



**Syllabus- Defence and Strategic Studies**

**Year-wise Titles of the Papers in U.G Programme (B.A./B.Sc.)**

Year	Paper	Course Code	Paper Title	Theory/Practical	Credits
B.A-1	I	A120101T	Conceptual Aspect of war	THEORY	4
	II	A120102P	Basics of Operational Exercises-I	PRACTICAL	1
	III	A120201T	Military History of India	THEORY	4
	IV	A120202P	Basics of Operational Exercises-II	PRACTICAL	1
B.A-2	I	A120301T	National Security - Conceptual Aspects	THEORY	4
	II	A120302P	Basics of Operational Exercises-III	PRACTICAL	1
	III	A120401T	Strategic Thought	THEORY	4
	IV	A120402P	Basics of TEWTs/Sand Model Exercises, Sketching, Discussion	PRACTICAL	1
B.A-3	I	A120501T	Indian Defence Mechanism	THEORY	5
	II	A120502T	National Security of India	THEORY	4
	III	A120503P	Military use of Electromagnetic Spectrum, Press Clipping, Tour	PRACTICAL	1
	V	A120601T	Science and Technology in Relation to Warfare	THEORY	5
	VI	A120602T	Military Psychology	THEORY	4
	VII	A120603P	Spotting Strategic Locations, Military Models, Presentation	PRACTICAL	1



## Proposed Year wise Structure of UG Program in Defence and Strategic Studies

### Program Outcomes (POs)

1. Upon completion of the programme of Bachelor's in Defence and Strategic Studies, a student should have acquired basic competency in strategic affairs covering a wide spectrum of interstate security to global security issues including non kinetic dimensions.
2. Shall develop capability in understanding the implications of use and threat of use of force in International relations.
3. Shall seek, identify and apply the acquired knowledge in defence and strategic studies on contemporary issues of strategic relevance.
4. Ability to move from LOTS (Lower Order of Thinking Skills) to HOTS (Higher Order of Thinking Skills) in Defence and Strategic Studies.
5. The learning of strategic studies shall arm the candidates to independently choose further course of action in his/her life whether pursuing higher education by taking specialized course in honours or identifying a career for himself or herself.
6. The course curriculum in Defence and Strategic Studies is designed to encourage the acquisition of disciplinary/subject understanding, gain academic knowledge and professional skills required for any career pursuit be it choosing for higher studies or a job. The outcome based approach, particularly in the context of Defence and Strategic Studies for undergraduate programme will incorporate a significant shift from teachers centric to learner centric pedagogies and from specific to active/participatory pedagogies where emphasis will be on field Study, educational tours, writing assignments, seminar presentation and Tutorials etc. Teaching, therefore, becomes more interesting and absorbing aiming at demonstrative learning.

### B.A. /B.Sc.First Year

### Certificate in Fundamentals of Defence and Strategic Studies

### Program Specific Outcomes (PSOs)-

After undergoing this course a student will be in a position to –

1. Clearly understand the definition, meaning and distinguish basic concepts of war; Various types of war and its various typologies, techniques and characteristics; and Grasp the concept and theories of nuclear war in detail. (I Year)
2. Become familiar in evolution of art of warfare in India; Learn and understand the Strategy, tactics, application of principles of war and causes of defeat and victory of various Indian, Mughal, Maratha and Sikh Generals. Besides, in a position to appreciate and understand evolutionary changes in the art and science of war in India through ages (I Year)

Paper	Name of Paper	Credits	No of Lectures
I	Conceptual Aspect of war (Theory)	4	60
II	Basics of Operational Exercises-I(Practical)	1	60
	Total	5	120
	Name of Paper	Credits	Lectures
III	Military History of India(Theory)	4	60
IV	Basics of Operational Exercises-II(Practical)	1	60
	Total	5	120

**B.A. /B.Sc. Second Year  
Diploma in Defence and Strategic Studies****Program Specific Outcomes (PSOs) -**

After undergoing this course a student will be in a position to –

1. Develop core competencies in national security affairs by building his/her capacity on essentials of National Security through theory and practice. Understand the national security challenges both internal and external a country face; and Understand the Contemporary security environment in the world. (II Year)
2. Acquaint them with the concepts of strategic thinking as propounded by prominent classical and modern thinkers. Students will also develop analytical thinking regarding relevance of such thought to contemporary period. (II Year)

Paper	Name of Paper	Credits	No of Lectures
I	National Security- Conceptual Aspects(Theory)	4	60
II	Basics of Operational Exercises-III(Practical)	1	60
	Total	5	120
	Name of Paper	Credits	No of Lectures
III	Strategic Thought (Theory)	4	60
IV	Basics of TEWTs/Sand Model Exercises, Sketching, Discussion (Practical)	1	60
	Total	5	120

**B.A. /B.Sc.,Third Year  
Degree in Bachelor of Arts or Science****Program Specific Outcomes (PSOs)**

After undergoing this course a student will be in a position to –

1. Equip the students with specific knowledge of India's threat perceptions; An assessment at both internal and external level besides fair idea of problems the country faces as a nation state; and The Structure, objectives, role and problems of Civil Defence Organization in India. (III Year)
2. Acquire knowledge on how significant the role of science and technology is to Society and to National Security. The paper also provides realization in contemplating on the military-industrial complex (MIC) of a nation; besides Understanding the concepts and applications of Electronics Warfare, Space and Ballistic Missile Defence (BMD) in Warfare. (III Year)

Paper	Name of Paper	Credits	No of Lectures
I	Indian Defence Mechanism (Theory)	5	60
II	National Security of India(Theory)	4	60
III	Military use of Electromagnetic Spectrum, Press Clipping, Tour (Practical)	1	60
	Total	10	180
	Name of Paper	Credits	No of Lectures
V	Science And Technology in Relation to Warfare(Theory)	5	60
VI	Military Psychology(Theory)	4	60
VII	Spotting Strategic Locations, Military Models, Presentations (Practical)	1	60
	Total	10	180

# PROF. RAJENDRA SINGH (RAJJU BHAIYA) UNIVERSITY, PRAYAGRAJ

## B.A. /B.Sc I ,Year I, Defence and Strategic Studies, Paper 1

### Conceptual Aspects of war

#### (Theory)

Programme/Class: Certificate	Year: First	Paper: 1
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120101T	Course Title: <b>Conceptual Aspects of war</b> ( Theory)	
<b>Course outcomes:</b> The student at the completion of the course will be able to: Clearly understand the definition, meaning and distinguish basic concepts of war; Various types of war and its various typologies, techniques and characteristics; and Grasp the concept and theories of nuclear war in detail.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
<b>I</b>	1. Conceptual Formulation a. Meaning and definition of Defence and Strategic Studies – Its relevance and significance and relationship with other disciplines of study. b. War - Definition and meaning and basic concepts – Understanding various causes of War. Basic Concepts - War, Campaign, Battle, Strategy, Tactics, Security and Defence. c. Ancient Indian War and Defense Strategies	08
<b>II</b>	3. Principles of War 4. War as an instrument of policy : Past, Present and Future	07
<b>III</b>	5. Modern Warfare a. Concept and definition b. Features of Modern Warfare	07
<b>IV</b>	6. Guerilla Warfare a. Origin and concept. b. Principles, techniques and characteristics of guerrilla warfare. c. Counter guerrilla measures.	08
<b>PART B</b>		
<b>V</b>	7. Psychological Warfare a. Definition and concept. b. Functions and Limitations.	8
<b>VI</b>	8. Economic Warfare a. Concept and definition b. Basic dimensions c. Effects of war on National Economy	6
<b>VII</b>	9. Nuclear warfare a. Beginning of nuclear era and effects of nuclear explosion. b. Nuclear strategies of `Deterrence` and `Massive Retaliation`.	8
<b>VIII</b>	10. Chemical and Biological Warfare a. Definition and concept b. Agents,their effect and military use.	8
<b>Suggested Readings:</b> 1. Andreski S., (1968) Military Organization and Society, Univ. California Press, Berkeley. 2. Anthony James Joes, (1996)Guerrilla Conflict before the Cold War, (Praeger Publishers, 3. Aron R., (1966) Peace and War: A Theory of International Relations, Praeger, New York. 4. Barringer R., (1972) War: Patterns of Conflict, MIT Press, Cambridge, Mass. 5. Blainey G., (1973) The Causes Of War, Macmillan, London,. 6. Montgomery Viscount, (1983) A History of Warfare, William Morrow & Co, New York City. 7. Mukherji and Shyam Lal, (1952) A Textbook of Military Science, Vol. II., Navayuga, New Delhi. 8. Osanka, F.M., (1962) Modern Guerrilla Warfare, Free Press of Glencoe, New York. 9. Sidhu, K.S., (1988) War and Its Principles, Atlantic, New Delhi.		

<p>10. Tripathi, K.S., (1970) Evolution of Nuclear Strategies, Vikas, New Delhi                  11. Van Evara, Stephen, (1999), Causes of War: Power and the Roots of Conflict, Cornell University Press, Ithaca.                  12. Wright, Quincy, (1942) Study of War, University of Chicago Press.                  13. सिंह, टण्डन, अग्रवाल (2012), युद्ध और शांति का अध्ययन, शारदा पुस्तक भवन, प्रयागराज                  14. पाण्डेय बाबूराम एवं पाण्डेय रामसूरत, (2005) युद्ध और शांति के मूल तत्व, प्रकाश बुक डिपो, बरेली</p>
<p>This course can be opted as an elective by the students of following subjects: Open for all                  The eligibility for this paper is 10+2 with any subject</p>
<p><b>Suggested Continuous Evaluation Methods:</b>                  Seminar/ Presentation on any topic of the above syllabus                  Research Orientation                  Test with multiple choice questions/ short and long answer questions                  Attendance</p>
<p>Course prerequisites: To study this course, a student must have had the subject ALL..in class 12<sup>th</sup>.                  The eligibility for this paper is 10+2 with any subject</p>
<p><b>Suggested Equivalent online courses:</b></p> <ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>

**B.A. /B.Sc.I ,Year I , Defence and Strategic Studies Paper 2  
(Practical)**

Programme/Class: Certificate	Year: First	Paper: II
<b>Subject: Defence and Strategic Studies (Practical)</b>		
Course Code: A120102P	Course Title: Basics of Operational Exercises-I	
Credits: 1	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)		
Unit	Topic	No. of Lectures
<b>I</b>	1. Maps: Definition and Features; Classification and its utility for Military; Enlargement and reduction of Maps. 2. Conventional Signs: Military and Geographical	06
<b>II</b>	3 .GRID System: Four Figure and Six figure Map References.	08
<b>III</b>	4. North:Types of North and finding out True North; The Pole Star Method; The equal altitude method; Watch method & Compass method.	06
<b>IV</b>	5. Scale: Definition, Methods of representing Scale: Inter-conversion of scale into Representative Fraction, construction of simple scale line and the comparative scale lines.	10
<p>This course can be opted as an elective by the students of following subjects: Open for all                  .....</p>		
<p><b>Suggested Continuous Evaluation Methods:</b>                  Research Orientation                  Test with multiple choice questions/short and long answer questions, or Record ,Viva Voce</p>		

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## B.A./B.Sc I, Year I, Defence and Strategic Studies, Paper 03

Military History of India

(Theory)

Programme/Class: Certificate	Year: First	Paper: III
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120201T	Course Title: <b>Military History of India</b> ( Theory)	
<b>Course outcomes:</b> After undergoing this course a student will be in a position to – Become familiar in evolution of art of warfare in India; Learn and understand the Strategy, tactics, application of principles of war and causes of defeat and victory of various Indian, Mughal, Maratha and Sikh Generals. Besides, in a position to appreciate and understand evolutionary changes in the art and science of war in India through ages.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
I	1. Military System in Vedic and Epic Age. 2. Macedonian and Indian art of war with particular reference to the battle of Hydaspes (326 B.C.)	08
II	3. Kautilya's Philosophy of War : State Craft, Military Organisation, Weapon, Intelligence System and the Art of War	07
III	4. Turk and Rajput Military System with particular reference to the Battle of Tarran(1192 AD) 5. Military Organisation and Pattern of Warfare during the Sultanate period with particular reference to Ala-uddin Khilji	07
IV	6. The Mughal Military System with particular reference to the First Battle of Panipat (1526 AD) 8. The Rajput Military Organization, Weapon system and art of fighting with particular reference to the battle of Kanwah (1527 AD)	08
PART B		
V	9. The Maratha Military System with special reference to the third battle of Panipat (1761 AD)	8
VI	10. Sikh Military System with special reference to the battle of Sobraon (10 Feb. 1846AD)	6
VII	11. Military System of East India Company , Evolution of Indian Armed forces from 1858 to 1947 A.D. ,Growth of Indian Navy and Air Force	8
VIII	12. India's Wars post independence (In Brief) a. The First India-Pakistan War (1947- 1948) b. India-China War of 1962 c. The India Pakistan War of 1965 d. Liberation of Bangladesh of 1971 e. The Kargil Conflict of 1999	8
<b>Suggested Readings:</b> 1. Alfred, David., (1953) Indian Art of War, Atma Ram , Delhi. 2. Bajwa F.S., (1964) Military System of the Sikhs, Moti Lal, Banarsi Dass, Delhi. 3. Bruce, George., (1969) Six Battles of India, Rupa & Company, Calcutta. 4. Das, S.T., (1969) Indian Military - Its History and Development, Sagar, New Delhi. 5. Dikshitar, Ramachandra V. R. (1999) War in Ancient India. Cosmo, New Delhi. 6. Fuller, J.F.C., (1958) Generalship of Alexander The Great, Natraj Publishes, Dehradun. 7. Gustav Oppert, (1967) Weapons, Army Organisation and Political Maxims of Ancient Hindus, R.F Patel Rajratan Press, Ahmedabad. 8. Kangle, R.P., (1963) Kautilya's Arth Shastra, University of Bombay, Mumbai. 9. Majumdar, B.K., (1960) Military System in Ancient India, Firma K.L. Mukhopadhyoy, Calcutta. 10. Majumdar, B.N., (1963) Study of Indian Military History. Army Educational Store, Delhi.		

11. Roy, Kaushik, (2004) From Hydaspes to Kargil: A History of Warfare in India from 326 BC to AD 1999. Manohar, New Delhi. 12. Roy, Kaushik (2011), War, Culture and Society in Early Modern South Asia, 1740–1849, Routledge.  
 13. Roy, Kaushik Ed., (2011), The Indian Army in the Two World Wars Brill.  
 14. Singh, Sarva Daman. (1997) Ancient Indian Warfare: With Special Reference to the Vedic Period. Motilal Banasidass, New Delhi.  
 15. डेविड, मेजर अल्फ्रेड, (1972), भारतीय युद्ध कला, अनुवाद हिंदी ग्रन्थ अकादमी, भोपाल  
 16. शर्मा, डा. योगेन्द्र कुमार एवं निगम रामलाल, (1998–99) सैन्य विज्ञान भाग 1 व 2, अलका प्रकाशन , कानपुर  
 17. सिंह, टण्डन, अग्रवाल (2012), भारतीय युद्धकला, शारदा पुस्तक भवन, प्रयागराज  
 18. सिंह, टण्डन, अग्रवाल (2012), स्वतंत्र भारत की युद्धकला (कश्मीर से कारगिल तक), शारदा पुस्तक भवन, प्रयागराज

This course can be opted as an elective by the students of following subjects: Open for all  
 The eligibility for this paper is 10+2 with any subject

**Suggested Continuous Evaluation Methods:**

Seminar/ Research Orientation/Presentation on any topic of the above syllabus

Test with multiple choice questions/ short and long answer questions

Attendance

Course prerequisites: To study this course, a student must have had the subject ALL..in class 12<sup>th</sup>.

The eligibility for this paper is 10+2 with any subject

**Suggested Equivalent online courses:**

- Coursera
- Swayam

**B.A./B.Sc. I, Year I, Defence and Strategic Studies, Paper 04  
 (Practical)**

Programme/Class: Certificate		Year: First	Paper: IV
<b>Subject: Defence and Strategic Studies (Practical)</b>			
Course Code: A120202P		Course Title: Basics of Operational Exercises-II	
Credits: 1		Core Compulsory / Elective	
Max. Marks: 25+75		Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)			
Unit	Topic	No. of Lectures	
<b>I</b>	1.Bearing: Definition, Inter conversion of Bearing in detail.	06	
<b>II</b>	2. Liquid Prismatic Compass (LPC): Features and functions of its various parts: Attempt following exercise on the LPC: To determine magnetic north; Setting of the Map.	08	
<b>III</b>	3.To find out the bearing of a point from other point situated on the ground.	06	
<b>IV</b>	4.To determine one's and enemy's position on the map by resection and intersection methods with the help of compass.	10	
This course can be opted as an elective by the students of following subjects: Open for all .....			
<b>Suggested Continuous Evaluation Methods:</b>			
Test with multiple choice questions/ Research Orientation/ short and long answer questions,or Record ,Viva Voce			
Course prerequisites: To study this course, a student must have had the subject .....in class/12 <sup>th</sup> / certificate/diploma. .....			

**B.A. /B.Sc II , Year II, Defence and Strategic Studies, Paper 01**  
National Security-Conceptual Aspects  
(Theory)

Programme/Class: Diploma	Year: Second	Paper: I
Subject: Defence and Strategic Studies		
Course Code: A120301T	Course Title: National Security-Conceptual Aspects( Theory)	
Course outcomes: This course helps students develop core competencies in national security affairs by building his/her capacity on essentials of National Security through theory and practice.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
I	1. Introduction (a) Concepts of Nation, State and Nation – State, Security and Defence (b)Origin, Concept, and objectives of National Security.	08
II	2. National Security Analysis Concept, Components and formulation of Security and Defence Policies and their linkages	07
III	3. National and International Security related Concepts a. National Power and its elements , National Interest, Foreign Policy and Diplomacy. b. Balance of Power, Collective Security and Collective Defence,Non-Alignment, Deterrence, Disarmament and arms control	07
IV	4.Challenges and Threats to National Security a. Military Threats/Challenges :Internal and External b.Non-Military Threats/Challenges:Internal and External	08
PART B		
V	5. Concept of Defence: Threat Perception,Defence Planning and Reforms, Military ,Nuclear and Missile Capabilities of India, China and Pakistan	8
VI	6. Proliferation of weapons of Mass Destruction(WMD)and NPT, CTBT, MTCR, NMD and FMCT	6
VII	7. Armaments: Arms Race,Arms Aid,Arms Trade and Small Arms Proliferation	8
VIII	9. Measures to address the challenges of National Security : a.One-sided initiative , and b. Collaborative approach 10. Relevance of Science & Technology in National Security	8

**Suggested Readings:**

- Booth, K., (2007) Theory of World Security: Cambridge University Press, Cambridge,
- Buzan, Barry., (1987)People Fear and State: New Delhi, Trans Asia Publications.
- Das, S.T., (1987) National Security in Perspective: Delhi, Gian Publishing House.
- Frankel, Joseph., (1970) National Interest: London, Macmillan.
- Military Balance., Latest Edition (IISS)
- Morgenthau, Hans J.,(1969) Politics Among Nations, Calcutta, Scientific Book Agency.
- Palmer, Norman D. and Perkins, Howard C., (1968) International Relations: Calcutta, Scientific Book Agency
- Chowdhury, Subrata Roy., (1966) Military Alliances and Neutrality in War and Peace: New Delhi, Orient Longman.
- Singh, Nagendra., (1974) The Defence Mechanism and the Modern State: New Delhi, Asia Publishing House.
- SIPRI Year Book Latest Edition.
- उम्मान टी.के. सुरक्षा, (2010), सुरक्षा एक नया दृष्टिकोण, प्रभात प्रकाशन, नई दिल्ली
- पाण्डेय रामसूरत, (2010), राष्ट्रीय सुरक्षा एवं अन्तर्राष्ट्रीय संबंध, प्रकाश बुक डिपो, बरेली
- सिंह लल्लन जी, (2021) राष्ट्रीय रक्षा एवं सुरक्षा, प्रकाश बुक डिपो, बरेली
- श्रीवास्तव, जे.एम. एवं सिन्हा, हर्ष कुमार (2017), राष्ट्रीय सुरक्षा, ए.एस. आर, पब्लिकेशन, लखनऊ
- सिंह, अशोक कुमार., (2018), राष्ट्रीय सुरक्षा, प्रकाश डिपो, बरेली
- कुमार महेद्र , (2005) अन्तर्राष्ट्रीय राजनीति के सैद्धान्तिक पक्ष, शिवलाल अग्रपाल एण्ड कंपनी, आगरा



This course can be opted as an elective by the students of following subjects: Open for all The eligibility for this paper is 10+2 with any subject
<b>Suggested Continuous Evaluation Methods:</b> Seminar/ Research Orientation/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance
Course prerequisites:To study this course,a student must have had the subject ALL..in class 12 <sup>th</sup> . The eligibility for this paper is 10+2 with any subject
<b>Suggested Equivalent online courses:</b> <ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>

**B.A./B.Sc. II , Year II, Defence and Strategic Studies ,Paper 02  
(Practical)**

Programme/Class: Diploma	Year: Second	Paper: II
<b>Subject: Defence and Strategic Studies (Practical)</b>		
Course Code: A120302P	Course Title: Basics of Operational Exercises-III	
Credits: 1	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)		
Unit	Topic	No. of Lectures
<b>I</b>	1. Relief Features and their representation on the map.	06
<b>II</b>	2. Types of slopes and their representation on the map	08
<b>III</b>	2. Gradient – Determination of gradients.	06
<b>IV</b>	4.Inter visibility – Determination of inter visibility in case of rise or fall of slope.	10
This course can be opted as an elective by the students of following subjects: Open for all .....		
<b>Suggested Continuous Evaluation Methods:</b> Test with multiple choice questions/ Research Orientation/short and long answer questions,or Record ,Viva Voce		
Course prerequisites: To study this course, a student must have had the subject ..... in class/12 <sup>th</sup> / certificate/diploma. .....		

**B.A./B.Sc II, Year II, Defence and Strategic Studies, Paper 03**

Strategic Thought

(Theory)

Programme/Class: Diploma	Year: Second	Paper: III
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120401T	Course Title: <b>Strategic Thought (Theory)</b>	
<b>Course outcomes:</b>		
The course will provide students an acquaintance with the concepts of strategic thinking as propounded by prominent classical and modern thinkers. Students will also develop analytical thinking regarding relevance of such thought to contemporary period.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
<b>I</b>	1. Kautilaya's Philosophy of war.	10
<b>II</b>	2. Sun Tzu- The Art of war.	05
<b>III</b>	3. Clausewitz's theories on war and politics.	06
<b>IV</b>	4. Mao-Tse-Tung's views on Guerrilla warfare.	08
<b>PART B</b>		
<b>V</b>	5 J.F.C. Fuller and Liddell Hart: Their views on Mechanized warfare	8
<b>VI</b>	6. Mahan's Views on Sea Power and Naval Warfare.	5
<b>VII</b>	7. Douhet and Mitchell: Their views on the Role of Air Power in Modern Warfare.	8
<b>VIII</b>	8. Y.Harkabi, John Foster Dulles and Andre Beaufre - Theories of Nuclear War and Deterrence. 9.Thoughts of Mahatama Gandhi and Nehru on Peace, Security and Development.	10
<b>Suggested Readings:</b>		
<ol style="list-style-type: none"> <li>Dass, S.T., (1987) An Introduction to the art of war</li> <li>Earl, E.M., (1943) Makers of Modern Strategy, Princeton.</li> <li>Fuller, J.F.C., (1998) Armament and History, Da Capo Press.</li> <li>Fuller, J.F.C., (1992) The Conduct of war, Da Capo Press.</li> <li>Shama Shastri., (2012) Kautilya's Arthshastra, Low price Publications.</li> <li>Tzu, Sun., (2015) The Art of War, Grapevine, India.</li> <li>Duffy, Christopher., (1987) Siege Warfare, Routledge Kegenpaul.</li> <li>Ropp, Theodore., (2000) War in the Modern World, John Hopkins.</li> <li>Beaufre Andre., (1965) Deterrence and Strategy, Faber &amp; Faber.</li> <li>Mao-Te-Tung., (1967) On the protracted War: Selected works, Foreign Language Press, Peiking.</li> <li>Nasultion, Abdul Haris., (1965) Fundamentals of Guerrilla Warfare, Fredrick A Prager.</li> <li>Reid, Brain Holden., (1987) J.F.C.Fuller: Military Thinker, Palgrave McMilan.</li> <li>Greene, T.N., (1962) The Guerrilla and How to Fight Him, Fredrick A Prager.</li> <li>जोहरी, आर.सी., (1997) पाश्चात्य सैन्य विचारक, चन्द्र प्रकाश एंड ब्रदर्स, हापुड़</li> <li>पण्डेय बाबूराम एवं पाण्डेय रामसूरत, (2005), स्ट्रॉतेजिक विचारक, बरेली बुक डिपो, बरेली</li> <li>सिंह लल्लनजी, (2012) आधुनिक सैन्य चिन्तक ( विचारक), प्रकाश बुक डिपो, बरेली</li> <li>अधिकारी, शेखर, (2001), आधुनिक स्त्रातेजिक चिंतन, एस.पी.जे. पब्लिकशंस, इलाहाबाद</li> <li>चेगुएवाराआर्गेस्तो., (2008) छापामार युद्ध, अनुवाद नरेश 'नदीम' प्रकाशन सस्थान, नई दिल्ली</li> <li>सुंतजू., (2010) युद्ध की कला, अनुवा डॉ. आलोक कुमार, मांफ्ले प्रेस, नोएडा</li> </ol>		
This course can be opted as an elective by the students of following subjects: Open for all The eligibility for this paper is 10+2 with any subject		
Suggested Continuous Evaluation Methods: Seminar/ Research Orientation/Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance		
Course prerequisites:To study this course,a student must have had the subject ALL ..... in class 12 <sup>th</sup> . The eligibility for this paper is 10+2 with any subject		
Suggested Equivalent online courses: <ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>		

**B.A. /B.Sc. II, Year II, Defence and Strategic Studies, Paper 04  
(Practical)**

Programme/Class: Diploma	Year: Second	Paper: IV
<b>Subject: Defence and Strategic Studies (Practical)</b>		
Course Code: A120402P	Course Title: Basics of TEWTs/Sand Model Exercises, Sketching, Discussion	
Credits: 1	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)		
Unit	Topic	No. of Lectures
<b>I</b>	<b>1.Elementary knowledge of-</b> a.Rank structure of the three services b.Study and description of ground C.Judging distance d.Section formation e.Patrolling <b>Or</b> <b>1.Sand Model Exercises</b> Battle of Panipat, 1526 A.D. Battle of Assaye, 1803 A.D.	08
<b>II</b>	<b>2. Sketching of the Charts of Indian Battles</b> a.Battle of Thagla Ridge, 1962. b.Kargil Conflict, 1999	05
<b>III</b>	<b>3. Sketching of the Charts of Western Battles</b> a..Battle of Trafalgar, 1805. b.Battle of Somme, 1919.	05
<b>IV</b>	4. Lecture and group discussion on current defence topics.	12
This course can be opted as an elective by the students of following subjects: Open for all .....		
<b>Suggested Continuous Evaluation Methods:</b> Test with multiple choice questions/ Research Orientation/ short and long answer questions, Record ,Viva Voce		
Course prerequisites: To study this course, a student must have had the subject .....in class/12 <sup>th</sup> / certificate/diploma. ....		

**B.A. /B.Sc III, Year III, Defence and Strategic Studies, Paper 01  
Indian Defence Mechanism  
(Theory)**

Programme/Class: Degree	Year: Third	Paper: I
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120501T	Course Title: <b>Indian Defence Machanism</b> ( Theory)	
<b>Course outcomes:Students will learn about the defence mechanism of India and evaluate its strengths and weaknesses.</b>		
Credits: 5	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
<b>I</b>	1. Introduction and Differences between Army , Military and Defence Forces 2. Second line Defence [introduction to Paramilitary Forces in brief)	08
<b>II</b>	2. The Indian Defence Forces a. Rank Structure of the Three Services. b. Recruitment methods for Defence Services. c .Important training Institution of the Three Services.	07

<b>III</b>	3.Higher Defence Organizations of India a. Power of the President of India in relation of Defence. b. Role and function of Ministry of Defence. c .Composition and function of Defence Committees/NSC. d .Chief of Staff and joint service Organization.	08
<b>IV</b>	4.Army Organization a.Organization of army Headquarters (Role of COAS and PSOs). b.Static and Field formation of Indian Army. c. Arms and Services.	07
PART B		
<b>V</b>	5. Air Force Organization a. Organization of Air Force Headquarters (Role of CAS and PSOs). b. Static and Field formation of Indian Air Force.	7
<b>VI</b>	6.Navy Organization a. Organization of Naval Headquarters (Role of CNS & PSOs). b. Static and Field formation of Indian Navy.	7
<b>VII</b>	7.Cooperation Between Armed Forces and Civil Authorities a. Maintenance of Law and Order b.Flood Relief Operations c .Rescue and Relief Operation	8
<b>VIII</b>	8.Indian's Defence Cooperation with Foreign Countries a. Defence Diplomacy. b. Cooperation on Capacity Building and Training c. Defence Partnerships with Major Powers	8
<b>Suggested Readings:</b>		
<ol style="list-style-type: none"> <li>1. Venkateswaran, A.L., (1967) Defence Organisation in India, New Delhi: Government of India.</li> <li>2. Government of India, (1924) The Army of India and its Evolution, Calcutta.</li> <li>3. Ministry of Defence, Government of India, Indian Armed Forces Year Book, (Annual).</li> <li>4. Palit, D.K., (1989) Essentials of Military Knowledge, New Delhi.</li> <li>5. Singh, Nagendra., (1967) Defence Mechanism of Modern State, New Delhi.</li> <li>6. शर्मा, डॉ. योगेन्द्र कुमार एवं निगम रामलाल, , (1998-99), सैन्य विज्ञान भाग-2, अल्का प्रकाशन कानपुर</li> <li>7. वार्षिक रिपोर्ट रक्षा एवं विदेश मंत्रालय-भारत सरकार</li> <li>8. कारडोजो, मेजर लइयान, , (2016), भारतीय सेना का गौरवशाली इतिहास, अनुवाद विनोद कुमार मिश्र, प्रभात प्रकाशन दिल्ली</li> </ol>		
This course can be opted as an elective by the students of following subjects: Open for all The eligibility for this paper is 10+2 with any subject		
Suggested Continuous Evaluation Methods: Seminar/ Research Orientation/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance		
Course prerequisites:To study this course,a student must have had the subject ALL..in class 12 <sup>th</sup> . The eligibility for this paper is 10+2 with any subject		
Suggested Equivalent online courses:		
<ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>		

**B.A./B.Sc III, Year III, Defence and Strategic Studies, Paper 02**

Nation Security of India

(Theory)

Programme/Class: Degree	Year: Third	Paper: II
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120502T	Course Title: <b>National Security of India</b> (Theory)	
<b>Course outcomes:</b> Students will learn about the Defence mechanism of India and evaluate its strengths and weaknesses.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks: 35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
I	<b>1. India's Geo-Strategic Location and significance.</b> a. India's Borders- Nature and characteristics of land borders. b. Indian ocean territory and its strategic significance	08
II	<b>2. Indian Concept of National Security</b> a. Meaning and Definition b. Threat Perceptions c. Types of threats to India	07
III	<b>3. India's Security Problems since independence.</b> a. Geo-political effects of partition. b. Effects on Armed Forces	08
IV	<b>4. Determinants of Indian Foreign Policy - Basic Determinants: Objectives of Indian foreign policy; global and regional perspective.</b>	07
PART B		
V	<b>4. External Dimensions of India's security</b> a. Security problems related to Pakistan including Indo-Pak wars. b. Security problems related to China including 1962 Sino-Indian war. c. Regional Security challenges. d. India's Maritime Security Challenges	07
VI	<b>5. Internal dimension of India's security</b> a. Terrorism in Jammu & Kashmir b. Insurgency in North eastern states c. Naxalism	07
VII	<b>6. Defence Organization in India: - Structure, Objectives, Role, and Problems.</b>	08
VIII	<b>7. National Security Council: Structure and Role</b> <b>8. National Security Management and Future Challenges</b>	08
<b>Suggested Readings:</b>		
<p>1. Bajpai, U.S., (1986) India and its Neighborhood: New Delhi, Lancer International. 2. Baranwal, S.P., (1984) Measures of Civil Defence in India: New Delhi, Guide Publications.</p> <p>3. Bobbing, Ross and Gordon, Sandy, (1992) India's Strategic Future: Delhi, Oxford University Press.</p> <p>4. Chatterjee, R.K. (1978) India's Land Borders- Problems and Challenges: New Delhi, Sterling Publishers.</p> <p>5. Chaudhury, Rahul Roy, (1995) Sea Power and India's Security, London, Brassey's.</p> <p>6. Dass, S.T., (1987) National Security in Perspective: Delhi, Gian Publishers.</p> <p>7. Kavic, Lorne J., (1967) India's Quest For Security: Defence Policies 1947-1965, Los Angeles, University of California Press.</p> <p>8. Menon, V.P., (1961) The Story of the Integration of Indian States: New Delhi, Orient Longmans.</p> <p>9. Nayar, V.K., (1992) Threats From Within: New Delhi, Lancer Publications.</p> <p>10. Rao, Ramakrishna and Sharma, R.C., (1991) India's Borders, New Delhi, Scholars' Publishing Forum.</p> <p>11. Rao, P.V.R., (1970) Defence Without Drift: Bombay, Popular Prakashan.</p> <p>12. Singh, Jaswant (1999) Defending India: Bangalore, Macmillan India Ltd.</p> <p>13. कलाम, डॉ. ए.पी.जे. अब्दुल एवं राजन वाई.एस., (2015), भारत 2020 और उसके बाद, प्रभात प्रकाशन नई दिल्ली</p> <p>14. बाला, मनमोहन, (2000), रक्षा विज्ञान आयुध तथा टेक्नोलॉजी, प्रताप प्रकाशन नई दिल्ली</p> <p>15. बाला, मनमोहन, (2005), युद्ध और सूचना प्रौद्योगिकी, विकास दीप प्राइवेट लि. नई दिल्ली</p> <p>16. शंकर, काली, उपग्रह संचार प्रणाली के बढ़ते कदम, बी.पी.बी. पब्लिकेशन नई दिल्ली</p>		

<p>This course can be opted as an elective by the students of following subjects: Open for all The eligibility for this paper is 10+2 with any subject</p> <p>Suggested Continuous Evaluation Methods: Seminar/ Research Orientation/Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance</p> <p>Suggested Equivalent online courses:</p> <ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>
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**B.A./B.Sc. III, Year III, Defence and Strategic Studies ,Paper 03  
(Practical)**

Programme/Class: Degree	Year: Third	Paper: III
<b>Subject: Defence and Strategic Studies (Practical)</b>		
Course Code: A120503P	Course Title: Military use of Electromagnetic Spectrum, Press Clipping, Tour	
Credits: 1	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)		
Unit	Topic	No. of Lectures
<b>I</b>	<b>1.Thermal Imaging and Sensors. 2.Radars and its significance.</b>	10
<b>II</b>	<b>3.Introduction to Electronic Warfare in terms of Lasers, ECM, ECCM</b>	08
<b>III</b>	<b>4.Press Clippings on allotted current topics with a brief assignment</b>	06
<b>IV</b>	<b>6.Educational Tour and its report.</b>	06
<p>This course can be opted as an elective by the students of following subjects: Open for all</p> <p><b>Suggested Continuous Evaluation Methods:</b> Test with multiple choice questions/ Research Orientation/short and long answer questions,or Short Presentation/Lecturer,Record ,Viva Voce</p> <p>Course prerequisites: To study this course, a student must have had the subject .....in class/12<sup>th</sup>/ certificate/diploma. .....</p>		

**B.A./B.Sc III, Year III, Defence and Strategic Studies, Paper 05**  
**Science and Technology in Relation to Warfare**  
**(Theory)**

Programme/Class: Degree	Year: Third	Paper: V
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120601T	Course Title: <b>Science and Technology in Relation to Warfare</b> (Theory)	
<b>Course outcomes:</b>		
<b>At the end of this course, students acquire knowledge on how significant the role of science and technology is to Society and to National Security. The paper also provides realization in contemplating on the military-industrial complex (MIC) of a nation.</b>		
Credits: 5	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
I	<b>1.Science, Technology and National Security.</b>	07
II	<b>2.Impact of Science and Technology on Society and warfare.</b>	07
III	<b>3.Transfer of Technology:</b> a .International interdependence b.Role of Multinational Corporations.	08
IV	<b>4.Armament technology (in brief):</b>	08

	<b>a. Armoured vehicles: Tanks and APC`s</b> <b>b. Aircrafts, UAV's and Missile</b> <b>c. Submarine and Aircraft carrier</b>	
	PART B	
V	5. Electronics Warfare: Concept and applications	07
VI	6. Ballistic Missile Defence (BMD): Concept and applications.	7
VII	7. Revolution in Military Affairs (RMA)	08
VIII	8. Defence R&D and Defence Production in India	08

**Suggested Readings:**

1. Arcangelis, Mariode, (1990) Electronics Warfare, Ratna , New Delhi.
2. Rehman, A. (1972) Science Technology and Society: New Delhi, People's Publishers House.
3. Anand. A. (2003) Information Technology: The future warfare weapons: New Delhi, Ocean books,.
4. Baranson, Jack. (1978) Technology and the Multinationals: Lexington, Lexington Books.
5. Johan Erickson (Ed.) (1966) The Military Technical Revolution: Its Impact on strategic and Foreign Policy: New York, Frederick A Prager.
6. Macksey, Kenneth (1986) Technology in War: The impact of Science on weapon development and modern Battle: NY, Prentice Hall.
7. Mann T.S., (1982) Transfer and Technology: Bombay, Himalaya Publications House.
8. Jasbir R.K, (1987) Handbook of military science and Armament Technology: Dehradun, Natraj publications.
9. Singer, H.W., (1988) Technology Transfer by Multinational Vol. I& II: New Delhi, Ashis.
10. Tiwari V.M. and Rajnikant, (1996) The high tech war at twentieth Century: New Delhi, Vikas.
11. Rajan, Y.S. (2001) Empowering India (with Economic Business & Technological strengths for the twenty First Century) : New Delhi, Hari Anand.
12. Robert H . Latiff, ( 2017) Future war, Penguin Random House.
13. कलाम, डॉ. ए.पी.जे. अब्दुल एवं राजन वाई.एस., (2015), भारत 2020 और उसके बाद, प्रभात प्रकाशन नई दिल्ली
14. बाला, मनमोहन , (2000), रक्षा विज्ञान आयुध तथा टेक्नोलॉजी, प्रताभ प्रकाशन नई दिल्ली
15. बाला, मनमोहन, , (2005), युद्ध और सूचना प्रौद्योगिकी, विकास दीप प्राइवेट लि. नई दिल्ली
16. शंकर, काली, उपग्रह संचार प्रणाली के बढ़ते कदम, बी.पी.बी. पब्लिकेशन नई दिल्ली

This course can be opted as an elective by the students of following subjects: Open for all  
The eligibility for this paper is 10+2 with any subject

**Suggested Continuous Evaluation Methods:**

Seminar/ Presentation on any topic of the above syllabus/ Research Orientation  
Test with multiple choice questions/ short and long answer questions  
Attendance

**Suggested Equivalent online courses:**

- Coursera
- Swayam



**B.A./B.Sc III, Year III, Defence and Strategic Studies, Paper 06****Military Psychology****(Theory)**

Programme/Class: Degree	Year: Third	Paper: VI
<b>Subject: Defence and Strategic Studies</b>		
Course Code: A120602T	Course Title: <b>Military Psychology</b> (Theory)	
<b>Course outcomes:</b> After having done this course, student would be able to understand and appreciate psychological aspects of war making, military leadership and emotional issues that are faced by soldiers during war and peace.		
Credits: 4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-60		
Units	Topic	No of Lectures
<b>I</b>	1. Military Psychology: Definition, Scope, Significance and its role during war and peace.	08
<b>II</b>	2. Psychological Weapons of War: Propaganda, rumor and indoctrination.	07
<b>III</b>	3. Fear and Panic in War: Causes, Consequences and Management.	08
<b>IV</b>	4. Military Leadership: Meaning, attributes, importance and role of training.	07
<b>PART B</b>		
<b>V</b>	5. Discipline: Definition, purpose and tools of maintaining discipline	7
<b>VI</b>	6. Motivation and Morale factors and their utilization in the armed forces.	7
<b>VII</b>	7. Man Management: -Concept, importance and strategy vis-à-vis armed forces.	8
<b>VIII</b>	8. Emotional problems and adjustment during war and peace.	8
<b>Suggested Readings:</b>		
1. Bartlett, F.C., (1927) Psychology and the Soldier, Cambridge, Cambridge University Press..		
2. Baynes, John., (1967) Morale.: A study of Men and courage London, Cassell.		
3. Boring, E.G., (ed.), (1945) Psychology for the Armed Services, Dehradun, Natraj Publishers.		
4. Chibber, M.L. (1986) Military Leadership to Prevent Military Coup, New Delhi, Lancer International		
5. Copeland, Norman., (1967) Psychology and the soldier, Dehradun, English Book Depot..		
6. Hasnain Qamar., (1967) Psychology for the fighting man, Dehradun, English Book Depot, Publishing Company.		
7. Lienbarger, P.M.A., (1954) Psychological Warfare, Washington, D.C. Combat Press.		
8. Raj Narain, (1979) Military Psychology, Agra: National Psychological Co-operation, 1st edition.		
9. Nidhi Maheshwar, (2016) Military Psychology: Concepts, Trends & Interventions, Sage Publication India Pvt Ltd.		
10. गुप्त परशुराम, (2015), सैन्य मनोविज्ञान, प्रकाश बुक डिपो, बरेली		
11. तिवारी, निरंकार, प्रसाद (2015), सैन्य मनोविज्ञान, ए.एस.आर. पब्लिकेशन, लखनऊ		
12. सिन्हा, हर्ष कुमार एवं सिंह, विनोद कुमार, सैन्य मनोविज्ञान, प्रत्युष पब्लिकेशन, नई दिल्ली		
This course can be opted as an elective by the students of following subjects: Open for all The eligibility for this paper is 10+2 with any subject		
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus /Research Orientation Test with multiple choice questions/ short and long answer questions Attendance		
Course prerequisites: To study this course, a student must have had the subject ..... in class/12 <sup>th</sup> / certificate/diploma		
Suggested Equivalent online courses:		
<ul style="list-style-type: none"> <li>• Coursera</li> <li>• Swayam</li> </ul>		

**B.A. /B.Sc. III ,Year III, Defence and Strategic Studies ,Paper 07  
(Practical)**

Programme/Class: Degree	Year: 3	Paper: VII
<b>Subject: Defence and Strategic Studies (Practical)</b>		
Course Code: A120603P	Course Title: Spotting Strategic Locations, Military Models, Presentations	
Credits: 1	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:35	
Total No. of Lectures-Tutorials-Practical-30 (60 hours)		
Unit	Topic	No. of Lectures
<b>I</b>	1. Strategic Maps of India: India and her neighbours; Indian States and Union Territories with Capitals; Strategic Raw Materials and Defence Industries and Atomic Reactors.	08
<b>II</b>	2. World: World Map in 1945, Countries of NATO, Non-Aligned Countries, Countries of South Asia, South East Asia, Far East and West Asia; Nuclear Nations, Indian Ocean Littoral States and World Sea Routes.	08
<b>III</b>	3. Making of Models - a. Fighter Plane. b. Battle Ship. c. Radar d. Submarine e. Tank f. Missile g. Helicopter	08
<b>IV</b>	4. Presentations on current defence topic	06
This course can be opted as an elective by the students of following subjects: Open for all		
<b>Suggested Continuous Evaluation Methods:</b> Test with multiple choice questions/short and long answer questions, or Short Presentation/Lecturer, Record, Viva Voce/ Research Orientation		
Course prerequisites: To study this course, a student must have had the subject .....in class/12 <sup>th</sup> / certificate/diploma. .....		