, Agricultural Capacity, Financial capability, Scientific and technological capability, Military capability.

(ii) *Intangible Elements* :

Leadership, Bureaucratic Organisational Efficiency, Type of Government, Societal and Ethnic Cohesiveness, National Character and Reputation, National Morale, Foreign Support, and Dependency, Accidents.

UNIT-2

5. Concept and Models of International Security :
 - (i) Balance of Power.
 - (ii) Collective Security.
 - (iii) Collective Defence.
 - (iv) Non-alignment.

Conceptual framework of International Security during the cold war and post cold war periods : viable trends.

6. Concept and theories of conventional and nuclear deterrence.
7. (i) Arms proliferation as a constraint to National, Regional and International Security.
(ii) Prospects for arms control.
8. International Terrorism : Concept and dimensions.
9. Insurgency and counter-insurgency : Concept and dimensions
10. Co-relation between foreign, defence and domestic policies

UNIT-3

11. Historical legacy, Geo-political and Geo-strategical considerations of India's security.
12. National security problematics and India's quest for security :
 - (a) India in the world strategic arena : Contemporary trends.
 - (b) (i) India's quest for security vis-a-vis Pakistan (till date) :
(ii) Pakistan's nuclear and missile programmes and their impact on India's defence, India's options.
 - (c) India-China boundary dispute : Positions and Polemics : Effort for the settlement of the boundary disputes : Framework for co-operative security between India and China.
 - (d) India's mutuality of strategic and other interests with Bangladesh, Nepal, Bhutan, Myanmar, Srilanka, Maldives and Afghanistan.

UNIT-4

13. Science and Technology in India's Security :
 - (a) India's Scientific and Technological base for National Defence.
 - (b) Need for India's Integrated Science Policy.
 - (c) India's Defence Industrialisation and achievements.
 - (d) India's Research and Development (R & D).

14. India's Nuclear Policy and options :
 - (a) India's need for Nuclear power.
 - (b) India's Nuclear Breakthrough world.
 - (c) India's Nuclear options in a nuclearised world.

UNIT-5

15. Indian Ocean and India's security considerations :
 - (a) Strategic milieu in and around Indian Ocean.
 - (b) India's security problems in relation to the Indian Ocean region.
 - (c) India's maritime security and its need for Naval power projections.
16. India's overall security perspectives and defence preparedness.
17. Internal security of India :
 - (a) Harmful internal threats and challenges.
 - (b) Low intensity conflicts (LIC) in India with special reference to J & K
 - (c) Security problems in the north-eastern region of India.
 - (d) Identification of the problems of internal security and the use of military pros and cons.
18. Imperatives of a comprehensive National Security Strategy.

BOOKS RECOMMEND

1. Adi, W.A.C. Oil Politics and Sea, The Indian Ocean Ports.
2. Agrawal, R.K. Defence Production & Development.
3. Anand, V.K. Insurgency & Counter-Insurgency.
4. Bajpai, S.C. Northern frontier of India.
5. Bajpai, U.S. Non-Alignment, Perspective and Prospective.
6. Bandopadhyaya, J. Making of India's Foreign Policy.
7. Brines, R. Indo-Pak Conflict.
8. Chaudhary, J.N. India's Problem of National Security in the 70s.

B.A./B.Sc. III
IIIrd PAPER

Science Technology and National Security

UNIT-1

1. Science and Society
 - (a) Science, Technology and Society in different historical context.
 - (b) Technological breakthrough and Social changes.
2. Technology and Interdependence
 - (a) Structure.
 - (b) Magnitude.
 - (c) Transfer of Technologies.
 - (d) Military-Industrial Complex in developing & developed countries.

UNIT-2

3. Civilian & Military aspects of technology
 - (a) Nuclear technologies.
 - (b) Space.
 - (c) Communication.
 - (d) Marine.
4. Automation of Weapons and its impact on Warfare.

UNIT-3

5. Role of Chemical and Biological technology and its linkage with military uses.
6. New Military Technologies
 - (a) New conventional weapons.
 - (b) Precision Guidance.
 - (c) Surface to Air and Surface to Surface Guided Weapons.
 - (d) Armoured Fighting Vehicles, Logistic Vehicles and Bridging.

UNIT-4

7. Electronic Warfare : Systems and Techniques
 - (a) Command, Control and Communication.
 - (b) Electronic Counter Measures (ECM).
 - (c) Jamming and its Types, modes of Jamming.
 - (d) Electronic Counter-Counter Measures (ECCM).
8. Search for alternative sources of energy.

UNIT-5

9. Population and depletion of resources.
10. Indian Policy and Problems of National Security
 - (a) Resource base.
 - (b) Science and Technology and Industrial Growth.
 - (c) Defence and Development.
 - (d) Defence Research & Development (R & D).
 - (e) Military Industrial Complex.
 - (f) Concept of Integrated Science Policy and its relevance for National Security.

SELECTED READINGS

1. John G. Collier & Geoffery E. Hewitt Introduction to Nuclear Power.
2. Jack Dannis The Nuclear Almanac Confronting the Atom in War and Peace.
3. L.W. Mc Naught Nuclear Weapons & Their Effects.
4. Joseph Rotblat & Steven Eliman Nuclear Strategy & World Security.
5. Robert Jastrow How to make Nuclear Weapons Obsolete.
6. Girish Mishra Economic Effects of Militarism.
7. Jasjit Singh Air Power in Modern Warfare.
8. Rajesh K. Agarwal Defence Production & Development
9. Philip Mullenbach Civilian Nuclear Power

PRACTICALS

B.A./BSc. Third Year

1— Sketching of the Strategic Maps of :

India

- (a) India and her neighbours.
- (b) Indian States and Union Territories with Capitals.
- (c) Strategic Raw Materials.
- (d) Defence Industries and Atomic Reactors.

World

- (a) World Map in 1945.
- (b) Countries of NATO, SEATO and CENTO.
- (c) Countries of Warsaw pact.
- (d) Non-Aligned Countries.
- (e) Developed Nations.
- (f) Countries of South Asia, South East Asia, Far East and West Asia.
- (g) Countries of Asian Continent.
- (h) Nuclear Nations.
- (i) Indian Ocean Littoral States.
- (j) U.N. Organisation.
- (k) World Sea Routes.

2— (a) Higher Defence Organisation of India.

(b) Army, Navy and Air Force Commands and its Area.

3— Spotting of :

Tanks, Bombers, Fighters, Helicopters, Air Craft Carriers and Naval Ships.

4— Press Clippings on allotted current topics with a brief covering note.

5— Educational Tour and its report.