

**University of Pune**  
**Defence and Strategic Studies**  
**Proposed Syllabus for T.Y. B.Sc.**

Sr. No.	Semester III		Semester IV	
	Paper No:	Title of Paper	Paper No:	Title of Paper
	-		-	
For both the semester following five courses will be compulsory. (Core Courses)				
1.	DS – 331	Science Technology and National Security	DS – 341	Management of Military Technology in India
2.	DS – 332	Defence Economics	DS – 342	Economic Aspects of War
3.	DS – 333	Study of Disaster	DS – 343	Disaster Management
4.	DS – 334	Research Methodology	DS – 344	Project Report (Internal Departmental Paper)
5.	DS – 335	Computer Application in Defence Management	DS – 345	Information Technology and National Security
Optional Courses: - Students should Choose anyone paper from each group. (Total Group 4 and Choose anyone from each group )				
6.	DS – 336	A. Indian Military System (I) B. Maratha Military System (I) C. Indian War since Independence (I)	DS – 346	A. Indian Military System (II) B. Maratha Military System (II) C. Indian War since Independence (II)
7.	DS – 337	A. Military Sociology B. Defence Journalism C. Defence Preparedness of India (I)	DS – 347	A. Military Psychology B. Defence Journalism and National Security C. Defence Preparedness of India (II)
8.	DS – 338	A. Armed Conflict and Human Rights B. International Organisation and National Security C. International Law	DS – 348	A. Refugees Studies B. Study of United Nations C. Laws of War and Peace
9.	DS – 339	A. Defence Management in India B. Internal Security of India (I) C. India's Maritime Security (I)	DS – 349	A. Management of Defence Production and Logistics in India  B. Internal Security of India (II) C. India's Maritime Security (II)

**Note: - Students will be opting 5+4 = Total 9 courses per semester of T.Y.B.Sc.**

### **T.Y.B.Sc. Semester – III.**

#### **(Core Paper) DS-331 Science, Technology and National Security.**

**Objective:** - To appraise the student on role and application of Science and Technology in the accomplishment of National Security.

1. Introduction: - Evolution of Science and Technology. (5)
2. Relationship between Science and Society and Industrial Revolution. (5)
3. Development of Scientific and Technological Revolution in Military affairs and present application. (5)
4. Concept of Electronic Warfare and Military applications of Electronic Technology. (5)
5. Concept of Space Warfare and Military applications of Space Borne Assets. (5)
6. Concept of Information Warfare and Military applications & Information Technology. (5)
7. Development Trends in Defence Material. (5)
8. Promising & New Military Technologies. (5)

#### **References:-**

- 1) Surendra Verma “Fast Science Facts” University Press Limited, Hyderabad 1999.
- 2) M.A. Rice & A.J. Sammes “Communications and Introduction System For Battlefield Command & Control” Royal Military College of Science, Brassey’s UK, 1989.
- 3) June Goodfield “An Imagined Word – A Story of Scientific Discovery”, Hutchinson and Company, London, 1981.
- 4) Trevor I Willams “A Short History of 20<sup>th</sup> Century Technology”, Oxford University Press, New York , 1982.
- 5) John D. Berges “A Text for Technology”, Center for Military History, United State Army, Washington D.C. 1986.

**T.Y.B.Sc. Semester – IV.**  
**(Core Paper) DS- 341 Management of Military Technology in India.**

**Objective:** - The tangible variables in any equation of Military Capability are absorption, assimilation and development of Military Technologies. Thus, objective of this paper is to know the management of technological know-how, expertise and proficiency of India in Military Technologies.

1. India: A rising global Power. (5)
2. Science and Technological Education in India. (5)
3. Understanding Military Technologies and Status of related R&D in India. (5)
4. Technology development and acquisition. (5)
5. Transfer of Technology and absorption. (5)
6. Application of first grade technology in the weapon development. (5)
7. Technology forecasting and option of dual use technologies. (5)
8. Strategic Management of Technology and future strategy. (5)

**References: -**

- 1) Virender Kapoor and MI Jaisinghan “Battlefield Information System”, C3-I Regiment of Artillery Association, Nashik Road, 1994.
- 2) N. Vitthal and Dr. S. Mahalingam “Information Technology India’s Tomorrow”, Manas Publication, New Delhi – 2001.
- 3) Air Vice Marshall Samir K. Sen “Military Technology & Defence Industrialisation” Army Publisher, New Delhi, 1999.
- 4) Martin Van Creveld “Technology and War” Brassey’s Royal Military College of Science, United Kingdom, London, 1996.
- 5) Lee P. G. “Introduction to Battlefield Weapon System and Technology” Brassey’s Oxford University Press, UK, 1981.

**T.Y.B.Sc. Semester – III.**  
**(Core Paper) DS- 332 Defence Economics.**

**Objective:-** To provide elementary knowledge pertaining to defence budgeting, planning and programming in India, inter- alia highlighting the trends in defence expenditure.

1. Salient features of Indian Economic System. (5)
2. Determinants of Defence Expenditure. (10)
  - A. Threat Perception and Capabilities.
  - B. Leadership.
  - C. Ideology.
3. Defence Budget. (5)
  - A. Planning and Programming.
  - B. Structure of India's Defence Budget.
  - C. Parliamentary Control over Defence Budgeting.
4. Wartime Economy. (10)
  - A. Sources of finance allocation of national resources.
  - B. Techniques of control and rationing with reference to production, consumption and distribution.
  - C. Importance of price control and rationing.
5. War Finance. (5)
  - A. Meaning and Concept.
  - B. Domestic.
  - C. Foreign.
6. Economic Warfare. (5)
  - A. Meaning and Concept.
  - B. Scope of Economic Warfare.
  - C. Significance in the Present Context.

**References: -**

- 1) Laxmi. Y. "Trends in Defence Expenditure", New Delhi-ADS-1988.
- 2) Ron Mathew."Defence Production in India", New Delhi-ABC-1989.
- 3) Alok Ghosh "Indian Economy: Its Nature & Problem", New Book Hall-Kolkata-1994.
- 4) S.K. Mishra & V.K. Puri "Indian Economy", Himalaya Publishing House – 1998, New Delhi.
- 5) K. Subramanyam. "Perspectives in Defence Planning", Abhinav Publishing Company, New Delhi – 1972.
- 6) Raju G. C. Thomas "The Defence of India- A budgetary perspective of strategy and politics", The Macmillan Company of India, New Delhi.
- 7) A.N. Agrawal. "Economic Mobilisation for National Defence", Asia Publishing House, London 1968.

**T.Y.B.Sc. Semester – IV.**

**(Core Paper) DS- 342 Economic Aspects of War.**

**Objective:** - To provide elementary knowledge pertaining to Economic Aspects of war like Peacetime Economy, Wartime Economy, War Potential and their Impact on War as well as inter- alia highlighting the related economic aspects which affects the war.

1. Peacetime Economy. (5)
  - A. Meaning.
  - B. Merits & Demerits of Peacetime Economy.
2. Wartime Economy. (5)
  - A. Meaning
  - B. Merits & Demerits of Wartime Economy.
3. War Potential. (5)
  - A. Economic Elements of War Potential.
  - B. Contributory Elements.
4. Effects of War on – (5)
  - A. Economic Structure.
  - B. Industry and Society.
5. Cost of War. (5)
  - A. Economic Cost.
  - B. Real Cost.
6. Analysis of India's Defence Spending from 1962 to till date. (10)
  - A. From 1962 – 1971.
  - B. From 1971 – 2009.
7. Defence and Development. (5)
  - A. Contrast.
  - B. Linkages.

**References: -**

- 1) V. N. Shrinivas. "Budgeting for Indian Defence", KW Publishers, New Delhi – 2008.
- 2) Amiya Kumar Ghosh. "Defence Budgeting & Planning in India: The Way Forward", New Delhi – USI – 2006.
- 3) Alain C. Enthoven & K. Wayne Smith, "How much is Enough?", Shaping the Defence Budget 1961-1969s, RAND Corporation.
- 4) H. C. Bhatia. "Public Finance (Ed)", Vikas Publishing House, New Delhi – 2006.
- 5) S. P. Gangoly. "Fundamentals of Government Budgeting in India", 3<sup>rd</sup> Ed, New Delhi, Concept Publishing Co. – 2007.
- 6) Raju G. C. Thomas "The Defence of India- A budgetary perspective of strategy and politics", The Macmillan Company of India, 1978, New Delhi.
- 7) K. Subramanyam. "Perspectives in Defence Planning", Abhinav Publishing Company, New Delhi – 1972.

**T.Y.B.Sc. Semester – III.**

**(Core Paper) DS- 333 Study of Disaster.**

**Objective:** - To have a proper understanding about disaster along with its nature, types and different warfare.

1. Disaster. (5)
  - A. Meaning & Definition.
  - B. Types of Disaster.
  - C. Aim & Objectives of Study of Disaster.
  - D. Need of Study of Disaster.
2. Natural Disaster. (10)
  - A. Meaning.
  - B. Characteristics.
  - C. Nature and Types [Earthquake, Storm, Cyclone, Tsunami; etc.].
  - D. Effects.
3. Manmade Disaster. (10)
  - A. Meaning.
  - B. Characteristics.
  - C. Nature and Types [Terrorism, Medical Alteration, Street Accidents; etc.]
  - D. Effects.
4. Environmental Disaster. (10)
  - A. Meaning.
  - B. Types [Pollution, Marine & Coastal area, Radioactive, Thermal]
  - C. Global Warming.
  - D. Population Burden.
  - E. Effects of Environmental Disaster.
5. War and Disaster. (5)
  - A. Traditional War & Disaster.

- B. Chemical War & Disaster.
- C. Biological War & Disaster.
- D. Nuclear War & Disaster.

**References: -**

(Note: - References for DS – 333 & 343 are similar.)

- 1) Ram Murthy. “Disaster Management” Dominant Publication & Distributer, New Delhi.
- 2) Brig. (Dr.) H. R. Kar. “Silent Warfare – Managing Nuclear, Chemical, Biological, (WMD) Disaster”, Manas Publication, New Delhi.
- 3) Trivedi P. R. & Gurudeep Raj. “Encyclopedia of Environmental Science.”
- 4) Dr. M. L. Sali. “Military Geography”, Manas Publication, New Delhi – 2009.
- 5) Narendra Pradhan “Disaster Management”, Surendra Publication 4561/16 /Ansari Road, New Delhi – 110662. Call – 65159385, Mob: -9811068537 (09).
- 6) Dr. S. R. Singh “Disaster Management”, APH Publishing Corporation 4435/7, Ansari Road, New Delhi – 116602, 2009.
- 7) S. Prasad. “Natural Disaster Management”, Manglam Publication & Distributor, New Delhi 53, Call – 22945678, Mobile: - 9868572512, (2008).
- 8) Braj Kishor Prasad Singh “Industrial Disaster Management”, Navayug Publication & Distributor, New Delhi – 53, Mobile: - 9868480308, 9311640178, (2008).
- 9) B. Narayan. “Disaster Management”, A.P.H. New Delhi, 2009. Phone – 23274080.
- 10) Rajesh Anand, N. C. Jana, Sudhir Singh. “Disaster Management & Sustainable Development”, Pantagon Press, New Delhi: - 110649, Phone – 011-64706243, 26491568, (2009).

**T.Y.B.Sc. Semester – IV.**

**(Core Paper) DS- 343 Disaster Management.**

**Objective:** - To provide elementary knowledge about the importance of disaster management and its spectrum. Also, to make aware about the different role of the people in the of disaster management.

1. Disaster Management. (5)

A. Meaning & Concept.

B. Elements.

C. Organisational Set – Up

D. Administration, R & D Contribution, NGO, Local – Self Government action.

E. Information & Awareness.

2. Role of the Local Bodies. (10)

A. Seeking Solutions.

B. Role of Volunteers.

C. Cooperation by Local Bodies.

D. Professional Training, and Identified Disasters.

3. Possible Solutions. (10)

A. Need for Technical Assistance.

B. Planning and Enforcement.

C. Boosting up The Morale of Community.

D. Pre disaster Plan.

E. Post disaster Emergency Phase.

F. Rehabilitation & Reconstruction – Relief Work.

4. Remedial Measures. (10)

A. Managing Disaster.

B. Status of Development.

C. Process of Settlement.

- D. Assistance Package.
  - E. Collective Impact.
  - F. Required National Policy.
  - G. Psychological & Sociological Consequences.
5. Planning for Future. (5)
- A. Yokohama Message & Strategy.
  - B. Important Principles.
  - C. Plan for Actions.
  - D. Follow up Actions.

**References: -**

**(Note: -** References for DS – 333 & 343 are similar.)

- 1) Ram Murthy. “Disaster Management” Dominant Publication & Distributer, New Delhi.
- 2) Brig. (Dr.) H. R. Kar. “Silent Warfare – Managing Nuclear, Chemical, Biological, (WMD) Disaster”, Manas Publication, New Delhi.
- 3) Trivedi P. R. & Gurudeep Raj. “Encyclopedia of Environmental Science.”
- 4) Dr. M. L. Sali. “Military Geography”, Manas Publication, New Delhi – 2009.
- 5) Narendra Pradhan “Disaster Management”, Surendra Publication 4561/16 /Ansari Road, New Delhi – 110662. Call – 65159385, Mob: -9811068537 (09).
- 6) Dr. S. R. Singh “Disaster Management”, APH Publishing Corporation 4435/7, Ansari Road, New Delhi – 116602, 2009.
- 7) S. Prasad. “Natural Disaster Management”, Manglam Publication & Distributor, New Delhi 53, Call – 22945678, Mobile: - 9868572512, (2008).
- 8) Braj Kishor Prasad Singh “Industrial Disaster Management”, Navayug Publication & Distributor, New Delhi – 53, Mobile: - 9868480308, 9311640178, (2008).
- 9) B. Narayan. “Disaster Management”, A.P.H. New Delhi, 2009. Phone – 23274080.
- 10) Rajesh Anand, N. C. Jana, Sudhir Singh. “Disaster Management & Sustainable Development”, Pantagon Press, New Delhi: - 110649, Phone – 011-64706243, 26491568, (2009).

## **T.Y.B.Sc. Semester – III.**

### **(Core Paper) DS- 334 Research Methodology.**

**Objective:** - This paper will help the student to understand the significance of research, its methods, and process of research for new knowledge.

1. Introduction (15).
  - A. Aim & Objectives of Research.
  - B. Advantages of Research.
  - C. Role of Research in important areas.
  - D. Characteristics of Research.
  - E. Significance of Research.
  - F. Steps of Research.
2. Selection of Problem (5).
3. Hypothesis and Research Design (5).
4. Data Collection and Analysis (5).
5. Report Writing (10).
  - A. Rationale of Research Report.
  - B. Structure of Research Report.
  - C. Important Precautions.

#### **References: -**

- 1) Khan J. A. “Research Methodology”, APH Publications, New Delhi 2006.
- 2) Ram Ahuja. “Research Methods”, Rawat Publications, Jaipur, 2001.
- 3) Kothari C. R. “Research Methodology Methods and Techniques”, Vishwa Publications, New Delhi, 1996.
- 4) Sharma K. R. “Research Methodology”, National Publishing House, New Delhi – 2002.
- 5) Ackoff R. L. “Design of Social Research”, University of Chicago, 1973.

**T.Y.B.Sc. Semester – IV.**

**(Core Paper) DS- 344 Project Report (Internal Paper).**

**Objective:** - Objective of Project Report is to encourage the students towards research and this will be the first step and orientation before going for further research in M.Phil. / Ph. D.

**Instructions and Guidelines: - (40 Periods will be adjusted accordingly)**

1. Students will be made aware on any one topic related to the subject.
2. Students will be guided on related hypothesis, research design and data collection and analysis.
3. Students will be guided to write the project report. They will be guided on drafting skill, footnotes and bibliography.
4. Two Copies of the project report should be submitted by the students (with typing and binding).
5. Evaluation of the project report will be done by the Internal Examiner, i.e. Guide for the students.
6. Marks will be given for project out of 40, and a viva voce will be conducted on the project theme and marks will be given out of 10.
7. After viva, one copy of project will be given back to the students and one copy will be retained by the department.

### **T.Y.B.Sc. Semester – III.**

#### **(Core Paper) DS- 335 Computer Application in Defence Management.**

**Objective:** - To Provide Theoretical Knowledge about the role of computer in the management of National Security.

1. Introduction. (2)
2. Historical Evolution. (2)
3. Generations. (2)
4. Types. (2)
5. Classifications. (2)
6. Data Representations and Analysis. (5)
7. Applications in Defence Management. (10)
  - A. C 4
  - B. CAD
  - C. CAM
  - D. Operational Research
  - E. Scientific Approach to :- (10)
    - I. Pay Roll System.
    - II. Medical Aspects.
    - III. Development of Machine.
    - IV. Weather Forecasting.
    - V. Simulations and War Gaming.
8. Future Applications of Computer in Defence Management. (5)

#### **References: -**

- 1) James Schutlz. “Computer Offer Low Cost Readiness”.
- 2) C. R. Chakroborty. “Computer Oriented Activities – DRDO Prospection Plan”.
- 3) “Use of Computer in Defence Management” Ministry of Broadcasting Publication.

- 4) Van Ness Robert. "Principles of Data Processing".
- 5) Journal: - "Defence Science Journal".

**T.Y.B.Sc. Semester – IV.**

**(Core Paper) DS- 345 Information Technology and National Security.**

**Objective:** - To Provide Theoretical Knowledge about the role of computer and Information Technology, in the management of National Security.

1. Information Technology and its importance on National Security. (5)
2. Application of IT in Weapon System. (15)
  - A. Night Vision.
  - B. Surveillance.
  - C. Decision Making.
  - D. R & D Simulator.
3. Information Technology and its role in National Development and Security. (10)
4. Missile Defence System and Information Technology. (10)

**References: -**

- 1) V. Kappor & Jai Ningham "Battlefield Information System", Ref of Arty. Association Nashik.
- 2) M.A. Rice. & A. J, Sanmer. "Communication and Information System for Battlefield Command & Control". Vol. 5, U.K. Brassey's 1989.
- 3) Roger Walker. "Understanding and Target Acquisition System", Brassey's Defence Publishers, U.K. 1983.
- 4) Roger Fowler. "Surveillance and Target Acquisition System", Brassey's Defence Publishers, U.K. 1983.
- 5) Willcox Slade Ramsdale. "Command, Control and Communication", Brassey's Defence Publishers, U.K. 1983.
- 6) Schulz James. "Computerized Battle Management System", Defence Electronics – May 1985.
- 7) R. K.Baga. "Computer and Raksha Anu Prayog", Ministry of Defence – 1991.

**T.Y. B.Sc. Semester – III.**

**DS 336 (A) Indian Military System. (I) (Optional)**

**Objective:-** Aim is to literate the students about the Indian Art of Warfare and Strategic Thoughts.

1. Military History. (8)

- A. Meaning.
- B. Sources of Indian Military History.
- C. Necessity of Its Study.

2. Indian Military System. (7)

- A. Vedic.
- B. Ramayana and Mahabharata Period.

3. Battle of Jhelum. (5)

- A. Background.
- B. Battle and Its Analysis.
- C. Significance of Battle.

4. Kautilya as Military Thinker. (10)

- A. His views on Defence & Security Affairs of the State.
- B. Significance and Relevance of his Thoughts to the present context.

5. Rajput Military System. (10)

- A. Rise of Rajput Power.
- B. Art of Warfare.
- C. Battle of Tarrain.
- D. Merits and Demerits of Rajputs.

**References: -**

- 1) V.B. Kangle. "Kautilya's Arthashastra", Bombay University, Mumbai – 1972.
- 2) J.N. Sarkar. "Military History of India", Orient Longman, New Delhi – 1973.
- 3) S. N. Sen. "The Military System of Maratha", Bagchi Com. New Delhi – 1977.

- 4) Brig. K. G. Pitre. "War History of The Maratha", Pune University, Pune – 1988.
- 5) Pitre K. G. "*Hindustancha Sankshipta Itihas*", Navachaitanya Prakashan, Mumbai – 1992.
- 6) Effenberger David "A Dictionary of Battles", New Delhi -1966.
- 7) Sir. J. Sarkar. "Some Aspects of Military Thinking and Practice in Medieval India", Calcutta – 1969.
- 8) Dr. Vipin Bihari Sindh. "*Madhyayugin Bharat Ka Itihas*", Manas Publication, New Delhi – 110002.
- 9) Dr. Vipin Bihari Sindh. "*Prachin Bharat Ka Itihas*", Manas Publication, New Delhi – 110002.
- 10) Dr. Dinanath Varma. "*Mughalkalin Bharat*", Manas Publication, New Delhi – 110002.

**T.Y. B.Sc. Semester – IV.**

**DS 346 (A) Indian Military System. (II) (Optional)**

**Objective:** - Evaluate the changes in terms of military system, organisation and art of warfare in military system of India.

1. Military System of Sultan. (10)
  - A. Art of Warfare.
  - B. Military Reforms by Allahuiddin Khilji and Ghiasuddin Balban.
  - C. Causes of Downfall.
2. First Battle of Panipat. (5)
  - A. Background.
  - B. Battle & Its Analysis.
  - C. Significance in Indian Military History.
3. Third Battle of Panipat. (10)
  - A. Background.
  - B. Battle and Its Analysis.
  - C. Significance in Indian Military History.
4. Mughal Military System. (10)
  - A. Organisation.
  - B. Weapon System.
  - C. Art of Warfare.
  - D. Battle of Haldighat.
  - E. Causes of Decline of Mughals.
5. Indian Southern Empires. (5)
  - A. Cholas.
  - B. Vijayanagar.

**References: -**

- 1) V.B. Kangle. "Kautilya's Arthashastra", Bombay University, Mumbai – 1972.
- 2) J.N. Sarkar. "Military History of India", Orient Longman, New Delhi – 1973.

- 3) S. N. Sen. "The Military System of Maratha", Bagchi Com. New Delhi – 1977.
- 4) Brig. K. G. Pitre. "War History of The Maratha", Pune University, Pune – 1988.
- 5) Pitre K. G. "*Hindustancha Sankshipta Itihas*", Navachaitanya Prakashan, Mumbai – 1992.
- 6) Effenberger David "A Dictionary of Battles", New Delhi -1966.
- 7) Sir. J. Sarkar. "Some Aspects of Military Thinking and Practice in Medieval India", Calcutta – 1969.
- 8) Dr. Vipin Bihari Sindh. "*Madhyayugin Bharat Ka Itihas*", Manas Publication, New Delhi – 110002.
- 9) Dr. Vipin Bihari Sindh. "*Prachin Bharat Ka Ithihas*", Manas Publication, New Delhi – 110002.
- 10) Dr. Dinanath Varma. "*Mughalkalin Bharat*", Manas Publication, New Delhi – 110002.

**T.Y. B.Sc. Semester – III.**

**DS 336 (B) Maratha Military System. (I) (Optional)**

**Objective:** - The aim of this paper is to analyse the role of Shivaji in relation to development of the Maratha Military System.

1. Maharashtra Region. (10)
  - A. Geographical, Socio- religious & economic condition of Maharashtra before Shivaji.
2. Rise of Maratha Power. (5)
  - A. Birth of Shivaji.
  - B. Childhood of Shivaji & beginning of his Military Career.
3. Shivaji's conflict with Adilshahi. (5)
  - A. Jawali Incident and gains of Shivaji form Jawali.
  - B. Battle of Pratapgad and its Analysis.
4. Shivaji's conflict with Mughals. (10)
  - A. Raid on Shahiste Khan.
  - B. Campaign of Mirza Raje JaiSingh.
  - C. Treaty of Purandar and its Significance.
5. Shivaji's Karnataka Campaign. (5)
  - A. Aim & Objectives.
  - B. Cause of the Campaign.
  - C. Gain of Shivaji form Karnataka Campaign.
6. Military System of Shivaji. (5)
  - A. Organisation & Discipline.
  - B. Forts.
  - C. Art of Warfare.

**References: -**

- 1) J. N. Sarkar. "Shivaji and His Times", Orient Longman, New Delhi, 1960.
- 2) A. R. Kulkarni. "The Marathas", Books & Books, New Delhi, 1996.

- 3) K. G. Pitre. "War History of The Marathas", Pune University, Pune, 1988.
- 4) B. K. Apte. "History of Maratha Navy", State Board of Literature and Center, 1973.
- 5) Gurucharan Singh Sandhu, "A Military History of Medieval India", Delhi 2003.
- 6) G. J. Brynat "Assymetric Warfare: The British Experience in 18<sup>th</sup> Century India", Journal of the Military History.
- 7) Pradeep Barma. "Military Developments in India 1750-1880", Journal of Military History. Vol. 58, 1994.
- 8) "Maratha History: - Question- Answer", Published by Surjeet Book Depot, New Delhi , 1988.

**T.Y. B.Sc. Semester – IV.**

**DS 346 (B) Maratha Military System. (II) (Optional)**

**Objective:** - Aim of this paper is to highlight on how the changes were occurred in Maratha Military System after Shivaji.

1. Assessment of Shivaji. (5)
  - A. Shivaji as a Military Leader.
  - B. Shivaji as a Master of Guerilla Tactics.
2. Evaluation of Sambhaji. (5)
  - A. Sambhaji as a Military Leader.
  - B. Achievements of Sambhaji.
3. Maratha after Sambhaji. (5)
  - A. Rajaram & Tarabai, and Struggle with Mughals.
  - B. Role of Santaji and Dhanaji.
4. Military System during Peshwa period. (10)
  - A. First Bajirao Peshwa as a Military Genral / Leader.
  - B. Battle of Bhopal & III<sup>rd</sup> Battle of Panipat.
  - C. Maratha Navy under Kanhoji Angre.
5. Maratha- Anglo Conflict. (10)
  - A. First, Second and Third Anglo – Maratha War.
  - B. Nature and Its Causes.
  - C. Impact on Contemporary Maharashtra.
6. Causes of Downfall of Maratha. (5)

**References: -**

- 1) J. N. Sarkar. “Shivaji and His Times”, Orient Longman, New Delhi, 1960.
- 2) A. R. Kulkarni. “The Marathas”, Books & Books, New Delhi, 1996.
- 3) K. G. Pitre. “War History of The Marathas”, Pune University, Pune, 1988.
- 4) B. K. Apte. “History of Maratha Navy”, State Board of Literature and Center, 1973.

- 5) Gurucharan Singh Sandhu, "A Military History of Medieval India", Delhi 2003.
- 6) G. J. Brynat "Assymetric Warfare: The British Experience in 18<sup>th</sup> Century India", Journal of the Military History.
- 7) Pradeep Barma. "Military Developments in India 1750-1880", Journal of Military History. Vol. 58, 1994.
- 8) "Maratha History: - Question- Answer", Published by Surjeet Book Depot, New Delhi , 1988.

**T.Y. B.Sc. Semester – III.**

**DS 336 (C) Indian Wars Since Independence. (I) (Optional)**

**Objective:** - To make aware the students about the Indo – Pak and India – China war along with essential details.

1. Indo – Pak War of 1947 – 48. (13)
  - A. Background & Causes.
  - B. Actual War & Affected Sectors.
  - C. Ceasefire and Political Negotiations.
  - D. Treaty/Agreement – Nature & its Significance.
  - E. Impact – Domestic, Regional & Global.
2. India – China War of 1962. (12)
  - A. Background and Causes.
  - B. Actual War and Affected Areas/ Sectors.
  - C. Political Negotiations and Ceasefire.
  - D. Treaty & Agreements – Nature & its Significance.
  - E. Impact – Domestic, Regional & Global.
3. Indo – Pak War of 1965. (15)
  - A. Background and Causes.
  - B. Actual War and Affected Areas/ Sectors.
  - C. Political Negotiations and Ceasefire.
  - D. Treaty & Agreements – Nature & its Significance.
  - E. Impact – Domestic, Regional & Global.

**References: -**

**Note:** - References for DS – 336 (C) and DS – 346 (C) are similar.

- 1) “Pakistan Occupied Kashmir – The Untold Story” By Virendra Gupta & Alok Bangai, Manas Publication, New Delhi.
- 2) “Prepare or Perish”, Gen. Krishna Rao, Lancer Publishers, New Delhi, 1991.
- 3) “India China Border Dispute”, Dr. M. L. Sali, A.P.H., New Delhi, 1998.

- 4) Dodwell H.H. "The Cambridge History of India" Chand & Company, New Delhi, 1970.
- 5) "Kashmir & Indo – Pak Relations" By Manas Publications, New Delhi.
- 6) "India- Pakistan War of 1965" By Jagan Mohan & Samir Chopra, Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 7) Dalvi J. P. (Brig. Retd.) "Himalyan Blunder" Hind Pocket Books, New Delhi.
- 8) "Kargil Knot – Unholy Pakistani Quest", By M.S. Jaswal, Manas Publication, New Delhi.
- 9) "Kargil 1999", By Jagjit Singh., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 10) "Kargil War: Past, Present and Future", Col. B. Sarkar., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 11) "Future of India", Bimala Jalan., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 12) "Air Power and Challenges to IAF", Dr. J.A. Khan., A.P.H. New Delhi, 2009.
- 13) Hussain S.S. & Tariq M. "History of PAF", PAF Press, Masroor , Karachi, 1981.
- 14) Kapila Viney. Air Vice Marshal, "IAF: A Balance Strategic & Tactical Application", Ocean Books Pvt. Ltd., New Delhi, 2002.

## **T.Y. B.Sc. Semester – IV.**

### **DS 346 (C) Indian Wars Since Independence. (II) (Optional)**

**Objective:** - To literate the students about the role of the Indian Armed Forces for National as well as Regional Peace and Security.

1. Indo – Pak War of 1971. (13)
  - A. Background and Causes.
  - B. Actual War and Affected Areas/ Sectors.
  - C. Political Negotiations and Ceasefire.
  - D. Treaty & Agreements – Nature & its Significance.
  - E. Impact – Domestic, Regional & Global.
2. Kargil Episode of 1999. (12)
  - A. Background and Causes.
  - B. Actual War and Affected Areas/ Sectors.
  - C. Political Negotiations and Ceasefire.
  - D. Treaty & Agreements – Nature & its Significance.
  - E. Impact – Domestic, Regional & Global.
3. Important Military Operations other than Wars. (15)
  - A. Maldives & Sri Lanka
    - I. Aim & Objectives.
    - II. Causes of India's Action.
    - III. Implications.

#### **References: -**

**Note:** - References for DS – 336 (C) and DS – 346 (C) are similar.

- 1) “Pakistan Occupied Kashmir – The Untold Story” By Virendra Gupta & Alok Bangai, Manas Publication, New Delhi.
- 2) “Prepare or Perish”, Gen. Krishna Rao, Lancer Publishers, New Delhi, 1991.
- 3) “India China Border Dispute”, Dr. M. L. Sali, A.P.H., New Delhi, 1998.

- 4) Dodwell H.H. "The Cambridge History of India" Chand & Company, New Delhi, 1970.
- 5) "Kashmir & Indo – Pak Relations" By Manas Publications, New Delhi.
- 6) "India- Pakistan War of 1965" By Jagan Mohan & Samir Chopra, Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 7) Dalvi J. P. (Brig. Retd.) "Himalyan Blunder" Hind Pocket Books, New Delhi.
- 8) "Kargil Knot – Unholy Pakistani Quest", By M.S. Jaswal, Manas Publication, New Delhi.
- 9) "Kargil 1999", By Jagjit Singh., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 10) "Kargil War: Past, Present and Future", Col. B. Sarkar., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 11) "Future of India", Bimala Jalan., Y. S. Books International F – 31, Bali Nagar, New Delhi – 15.
- 12) "Air Power and Challenges to IAF", Dr. J.A. Khan., A.P.H. New Delhi, 2009.
- 13) Hussain S.S. & Tariq M. "History of PAF", PAF Press, Masroor , Karachi, 1981.
- 14) Kapila Viney. Air Vice Marshal, "IAF: A Balance Strategic & Tactical Application", Ocean Books Pvt. Ltd., New Delhi, 2002.

**T.Y. B.Sc. Semester – III.**

**DS 337 (A) Military Sociology. (Optional)**

**Objective:** To study the military community as a distinctive sociological phenomenon.

1. Military Group – A Sociological Phenomenon (5).
2. Military as a Rationally Disciplined Group (5).
3. Military as a Modernised Group (5).
4. Military as a Nationally Integrated Group (5).
5. Social Composition of Indian Armed Forces (5).
6. Social view of War and Soldiering in India (5).
7. Analysis of Military Profession – Institutional vs. Occupational (5).
8. Image of the Armed Forces and its Projection in Society (5).

**References: -**

- 1) Singh M. K. “The Indian Army – A Sociological Phenomenon”, University of Poona Press, 1985.
- 2) Khan J. A. “Armed Forces & Society”, Anmol Publication, New Delhi, 2006.
- 3) Khan J. A. “Choice of Military Career”, Plot No; - 20, Chanakya Nagar, CIDCO, Nashik – 422008, 2000.
- 4) Parmar Leena. “Military Sociology”, Rawat Publication, New Delhi, 1999.
- 5) Janowitz Morris, “Sociology and Military Establishment”, R S Foundation, New York, 1965.

**T.Y. B.Sc. Semester – IV.**

**DS 347 (A) Military Psychology. (Optional)**

**Objective:** - This paper is intended to study the military applications of Psychological principles on important aspects.

1. Introduction to Psychology (5).
2. Organizational Psychology and Military Psychology (5).
3. Psychological view of War and Soldiering (5).
4. Military Uses of Psychology (5).
5. Application and Role of Psychology in Military Motivation and Morale (5).
6. Application and Role of Psychology in Military Leadership (5).
7. Mental Toughening against War Neurosis, Combat Stress and Fear of Death (5).
8. Propaganda and Psychological Warfare (5).

**References: -**

- 1) Anila Kumar & Ushar Rao, “General Psychology”, Himalaya Publishing House, Mumbai, 1988.
- 2) Khan J. A. “Military Career”, Plot No: -20, Chanakya Nagar, CIDCO, Nashik – 422008, 2000.
- 3) Edwin G. Boring. “Psychology for the Armed Forces”, Natraj Publisher, Dehradun, 1979.
- 4) Copeland Normand, “The Psychology and The Soldier”, The English Book Depot, Dehradun 1968.
- 5) Saredeshpande S. C. “War & Soldiering”, Lancer Publication, New Delhi, 1993.

**T.Y. B.Sc. Semester – III.**

**DS 337 (B) Defence Journalism. (Optional)**

**Objective:** - To make aware of the students about the role of media in the management of National Security. And the role as well as the responsibility of the Journalists. Also, provide knowledge how to be responsible Defence Journalist.

1. Introduction – Characteristics and Types. (5)
2. Defence and Media – Duties & Responsibilities of Journalists. (10)
3. Essential Information for Defence Journalist. (5)
4. Hurdles in Defence Journalism. (5)
5. Ingredients in Defence Journalism. (5)
6. Structure of the Defence Establishments in India. (5)
7. Scope of Future Defence Journalism. (5)

**References: -**

- 1) Sangeeta Saxena. “Defence Journalism In India”, Manas Publications, New Delhi, 1997.
- 2) M. V. Desai & Seventi Ninan (Ed), “Beyond Those Headlines”, Allied Publications Ltd.
- 3) P. P. Singh & Dr. A. K. Nayak., “Future of Mass Communication”, Manas Publication, New Delhi, 2008.
- 4) A. K. Nayak & S. K. Singh. “Professional Journalism”, Manas Publications, New Delhi, 2008.
- 5) P. P. Singh & S. Kumar Singh., “World Encyclopedia of Mass Communication”, Manas Publications, New Delhi.

## **T.Y. B.Sc. Semester – IV.**

### **DS 347 (B) Defence Journalism and National Security. (Optional)**

**Objective:** - To make aware the students about the role of Defence Journalist in the management of National Security. And also highlight on current trends in Defence Journalism.

1. Introduction. (5)
2. Military vs. Media. (5)
3. Defence Journalism and Media Ethics. (10)
4. Defence Journalism and Conflict Management. (10)
5. Current trends in Indian Defence Journalism. (5)
6. Problems & Prospects in Defence Journalism. (5)

#### **References: -**

- 1) Sangeeta Saxena. “Defence Journalism In India”, Manas Publications, New Delhi, 1997.
- 2) M. V. Desai & Seventi Ninan (Ed), “Beyond Those Headlines”, Allied Publications Ltd.
- 3) D. S. Mehta. “Mass Communication and Journalism In India”.
- 4) B. G. Varghese. “Indian Journalism”.
- 5) Military Year Book (Annual).
- 6) Ministry of Defence, Annual Report.
- 7) P. P. Singh & Dr. S. Kumar Singh., “World Encyclopedia of Mass Communication Ethics” (6 Vols Sep.), Manas Publications, New Delhi.
- 8) Dr. S. K. Singh. “Media Legislation and Laws”, Manas Publications, New Delhi.

**T.Y. B.Sc. Semester – III.**

**DS 337 (C) Defence Preparedness of India. (I) (Optional)**

**Objective:** - To make aware the students about war potential of India in a comprehensive manner.

1. India's Land and Maritime Boundaries – Geopolitical Evolution. (10)
2. India & Neighbours – Issues / Security Problems. (10)
3. India's War Potential. (10)
  - A. Political will and Strategic culture.
  - B. Science and Technology – Status & Future.
  - C. Economic Condition.
  - D. Defence Industries – Present Status & Future.
  - E. Socio – Cultural Factor: Harmony & its Status.
4. Defence & Development in India. (10)
  - A. Contrast between Defence and Development.
  - B. Relationship between them (Defence & Development).
  - C. Actual allocation and its practice/ applications.

**References: -**

- 1) “Indian Defence Year Book - 2009”, By Lt. Gen. R. K. Jasbir Singh., Y.S. Books International, F-31, Bali Nagar, New Delhi – 15.
- 2) “Indian ArmForces”, Capt. Bharat Verma, Vice Admiral G. M. Hiranandani & Air Marshal B. K. Pandey, Publication as mentioned above.
- 3) “Army 2020 (Shape, Size, Structure & General Doctrine for Emerging Challenges)”, Lt. Gen. Vijay Oberoi., Publication as mentioned above.
- 4) “India's Maritime Security”, By Rahul Chowdhary.
- 5) “Defence Budgeting and Planning in India”, By Amiya Kumar Ghosh., Publication as mentioned above.
- 6) “India's Quest: - Leadership of Powerful Nation”, By Lt. Col. Jaswant Singh Marwah., Manas Publicaitons New Delhi.

- 7) "India at 60: -A Rediscovery", By P. K. Budhwar, Manas Publications.
- 8) "India A Rising Power", Authors Press, New Delhi-92, 2006.
- 9) "Nuclear India in the 21<sup>st</sup> Century" By Dr. Sardesai & Raju G. C. Thomas, Y.S. International, F-31, Bali Nagar, New Delhi – 15.
- 10) "Nuclear India", By Air Commodore Jagjit Singh., Publication as mentioned above.
- 11) "Geography of India", Nirmal Bhattacharya and Vidya Ramamurthy.
- 12) "Indian Navy & South East Asia", Knowledge World Publications, New Delhi.
- 13) "India's Maritime Security", Publication as mentioned above.
- 14) "Army 2020 and Air Power – Journal of Air Power", Knowledge World Publications, New Delhi.
- 15) "Air Power and Joint Operations", By Jagjit Singh K.W. Publication, New Delhi.
- 16) "India – China Relations" By Dr. M. L. Sali., A. P. H. Publications, New Delhi, 2009.
- 17) "Military Geography", By Dr. M. L. Sali., Manas Publication, New Delhi, 2009.

**T.Y. B.Sc. Semester – IV.**

**DS 347 (C) Defence Preparedness of India. (II) (Optional)**

**Objective:** - To literate the students about the present status of India's Defence Preparedness as compare to her adversary.

1. Army. (10)
  - A. Commands & Responsibilities.
  - B. Strength, Weapon System & Present Status.
  - C. Process of Modernisation & Achievements.
2. Navy. (10)
  - A. Commands & Responsibilities.
  - B. Strength, Weapon System & Present Status.
  - C. Process of Modernisation & Achievements.
3. Air Force. (10)
  - A. Commands & Responsibilities.
  - B. Strength, Weapon System & Present Status.
  - C. Process of Modernisation & Achievements.
4. Comparison. (10)
  - A. Indo – Pak War Potential.
  - B. India –China War Potential.

**References: -**

- 1) "Indian Defence Year Book - 2009", By Lt. Gen. R. K. Jasbir Singh., Y.S. Books International, F-31, Bali Nagar, New Delhi – 15.
- 2) "Indian ArmForces", Capt. Bharat Verma, Vice Admiral G. M. Hiranandani & Air Marshal B. K. Pandey, Publication as mentioned above.
- 3) "Army 2020 (Shape, Size, Structure & General Doctrine for Emerging Challenges)", Lt. Gen. Vijay Oberoi., Publication as mentioned above.
- 4) "Defence Budgeting and Planning in India", By Amiya Kumar Ghosh., Publication as mentioned above.

- 5) "India's Quest: - Leadership of Powerful Nation", By Lt. Col. Jaswant Singh Marwah., Manas Publications New Delhi.
- 6) "India at 60: -A Rediscovery", By P. K. Budhwar, Manas Publications.
- 7) "India A Rising Power", Authors Press, New Delhi-92, 2006.
- 8) "Nuclear India in the 21<sup>st</sup> Century" By Dr. Sardesai & Raju G. C. Thomas, Y.S. International, F-31, Bali Nagar, New Delhi – 15.
- 9) "Nuclear India", By Air Commodore Jagjit Singh., Publication as mentioned above.
- 10) "Geography of India", Nirmal Bhattacharya and Vidya Ramamurthy.
- 11) "Indian Navy & South East Asia", Knowledge World Publications, New Delhi.
- 12) "India's Maritime Security", Publication as mentioned above.
- 13) "Army 2020 and Air Power – Journal of Air Power", Knowledge World Publications, New Delhi.
- 14) "Air Power and Joint Operations", By Jagjit Singh K.W. Publication, New Delhi.
- 15) "India – China Relations" By Dr. M. L. Sali., A. P. H. Publications, New Delhi, 2009.
- 16) "Military Geography", By Dr. M. L. Sali., Manas Publication, New Delhi, 2009.

**T.Y. B.Sc. Semester – III.**

**DS 338 (A) Armed Conflict and Human Rights. (Optional)**

**Objective:** - The aim is to provide elementary knowledge about the different spectrum of human security and the rights of the people within and without state. Such elementary knowledge is useful to the security personnel while tackling law and order problem.

1. Introduction to International Humanitarian Studies. (5)
2. Introduction to Human Rights. (5)
3. Theories and Principles of Human Rights. (10)
4. International Relations, Democracy and Human Rights. (10)
5. Armed Conflicts and Protection of Defenceless Victims. (10)
  - A. Protection of Civilians.
  - B. Wounded and Sick Soldiers.
  - C. Prisoners of War.
  - D. Combatant/ International Humanitarian Laws and Laws of Armed Conflict.

**References: -**

- 1) “UNCHR – The State & The World’s Refugee Fifty Years of Humanitarian Actions”
- 2) “International Law” By S. K. Kapoor.
- 3) Zeigler David, “War, Peace and International Politics”, Boston: Little Brown and Co. 1981.
- 4) Burton John, “Conflict: Practices in Management, Settlement and Resolution ”, St.Martins Press 1993.
- 5) Anand R. P., “New States and International Law”, Vikas Publication, New Delhi – 1972.
- 6) Agrawal S. K., “New Horizons of International Law in Developing Countries”, N. N. Fropath Mumbai 1983.

**T.Y. B.Sc. Semester – IV.**

**DS 348 (A) Refugee Studies. (Optional)**

**Objective:** - The aim is to provide elementary knowledge about the different spectrum of human security and the rights of the stateless peoples. This paper highlights on a comprehensive study of Refugee.

1. Refugee. (10)
  - A. Meaning and Definition.
  - B. 1951 Convention & 1967 Protocol.
  - C. Stateless Person.
2. Problems of Refugees. (10)
  - A. Causes of Migration.
  - B. Population in Border areas and Border Security.
3. Rights and Duties of Refugees. (10)
4. Refugee Law's and UNCHR. (5)
5. Refugee Problems and South Asia. (5)

**References: -**

- 1) B. S. Chimi., "International Refugee Law", A Reader, Sage Publication, New Delhi, 2007.
- 2) "Refugee Law & UNCHR", Published by IIHR, New Delhi, 2000.
- 3) "Refugee Problem in South Asia", IIHR, New Delhi, 2000.
- 4) "Basic International Legal Documents on Refugees", UNCHR – The UN Refugee Agency, UNCHR – 2002, New Delhi.
- 5) "Bulletin on IHL & Refugee Law, Focus on Human Rights", Vol. No. 3, INCHR – 1998.

**T.Y. B.Sc. Semester – III.**

**DS 338 (B) International Organisations & National Security. (Optional)**

**Objective:** - To provide elementary knowledge about the organizational structure of international organisation and its role in the management of National, Regional and International Security.

1. Evolution of International Organisation. Concept and History. (5)
2. League of Nation. (10)
  - A. Treaty of Versailles and Creation of League.
  - B. Structure.
  - C. Nature of Function.
  - D. Survey of its Work.
  - E. Causes of its Failure.
3. United Nations, (5)
  - A. Origin & Structure.
  - B. Principles Organs of UN and their Functions.
4. The UN Role in International Peace & Security. (20)
  - A. Pacific Settlement.
  - B. Enforcement Action.
  - C. UN Peace Keeping.

**References: -**

- 1) S. K. Agrawal (Ed). , “Essay on the Law of Treaties”, Bombay – Orient Longmans – 1973.
- 2) K. P. Saxena. “Reforming The United Nations”, Sage Publications, New Delhi, 1983.
- 3) S. J. R. Brijlani., “International Organisation”, Vikas Publications, New Delhi, 1983.
- 4) R. P. Anand., “New States and International Law”, Vikas Publications, New Delhi, 1972.

- 5) R. P. Anand., “Studies in International Adjudication” Vikas Publications, New Delhi, 1963.
- 6) Vinay Kumar Malhotra., “International Relations”, A. I. T. B. Sc. Publishers, Krishna Nagar, New Delhi, 2000.

**T.Y. B.Sc. Semester – IV.**

**DS 348 (B) Study of United Nations. (Optional)**

**Objective:** - To highlight on role of UN in maintaining global peace and security along with non – political functions and achievements.

1. Specialized Agencies of U.N. (10)
  - A. Economic & Social Council.
  - B. Role of U.N. in the field of Economic & Social Issues.
2. U.N. and Human Rights. (5)
3. Role of U.N. in International Conflict. (10)
4. Role of U.N. in Disarmament. (5)
5. Hindrances in the working of U.N. – Restructuring of U.N. (10)

**References: -**

- 1) R. P. Anand., “Studies in International Adjudication” Vikas Publications, New Delhi, 1963.
- 2) S. J. R. Brijlani., “International Organisation”, Vikas Publications, New Delhi, 1983.
- 3) S. K. Agrawal (Ed). , “Essay on the Law of Treaties”, Bombay – Orient Longmans – 1973.
- 4) K. P. Saxena. “Reforming The United Nations”, Sage Publications, New Delhi, 1983.
- 5) Hans. J. Morgenthau. , “Politics Among Nations”, Kalyani Publisher, New Delhi, 1985.
- 6) Vinay Kumar Malhotra. , “International Relations”, Amol Publications, New Delhi, 2001.

**T.Y. B.Sc. Semester – III.**

**DS 338 (C) International Law. (Optional)**

**Objective:** - To provide elementary knowledge about the different rules and law framed by the international organization (UNO). Such Knowledge is essential, for States to maintain foreign trade, defence and foreign relations and conducting a war against belligerent States.

1. Introduction. (10)
  - A. Definition and Nature.
  - B. Scope & Sources of International Law.
  - C. Historical Development.
  - D. Subjects of International Law.
2. Conflicts & Human Rights. (5)
  - A. U.N. Charter.
  - B. Universal Declaration of I.H.R.
3. Control of International Conflicts. (10)
  - A. U.N. Charter.
  - B. U.N. Peacekeeping.
  - C. Diplomatic Procedure.
4. International Law related to War. (10)
  - A. Hange Conventions.
  - B. Geneva Conventions.
5. Nuclear, Chemical & Biological Warfare. (5)

General Protocol, International Conventions and Treaties.

**References: -**

- 1) M. S. Rajan., “World Order and The United Nations Organization”, Kanishka, New Dellhi, 1998.
- 2) Sukhbir Singh., “Structure and Functions of U.N.O. – New Journal: International Organisation”.

- 3) S. K. Agrawal (Ed). , “Essay on the Law of Treaties”, Bombay – Orient Longmans – 1973.
- 4) R. P. Anand., “New States and International Law”, Vikas Publications, New Delhi, 1972.
- 5) Vinay Kumar Malhotra. , “International Relations”, Amol Publications, New Delhi, 2001.
- 6) Zelester David., “War, Peace and International Politics”, Boston, Little Brown & Co. 1981.
- 7) Kesley Charles W. Jr. & Whittkopt Eugence R., “World Politics: Trends and Transformation”, Hampshire, Mac Millon, 1989.
- 8) Journals: “International Studies”, Quarterly, New Delhi, India.

**T.Y. B.Sc. Semester – IV.**

**DS 348 (C) Law of War & Peace. (Optional)**

**Objective:** - To provide elementary knowledge about the different rules and law framed by the international organization (UNO). Such Knowledge is essential, for States to maintain the foreign trade, defence and foreign relations and conducting war.

1. Laws of Peace. (25)
  - A. Types of States.
  - B. Recognition of States.
  - C. State – Succession.
  - D. Intervention.
  - E. Right of Self - Defence.
  - F. Wartime Laws & Conventions.
  - G. Collective Security & Disarmament.
2. Laws of War. (15)
  - A. Settlement of Dispute.
  - B. The Laws of War.
  - C. Land Warfare.
  - D. Sea Warfare.
  - E. Air Warfare.

**References: -**

- 1) S. K. Agrawal (Ed). , “Essay on the Law of Treaties”, Bombay – Orient Longmans – 1973.
- 2) S. K. Agrawal (Ed). , “New Horizons of International Law Development Countries”, Bombay, N. N. Fropolc, 1983.
- 3) R. P. Anand., “New States and International Law”, Vikas Publications, New Delhi, (Viyas) 1972.
- 4) R. P. Anand., “Studies in International Adjudication” Vikas Publications, New Deli, 1963.
- 5) K. B. Keswani, “International Relations”, Anmol Publication, New Delhi, 2001.

- 6) Vinay Kumar Malhotra. , “International Relations”, Amol Publications, New Delhi, 2001.

**T.Y. B.Sc. Semester – III.**

**DS 339 (A) Defence Management in India. (Optional)**

**Objective:** - To appraise the students with the application of management practices in the Armed Forces.

1. About Management – Concept, Salient Features, Nature, Functions & Scope of Management. (5)
2. Applicability of Management in Armed Forces. (5)
3. Similarity of Industrial and Military Concept on Management. (5)
4. Principles of Management. (5)
5. Application and Strength of War Principles in Corporate Management. (5)
6. Human Resource Management in Armed Forces. (5)
7. Team Building in Armed Forces. (5)
8. Role of Leadership in the Defence Management and Development of Battle Dynamism in the current scenario. (5)

**References: -**

- 1) John Downey, “Management in the Armed Forces”, EBD Educational Pvt. Ltd., Dehradun India, 1987.
- 2) Andre Beaufre, “Strategy for Tomorrow”, MacDonal Press, London, 1974.
- 3) “Defence Management”, An Annual Journal of College of Defence Management, Secunderabad.
- 4) Mishra H. B. , Defence Management of India, Author Press, New Delhi, 2000
- 5) A. L. Venkateshwaran, “Defence Organisation in India”, Publication Division, Government of India, New Delhi, 1967.

**T.Y. B.Sc. Semester – IV.**

**DS 349 (A) Management of Defence Production and Logistics in India.  
(Optional)**

**Objective:** - Aim of this paper is to appraise the students about Defence production and logistic element in India.

1. Rationale of Defence Production in India. (5)
2. Role of Defence Production in National Development. (5)
3. Structure of Defence Production. (5)
  - A. Role and Functions of Department of Defence Production and DRDO.
  - B. Ordnance Factories – Its Highlights,
  - C. Management of DPSU, Foreign Collaboration & Private Sector.
4. Principles of Logistics. (5)
5. Just in Time Concept. (5)
6. Supply Chain Management. (5)
7. Mobilisation of Logistic Elements for War. (5)
8. Management of Integrated Defence Logistics. (5)

**References: -**

- 1) Ron Mathews, “Defence Production in India”, ABC, New Delhi, 1989.
- 2) Raju G. C. Thomas, “The Defence of India: A Budgetary Perspective of Strategy and Politics”, MacMillan Publication, New Delhi, 1978.
- 3) Sam – C – Sarekesian, “The Military Industrial Complex – A Reassessment”, Sage Publication, 1972.
- 4) Maj. Gen. Pratap Narain (Retd.), “Indian Arms Bazar”, Shilpa Publication, New Delhi, 1998.
- 5) Annual Reports of the Ministry of Defence, Government of India.
- 6) Brig. Pramod Sasius, “Military Logistics – Third Dimensions”, Manas Publication, New Delhi, 2000.

**T.Y. B.Sc. Semester – III.**

**DS 339 (B) Internal Security of India. (Optional)**

**Objective:** - To literate the students about the basic concept of Internal Security along with relevant dimensions of it.

1. Internal Security. (12)
  - A. Meaning & Elements of The State.
  - B. Role of The State in Human Security.
2. Different Dimension of Internal Security. (13)
  - A. Socio-ethnic.
  - B. Political.
  - C. Economic.
  - D. External Abetment.
3. Case Studies in India. (15)
  - A. Kashmir Problem.
  - B. Naxalite Problem.
  - C. Agitations over Economic/Developmental Issues (including SEZ).
  - D. Agitations over Religious and Caste Issues.
  - E. Security Challenges to North – East Region of India.

**References: -**

- 1) Shrikant Paranjpe, “India’s Internal Security: Issues and Perspectives”, Kalinga, New Delhi, 2009.
- 2) Inderfurth, Kari F. and Johnson, Lock K. (Ed), “Fateful Decisions: Inside the National Security Council”, Oxford University Press, New York, 2004.
- 3) Samadar Surjeet, “Defence, Development & National Security: Linkages in the Indian Context ”, Gyan Publishing House, New Delhi, 2005.
- 4) Bhonsle Rahul K., “India – Security Scope 2006: The New Great Home”, Kalpaz Publication, Delhi, 2006.

- 5) Carpenter William M & Wienecele David G. (Ed), "Asian Security Handbook: Terrorism and the New Security Environment", Pentagon Press, New Delhi, 2007.
- 6) Singh Anand K., "Ethnicity and Security of India", Anubhav Publishing House, Allahabad, 2008.
- 7) Vijay Khare, "India in Global Politics", K. Sagar, Pune – 2008.
- 8) Thakkar Usha and Kulkarni Mahesh, "India in World Affairs: Towards the 21<sup>st</sup> Century", Himalaya, Mumbai, 1999.

**T.Y. B.Sc. Semester – IV.**

**DS 349 (B) Internal Security of India. (Optional)**

**Objective:** - To make aware the students about the present internal security challenges of the country.

1. Internal Security Challenges to India: An Assessment. (20)
  - A. Cross – Border Terrorism.
  - B. Secessionist Movements.
  - C. Insurgency Problem.
2. Approaches / Response to the Problem of Internal Security. (20)
  - A. Role of the Central Government.
  - B. Role of the State Government.
  - C. Role of Force.
  - D. Role of the Media.
  - E. Role of N. G. O.'s.

**References: -**

- 1) Shrikant Paranjpe, “India’s Internal Security: Issues and Perspectives”, Kalinga, New Delhi, 2009.
- 2) Inderfurth, Kari F. and Johnson, Lock K. (Ed), “Fateful Decisions: Inside the National Security Council”, Oxford University Press, New York, 2004.
- 3) Samadar Surjeet, “Defence, Development & National Security: Linkages in the Indian Context ”, Gyan Publishing House, New Delhi, 2005.
- 4) Bhonsle Rahul K., “India – Security Scope 2006: The New Great Home”, Kalpaz Publication, Delhi, 2006.
- 5) Carpenter William M & Wienecele David G. (Ed), “Asian Security Handbook: Terrorism and the New Security Environment”, Pentagon Press, New Delhi, 2007.
- 6) Singh Anand K., “Ethnicity and Security of India”, Anubhav Publishing House, Allahabad, 2008.

- 7) Vijay Khare, "India in Global Politics", K. Sagar, Pune – 2008.
- 8) Thakkar Usha and Kulkarni Mahesh, "India in World Affairs: Towards the 21<sup>st</sup> Century", Himalaya, Mumbai, 1999.

### **T.Y. B.Sc. Semester – III.**

#### **DS 339 (C) Maritime Security of India. (Optional)**

**Objective:** - To provide Different aspects of maritime resources and their importance to National Economy and in the management of National and Regional Security.

1. Maritime Security/ Environment. (20)
  - A. Brief History of Oceans.
  - B. Concept of Maritime Boundaries / State.
  - C. Concept of Territorial Sea, Contiguous Zone, Continental Shelf, Exclusive Economic Zone, High Seas.
2. Role of the Maritime Elements / Assets. (10)
  - A. Fixed Assets: - Ports and Infrastructure Therein.
  - B. Naval bases, Oil Rigs and Exploration Platform, Light Houses and Navigational Aids.
3. Role of Navy & Coast Guard. (10)
  - A. Role of Sea Power.
  - B. Economic, Political & Military, etc.,.

#### **References: -**

- 1) Rahul Roy Choudhary, "India's Maritime Security", Knowledge World, New Delhi – 2000.
- 2) V. R. Raghavan and Lawrence Prabhakar, "Maritime Security in the Indian Ocean Region : Critical Issues in Debate".
- 3) K. R. Singh, "New Challenges to Maritime Security: Legality and Legitimacy of Responses".
- 4) "Freedom To Use The Seas: India's Maritime Military Strategy", Integrated HQ, Ministry of Defence (Navy), New Delhi, 2007.
- 5) Steven Jones., "Maritime Security : A Practical Guide", London Nautical Institute.

- 6) Ravi Visva and D. Chakroborty (Ed.), “Maritime Dimensions of A New World Order”, National Maritime Foundation, New Delhi.

#### **T.Y. B.Sc. Semester – IV.**

#### **DS 349 (C) India’s Maritime Security. (Optional)**

**Objective:** - To make aware the students about the strategic environment in Indian Ocean and its relevance to Indian Maritime Security.

1. Indian in the Oceanic System. (5)
2. Indian Ocean – Strategic Significance, Strategic Environment and its relevance to India’s Security. (10)
3. India’s Maritime Threats. (10)
  - A. Threat to Maritime Trade - Example of Terrorist Groups, LTTE, Piracy, Human Trafficking, Drugs.
  - B. Threat to Shipping – Oil Tankers, LPG & LNG Carriers, Cyber Threat.
  - C. 26/11 Mumbai Attack and Its Impact on Indian Security System.
4. Major Power Rivalry in the Indian Ocean. (10)
  - A. Policies of U.S.A.
  - B. Policies of China.
  - C. Policies of Britain.
  - D. Policies of Pakistan.
  - E. India’s Indian Ocean Policy.
5. Indian Ocean as a Zone of Peace: Concept, Problems and Dimensions. (5)

**References: -**

- 1) Rahul Roy Choudhary, “India’s Maritime Security”, Knowledge World, New Delhi – 2000.
- 2) V. R. Raghavan and Lawrence Prabhakar, “Maritime Security in the Indian Ocean Region: Critical Issues in Debate”, A.P.H. New Delhi, 2004.
- 3) K. R. Singh, “New Challenges to Maritime Security: Legality and Legitimacy of Responses”, Manas Publication, New Delhi, 2005.
- 4) “Freedom To Use The Seas: India’s Maritime Military Strategy”, Integrated HQ, Ministry of Defence (Navy), New Delhi, 2007.

- 5) Steven Jones., “Maritime Security: A Practical Guide”, London Nautical Institute.
- 6) Ravi Visva and D. Chakroborty (Ed.), “Maritime Dimensions of A New World Order”, National Maritime Foundation, New Delhi.