

Defence, Strategic and Geo Political Studies (School of Earth Science) (School of Earth Science) SECOND YEAR (Degree Course)

SEMESTER	PAPER CATEGORY	CREDITS	PAPER TITLE	PAPER
				CODE
	Core Subject A	04	Fundamentals of India's National Security	CCDSS 03
	Core Subject B	06	-	
SEMESTER - III	LAB-Practical	02	Practical	CCDSP 03
	Additional Interdisciplinary/Multidisciplinary	04	Cyber Security and Artificial Intelligence	AIMDSS 03
	Skill Course	02	Basics of Defence Journalism	SCDSS 03
	IKS - 1	02	Indian Knowledge System	
	Core Subject A	04	Economic Aspects of National Security	CCDSS 04
	Core Subject B	06	-	
SEMESTER - IV	LAB-Practical	02	Practical	CCDSP 04
	Additional Interdisciplinary/Multidisciplinary	04	Human Rights and Humanitarian Law	AIMDSS 04
	Skill Course	02	Introduction to Industrial Security Management	SCDSS 04
	IKS -2	02	Indian Knowledge System	



Defence, Strategic and Geo Political Studies (School of Earth Science) (School of Earth Science) THIRD YEAR (Degree Course)

SEMESTER	PAPER CATEGORY	CREDITS	PAPER TITLE	PAPER CODE
	Core Subject A	04	Defence Mechanism of India	CCDSSA 05
	Core Subject B	06	-	
SEMESTER - V	LAB-Practical	02	Practical	CCDSP 05
	Vocational Course/Field Visit/ Entrepreneurship Skills	04	Border Management	VC/FV/ESDSS 01
	Extracurricular Course/Compulsory Course	02	Cultural, Traditional, and Moral Values	
	Languages-I	02	(Indian, Modern, Regional Language-I)	
	Core Subject A	04	Evolution of Strategic Thought	CCDSSA 06
	Core Subject B	06	-	
SEMESTER - VI	LAB-Practical	02	Practical	CCDSP 06
	Vocational Course/Field Visit/ Entrepreneurship Skills Based on CS-1 or CS-2	04	Defence Tourism	VC/FV/ESDSS 02
	Communication Skills /CC	02	Based on Developing Soft Skills	
	Languages-II	02	Indian, Modern, Regional Language-II	

SECOND YEAR (DIPLOMA COURSE) SEMESTER-III

FUNDAMENTALS OF INDIA'S NATIONAL SECURITY

Objective: To develop special subject knowledge on the vital concept of National Security and the approaches to achieve National Security (Special reference to India).

Unit-I Introduction.

- A. Definition, Scope and features of the Concept of National Security.
- B. Concept of National Power elements of national power (tangibie and intangible).
- C. Fundamental factors, Values, goals and policies that determine National Security.

Unit-II Foreign Policy and Defence Policy.

- A. Definition, Meaning, Scope & Determinants of Defence Policy.
- B. Definition, Meaning, Scope, & Determinants of Foreign Policy.
- C. Linkage between Foreign policy and Defence policy.

Unit-III Threats to National Security.

- A. Meaning and Definition of Threat.
- B. Threat Perception.
- C. Types of threats and Threats to India.

Unit-IV Strategic Environment of India.

- A. Features of strategic environment its scope in policy making.
- B. India's Strategic environment Immediate Neighbours, Adjacent Regions, Indian Ocean.

- Bajpai, U.S. (ed) India's Security: The Politico-Strategic Environment, New Delhi: Lancers Books, 1983
- Barry, Buzon., People, State and Fear: The National Security Problems in International Relations, Sussex; Wheatsheaf Books, 1983.
- Dixit, J.N., Aceross Borders: Fifty Years of India's Forgeign Policy, New Delhi: Picus Books, 1998.
- Jayaramu, P.S., India's National Security and Foreign Policy, New Delhi: ABC Publishers, 1978.
- 5. Kaul, T.N., India and the New World Order, Vol. 1, New Delhi: Gyan, 2000,
- Kux, Dennis, Estranged Democracies: India and the United States 1941 1991, New Delhi: Sage Publications, 1994.
- Satish Kumar, (ed)., Yearbook on India's Foreign Policy, New Delhi: Deep & Deep, 1993.
- 8. Singh, L.J., National Defence and Security
- 9. Singh, L.J., National Security.
- Singh, L.J., Nature of War and North African Campaign (Hindi).

SECOND YEAR (DIPLOMA COURSE) SEMESTER-III

PRACTICAL

Programme/C	-	Year: Second	Semester: III		
	Total No. of Lectures-Tutorials-Practical-30 (60 hours)				
Unit		Торіс			
I	Relief Featur	Relief Features and their representation on the map. 06			
II	Types of slopes and their representation on the map 08				
III	Gradient – Determination of gradients. 06				
IV	Inter visibility – Determination of inter visibility in case of rise or fall of slope.				
This course can be opted as an elective by the students of following subjects: Open for all					
Suggested Continuous Evaluation Methods: Test with multiple choice questions/short and long answer questions,orRecord ,Viva Voce					

SECOND YEAR (DIPLOMA COURSE) SEMESTER-III CYBER SECURITY AND ARTIFICIAL INTELLIGENCE

Unit-I Information Security.

- A. Classification Security.
- B. Protective Measures.
- C. Investigation.
- D. Responsibility

Unit-II Information and Cyber Security Management.

- A. Information Security and Personal Practices.
- B. Threats and Counter Measures.

Unit-III Laws of Cyber Security.

- Indian Laws on Cyber Security.
- B. Management of Cyber Security.

Unit-IV Introduction and Basic concept of Artificial Intelligence.

- A. Meaning and Definition.
- B. Utility of Artificial Intelligence.

Unit-V Artificial Intelligence and National Security.

- A. Use of Artificial Intelligence in Armed Forces.
- B. Artificial intelligence in Military control and Military Operations.
- C. Role of Artificial Intelligence in National Security.

- Pavan Duggal, Textbook On Cyber Law, Tiniversal Law Publishing co, 2 edition, 2016.
- 2. Aparna Viswanathan, Cyber Law- Indian And International Perspectives On Key.
- Topics including Data security, E-Commerce, Cloud Computing And Cyber Crimes, Lexis Nexis; First edition 2012
- 4. Artificial Intelligence Sharbani Bhattacharya, University Science Pres, edition 2009
- Artificial intelligence, Pankaj Sharma SK Kataria & e Sons edition 2009

SECOND YEAR (DIPLOMA COURSE) SEMESTER-III

BASICS OF DEFENCE JOURNALISM

Objective: To Prepare the students in handling a specialized field of journalism i.e. defence journalism

Unit-I Introduction.

- A. Defence Journalism its features.
- B. Civil Journalism & Defence journalism differences.
- C. Defence Writing Need for specialist.
- D. Defence Journalism As a Profession.

Unit-III Defence News.

- A. Meaning and Defining Defence News.
- B. Kinds of Sources of defence News.
- C. Defence Writing Procedure.

Unit-IV Defence Reporting.

- A. Format languages and grammar.
- B. Forms Eye witness, computer assigned features.
- C. Concept of Graphics and Animation (Role of Modern Technology).

Unit-V Defence Terminology.

- A. Defence terms & Abbreviations.
- B. Military terms Weapons, Weapons system.
- C. Defence organization Rank and Rank structure in the services in India.

- Bhatt, S.C., Practical Journalism, Jaipur: Aavishkar, 2005.
- Chatterjee, R.K., Mass Communication, New Delhi: National Book Trust, 1973.
- Dhara, R., Journalism, Calcutta: Industry Publishers, 1945.
- Waren "K Agrie., (ed)., The Press and the Public Interest, Washington, D.C., Public Affairs Press, 1968.

SECOND YEAR (DIPLOMA COURSE) SEMESTER- IV

ECONOMIC ASPECTS OF NATIONAL SECURITY

Objective: After undergoing this course a student will be in a position to Mutual complementarities of economics and security would be learnt through this course. Also students learn the art of mobilizing resources for war, be it physical, fiscal or moral; and The importance of Logistics in War and the role of Defence Planning, Programming and Budgeting in India.

Unit-I Defence Economics: Meaning, Definition and Scope.

Unit-II Defence and Development: Concept and its implications for India;

Unit-III Economic Warfare; Effects of War on National Economy.

Unit-IV Assessment of War Potential (Resources of War) of a nation;

Unit-V Mobilization of Resources for War with reference to Physical, Fiscal and Moral Mobilization.

Unit-VI Importance of Logistics in War.

Unit-VII Defence Planning, Programming and Budgeting in India.

- Ghosh, A. K., (1996) India's Defence Budget and Expenditure Management in wider Context, Lancer, New Delhi.
- 2. Clark, J.J., (1996) The New Economics of National Defence, Random House.
- 3. Jack, D.T., (1940) Studies in Economic Warfare, PS King & Sons, London.
- Jalan, B. (2000) India's economic policy-preparing for 21st century, Penguin, New Delhi.
- 5. Knor, Klaus, (1962) War Potential of the Nations, Princeton University Press.
- 6. Mathews, Ron, (1998) Defence production in India, ABC Publishers, New Delhi.
- Sandler T., Hartley K. (1995) The Economics of Defence, Cambridge University Press.
- 8. Singh Jasjit, (2001) India's Defence Spending, Knowledge World, New Delhi.
- Subramanyam, K, (1972) Perspective in Defence Planning, Abhinav Publications, New Delhi.
- 10. Subramanyam, K, (1973) Defence and Development, Minerva, Calcutta.
- Thomas, Raju G. C., (1978) The Defence of India: A Budgetary Perspective of Strategy and Politics, Macmillan, Bombay.

SECOND YEAR (DIPLOMA COURSE)

SEMESTER- IV

PRACTICAL

-	nme/Class: na Course	Year: Second	Sen	nester: IV	
	Total No. of Lectures-Tutorials-Practical-30 (60 hours)				
Unit	Topic			No. of Lectures	
I	its various pa	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.			
П		To determine one's and enemy's position on the map by resection and intersection methods with the help of compass.			
III	Different met	Different method of marching in day and night 04			
IV	Compass var error. (ICE)	Compass variation and Determination of individual compass error. (ICE)			
v		To find out the bearing of a point from other point situated on the ground.			
This course can be opted as an elective by the students of following subjects: Open for all					
Suggested Continuous Evaluation Methods: Test with multiple choice questions/short and long answer questions or Record ,Viva Voce					

SECOND YEAR (DIPLOMA COURSE) SEMESTER- IV

HUMAN RIGHTS AND HUMANITATRIAN LAW

Unit-I Definition and evolution of the concept.

- A. Meaning, Nature and Development.
- B. Three Generation Rights.

Unit-II United Nations & Human Rights.

- A. UN Charter and the Universal Declaration of Human Rights.
- B. International Conventions and Covenants.

Unit-III Indian Perspective.

- A. Human Rights in Indian tradition- Civil, Political, Economic, Cultural Rights Women's Rights.
- B. Constitutional & Legal framework in India- Human Rights Commission & Special Commission for weaker section.

Unit-IV Issues and Challenges.

- A. Human Rights and challenges ethnic conflict, social & political violence, terrorism, environmental sources.
 - B. Rights of Refugees.
 - C. Internally Displaced people.

- Bajwa, G.S., Human Rights in India: Implementations and Violations, New Delhi: Sterling, 1995.
- Deshta, S., Deshta, K., Fundamental Human Rights, New Delhi: Deep & Deep, 2003.
- 3. Donnelly, Jack., The Concept of Human Rights, New York: St.Martin, 1985.
- Gibson, John, S., Dictionary of International Human Rights Law, Lanham, MD: Scarecrow Press, 1996.
- Mehta, P.L., Verma, N., Human Rights Under the Indian Constitution, New Delhi: Deep & Deep, 1999.
- Sehgal, B.P.S., Human Rights in India: Problems and Prospects, New Delhi: Deep & Deep' 2004

SECOND YEAR (DIPLOMA COURSE)

SEMESTER- IV

INTRODUCTION TO INDUSTRIAL SECURITY MANAGEMENT

Unit-I Security: Conceptual Aspects.

- A. Introduction.
- B. Security: Definition, Meaning and Scope/Concepts.
- C. Type of Security.
- D. Type of security Service.
- E. Role of private Security Service.

Unit-II Functions of security.

- A. Preventive Security.
- B. Protective Security.
- C. Detective security.
- D. Punitive security.

Unit-III Security Awareness.

- A. Introduction, Concept, Scope and Nature.
- B. The Security Awareness program.

Unit-IV Access control system.

- A. Varieties and access controls.
- B. Electronic security system.
- C. Prevention of mischief and sabotage.

- Sharma R.P. (2005), Industrial Security Management.
- Subramanian, S. (2006), Industrial Security Management.
- Russell, David L., Arlow, Pieter C. (2015), Industrial Security: Managing Security in the 21th Century.
- 4. Burstein, Harvey, (1986), Industrial Security Management.
- 5. Mccrie, Robert (2011), Security Operations Management.
- Landucci Gabriele, Khakzad Nima, Reniers (2020), Physical Security in the Process Industry: Theory with Applications.

THIRD YEAR (DEGREE COURSE) SEMESTER-V DEFENCE MECHANISM OF INDIA

Course Objectives: This paper aims to explore India's defence architecture by examining the structure and roles of its higher defence organisations, the Army, Navy, and Air Force. It seeks to outline their doctrines, histories, recruitment, training, and key platforms. Additionally, it will analyse joint structures and central armed police forces like the BSF and CRPF. This paper strives to provide a clear, engaging overview of India's defence framework and its critical role in ensuring national security.

UNIT I: HIGHER DEFENCE ORGANISATIONS OF INDIA.

- 1. Power of the President of India in relation of Defence.
- 2. CCS, NSA and NSAB: Roles and Composition
- 3. Ministry of Defence: Role, Historical Evolution and Organisational Structure.

UNIT II: INDIAN ARMY

- 1. Role, Doctrine and Brief History
- 2. Recruitment Policies and Training Establishments
- 3. Rank Structure, Organisational Structure, Arms and Services, Units and Formations
- 4. Major Combat and Support Platforms

UNIT III: INDIAN AIR FORCE

- 1. Role, Doctrine and Brief History
- 2. Recruitment Policies and Training Establishments
- 3. Rank Structure, Organisational Structure, Units and Establishments
- 4. Major Aviation and Support Platforms

UNIT IV: INDIAN NAVY

- 1. Role, Doctrine and Brief History
- 2. Recruitment Policies and Training Establishments
- 3. Rank Structure, Organisational Structure, Branches, Units and Establishments
- 4. Major Naval, Aviation and Support Platforms

UNIT-V: JOINT STRUCTURES, PARAMILITARY AND CAPFS

- 1. CDS and HQ IDS
- 2. SFC, ANC, AFSOD, DCA, DIA etc.
- 3. AR, BSF, CG, RR, ITBP, SSB, CRPF, CISF etc.

- Annual Report 2018-19. (2019). Ministry of Defence, Government of India.
- Annual Report 2021-22. (2022). Ministry of Home Affairs, Government of India.
- Doctrine of the Indian Air Force. (2022). Directorate of Operations (IEW), IAF.
- Gupta. (2018). How India Manages Its National Security. Penguin/Viking.
- Indian Army Doctrine. (2004). HQ Army Training Command.
- Indian Maritime Doctrine. (2009). Integrated HQ, Ministry of Defence (Navy).
- Joint Doctrine: Indian Armed Forces. (2017). HQ Integrated Defence Staff, MoD.
- Krishna Rao. (1991). Prepare or Perish: A Study of National Security. Lancer Publishers.
- Thapliyal. (2018). Military History of India. Rupa Publications.

THIRD YEAR (DEGREE COURSE)

SEMESTER-V

PRACTICAL

Prograi	nme/Class: Degree	Year: Third	Semester: V	
Course				
Total N	o. of Lectures-Tutori	als-Practical-30 (60 l	nours)	
Unit		Topic		No. of
	Elementary	Tactics Upto-Infant	ry Platoon Level-I	Lectures
I	Sand Model: Meanin	ng, Importance and pro	eparing.	06
П	Detailed Study of	an Infantry Section	n including Organization	08
	Weapons and Equipments.			
Ш	Section Formations: Section in Attack, Section in Defence, Section 06			
	in Withdrawl			
IV	Study of Field Craft	with reference to the fo	ollowing:	10
	a) Ground			
	b) Cover			
	c) Camouflage			
	d) Concealment			
e) Observation				
This course can be opted as an elective by the students of following subjects: Open for all				
Suggested Continuous Evaluation Methods: Test with multiple choice questions/short and long answer questions or Record ,Viva Voce				

THIRD YEAR (DEGREE COURSE) SEMESTER-V

Vocational Course/Field Visit/Entrepreneurship Skills

	BACHELOR PROGRAMME						
Year: III			Semester:V				
	Subject: Defence, Strategic and Geo Political Studies						
	Type of Paper: Vocational Course/Field Visit/Entrepreneurship Skills						
	(4 Credits Per Course)						
Paper Code : VC/FV/ESDSS01		Pape	r Name: B	order M	anagem	ent	
Outline	Visit of Border Area, Bord	ler Is	ssues and	Challenges	and Stu	dy of	Border
	Development Programmes.						

Vocational Course/Field Visit/Entrepreneurship Skills Outcome: Students will able to understand Border Structure, nature of threats and Challenges also various Border Development Programmes (B.D.P.).

THIRD YEAR (DEGREE COURSE) SEMESTER-VI EVOLUTION OF STRATEGIC THOUGHT

Course Objective: The paper examines the development of strategic thought from ancient to modern times, focusing on key military theorists and doctrines, and enabling students to understand the enduring principles and changing contexts of strategy in war and security.

UNIT 1

- 1. CONCEPT OF STRATEGY AND STRATEGIC THOUGHT
- 2. CONCEPT OF MILITARY STRATEGY

UNIT 2

- 1. KAUTILYA'S PHILOSOPHY OF WAR
- 2. SUN TZU AND THE ART OF WAR

UNIT 3

- 1. MACHIAVELLI'S VIEWS ON WAR
- 2. CLAUSEWITZ THEORY OF WAR

UNIT 4

- 1. JOHN FOSTER DULLES DOCTRINE OF MASSIVE RETALIATION
- 2. ANDRÉ BEAUFRE'S THEORY OF NUCLEAR DETERRENCE

- Earle, E. M. (Ed.). (1959). *Makers of modern strategy: Military thought from Machiavelli to Hitler*. Princeton University Press.
- Freedman, L. (2013). Strategy: A history. Oxford University Press.
- Gray, C. S. (1999). *Modern strategy*. Oxford University Press.

- Kautilya. (2016). *The Arthashastra* (L. N. Rangarajan, Trans.). Penguin Classics. (Original work ca. 4th century BCE)
- Sun Tzu. (2005). *The Art of War* (S. B. Griffith, Trans.). Oxford University Press. (Original work ca. 5th century BCE)
- Liddell Hart, B. H. (1954). Strategy (2nd ed.). Praeger.
- Machiavelli, N. (1992). *The Art of War* (P. Bondanella & M. Musa, Trans.). Oxford University Press. (Original work 1521)
- Machiavelli, N. (2008). *The Prince* (H. C. Mansfield, Trans.). University of Chicago Press. (Original work 1532)
- Clausewitz, C. v. (2008). *On War* (M. Howard & P. Paret, Trans.). Princeton University Press. (Original work 1832)
- Dulles, J. F. (1944). War or peace. Harper & Brothers.
- Beaufre, A. (1965). *An introduction to strategy*. Faber & Faber. (Original work, theory of nuclear deterrence)
- Beaufre, A. (1971). Deterrence and strategy. Praeger.
- Freedman, L. (1981). *The evolution of nuclear strategy*. Palgrave Macmillan.

THIRD YEAR (DEGREE COURSE) SEMESTER-VI PRACTICAL

Progra	mme/Class: Degree	Year: Third	Semester: VI	
Course				
Total N	o. of Lectures-Tutori	als-Practical-30 (60 ho	urs)	
Unit	Unit Topic No. of			
	Elementary Tactics Upto-Infantry Platoon Level-II Lectures			Lectures
I	Platoon Formation, T	Tactical Formation of Pl	atoon, Platoon in Attack,	08
	Platoon in Defence, Platoon in Withdrawl.			
П	Detailed Study of an Infantry platoon including Organization 10			
	Weapons and Equipments.			
Ш	III Application of Fire, Fire Control and Fire Control Orders. 06			06
IV	IV Verbal Order. 06			06
This course can be opted as an elective by the students of following subjects: Open for				
all				
Suggested Continuous Evaluation Methods:				
Test with multiple choice questions/short and long answer questions or Record ,Viva				

Voce

THIRD YEAR (DEGREE COURSE) SEMESTER-VI

Vocational Course/Field Visit/Entrepreneurship Skills

BACHELOR PROGRAMME				
Year: III		Semester:VI		
	Subject: Defence, Strategic and Geo Political Studies			
	Type of Paper: Vocational Course/Field Visit/Entrepreneurship Skills			
(4 Credits Per Course)				
Paper Cod	Paper Code : VC/FV/ESDSS02 Paper Name: Defence Tourism			
Outline	In view of the courses of the Defence, Strategic and Geo Political Studies. The			
	Student are required to visit the installation of military, signification so as to enable			
	them to understand the ground realities.			

Vocational Course/Field Visit/Entrepreneurship Skills Outcome: Students will able to understand the installation of military signification and their importance in nation building.