Vidyasagar University

Curriculum for B.Sc. (General) in Defence Studies [Choice Based Credit System]

Semester-I

Course	Course Code	Name of the Subjects	Course Type/ Nature	Sche	Teaching Scheme in hour per week		Credit	Marks
				L	T	P		
CC1		C1T: War and	Core	5	1	0	6	75
[DSC-1A]		Theories of Warfare	Course-1					
CC2	TBD	DSC-2A (other	Core				6	75
[DSC-2A]		Discipline)	Course-2					
CC3	TBD	DSC-3A (other	Core				6	75
[DSC-3A]		Discipline)	Course-3					
AECC		English	AECC	1	1	0	2	50
		-	(Elective)					
		Semester Total					20	275

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided, AECC= Ability Enhancement Compulsory Course

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2, **DSC-3** = Discipline Specific Core of Subject-3.

Semester-I Core Course (CC)

CC-1: War and Theories of Warfare

Credits 06

C1T: War and Theories of Warfare

- 1. Concept, causes and Theories of war
- 2. Type of war
 - 2.1 conventional war
 - 2.1.1 Limited war
 - 2.1.2 Total war
 - 2.2 Unconventional war
 - 2.2.1 Low Intensity
 - 2.2.2 Guerrilla war
 - 2.2.3 Insurgency and counter-insurgency
 - 2.3 Nuclear, Biological and chemical war: consequences and Remedies
- 3. Principals, operations, strategy, Tactics and logistics of Warfare
- 4. The Future of War
 - 4.1 Globalisation and its Effects
 - 4.2 Concept of Escalation theories of Herman Khan
 - 4.3 Concept of Jihad
 - 4.4 Revolution of Military Affairs

Suggested Readings:

- 1. Animesh Roy, The land and the people: Mizoram, Oxford University Press
- 2. Ahar Gat, War and Human civilization, Oxford University Press
- 3. C. Colher (ed.), The future of warfare, Routledeg.
- 4. David Killullen, Counterinsurgency, Oxford University Press.
- 5. J. Bandyopadhyay, The Maing of India's Foreign Policy: Determinants Institutions, Processes Personalities (1970), Allied.
- 6. Kaushik Roy (ed), The Oxford Companan to Modern Warfare in India, Oxford University Press.
- 7. Kaushik Roy, Frontiers, Routledge.
- 8. Kaushik Roy, Armed Force of Independed India, Manolur.
- 9. Kaushik Roy (ed), War and Society in India, Oxford University Press.
- 10. M. L. Sali, Military Geography, Manas Publication, New Delhi.
- 11. Peter Jackson, The Delhi Sultanate: A Political and Military History, Cambridge University Press.
- 12. Stephen Peter Rosen, India and its Armes, Oxford University press.
- 13. Stephen Cohen, The Indian Army, Oxford University press.
- 14. S. D Muni, India and its Neighbors in International Studies, JNU,1993.
- 15. Verinder Grover & Ranjan Arora, Partition of India, Indo-Park Wars and the UNO,1999, Deep Publication

Vidyasagar University

Curriculum for B. Sc (General) in Defence Studies

[Choice Based Credit System]

Semester-II

Course	Course Code	Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week		Credit	Marks	
				L	T	Р		
DSC-1B		DSC1BT: National Security and Indian history of war DSC1BP: Practical	Core Course	4	0	4	6	75
DSC-2B	TBD	DSC-2B (Other Discipline)	Core Course				6	75
DSC-3B	TBD	DSC-3B (Other Discipline)	Core Course				6	75
AECC (Elective)		ENVS	AECC(Elective)				4	100
		Semester Total					22	325

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided, AECC= Ability Enhancement Compulsory Course

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

DSC-3 = Discipline Specific Core of Subject-3.

Semester-II

Core Course (CC)

DSC-1B (CC-2): National Security and Indian History of War Credits 06

DSC1BT: National Security and Indian History of War

Credits 04

Course Contents

A. National Security: concepts and issues

Unit-I: Evolution of the concept of National Security:

Objectives and Elements of National Security. Emergence of the specialist perspective of national security. Marxist concept of national security. Non- statist national security

Unit-II: Geo-Strategic aspects of Defence and security:

Factors affecting war and security – Boundary, size and shape, topography. Location, climate population. Strategic resources. Frontiers and its characteristics. Sea coasts and ports

Unit-III: Economic aspects of Defence and security

Industrial Developments and defence. Transport and Communications. Defence Expenditure and Procurement. Science and Technology in Defence. Effects on war on economy

Unit-IV: National security - Internal and External

Problems of Internal Security and its causes. Problems of External Security – Threats from Hostile Neighbouring Countries, Cross Boarder Terrorism. Foreign Policy Considerations. International Obligation for Peace and Security.

B. Indian History of War

- 1. War: Definitions, objectives, scope, causes and effects, contributions of war.
- 2. Indo-Greek Art of war: Battle of Jhelum (326 B.C)
- 3. Indo-Turk Art of war: Battle of Tarrain I & II (1191 & 1192 A.D.)
- 4. Battle of Panipat-I (1526 A.D.)
- 5. Battle of Panipat-II (1556 A.D.)
- 6. Battle of Haldighat (1576 A.D.)
- 7. Battle of Plassy (1757A.D.)
- 8. Battle of Panipat-III (1761A.D)
- 9. Battle of Chilianwala (1849AD)
- 10. Battle of Assaye (1803 AD)

DSC1BP: Practical Credits 02

1. Prepare sand models of Battle formations of the following battles and draw sketches of the same on plain papers:

- a. Battle of Plassey,
- b. Battle of Chillianwalla,
- c. Three Battles of Panipath.
- 2. **News Paper Clippings:** News Paper clippings on securities related issues or related defense topics and a short essay on the basis of clippings to be produced.
- 3. **Field visit:** Field visit to a place of military interests. Students will submit a field report.
- 4. **Laboratory Note Book:** Students will be required to maintain records of all works done in connection with the topics taught in this paper.

Suggested Readings:

- 1. K. Subrahmanum, Our National Security
- 2. Lt. Gen. O. Kathpalia, National Security Perspective
- 3. Bandopadhaya, Making of India's Foreign Policy
- 4. U. S. Bajpai, India's Security
- 5. K. Subrahmanum, Safeguarding the Republic Ed, Aruna Asaf Ali, India's Unity and Security Challenges
- 6. Major Shiam Dal & P. K. Mukherjee, Text Book of Military Science, Vol. I & II 3
- 7. Dolly Arora, Internal Security in India
- 8. Bhatia, H.S. Military History of British India, Deep & Deep Publication. New Delhi
- 9. J.N. Sarkar, Military History of India
- 10. Akhtar Majee, No Farewell to Arms: Strategic issues in International Relations, New Delhi: Lancer Publishers Pvt. Ltd., 1991
- 11. Yengeny Dologopolov, The Army and the Revolutionary Transformation of Society, Moscow: Progress Publishers
- 12. Halperin Morton, *Contemporary Military Strategy*, Faber & Faber; Revised edition (December, 1970)
- 13. Maurice Clark *Reading in the economics of War*, University of California Libraries, 1918
- 14. Sexena K.M. The Miltary system of India, Sterling Publication, New Delhi.
- 15. Sali M.L., India China Border Dispute, Ashish Publication, New Delhi.
- 16. Major D.K. Plait, The Essentials of Military Knowledge
- 17. V.K.R.V. Rao, War in Indian Economy.

Vidyasagar University

Curriculum for B. A (General) in

Defence Studies

[Choice Based Credit System]

Semester-III

Course	Course	Name of the Subjects	Course	Teaching Scheme			Credit	Marks
	Code		Type/	in hou	in hour per week			
			Nature	L	T	P		
DSC-1C		DSC1CT: Defence Mechanism of India and Military Geography DSC1CP: Practical	Core Course	4	0	4	6	75
DSC-2C	TBD	DSC-2C (Other Discipline)	Core Course				6	75
AECC Core[L-2]		English-2	AECC-Core [Language core]	5	1	0	6	75
SEC-1		SEC-1: Defence Management Or Basics of Defence Journalism Or Consumer Protection Rights	Skill Enhancement Course -1	1	1	0	2	50
		Semester Total					20	275

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided, DSC-1 = Discipline Specific Core of Subject-1, DSC-2 = Discipline Specific Core of Subject-2. AECC-Core [L-2]: Ability Enhancement Compulsory Course-Core [Language Core]. SEC - Skill Enhancement Course.

Semester-III Core Course (CC)

DSC-1C (CC-3): Defence Mechanism of India and Military Geography

Credits 06

DSC1CT: Defence Mechanism of India and Military Geography

Credits 04

Course Contents:

A: National Security Organisation

National policy- Definition and objectives. National Defense Policy - Policy and Methods - National Defense policy of Post - independent India. Public information, Publicity, and propaganda. Role of Intelligence. National Security System including NSG

B. Defence Mechanism of India:

- a) Organisationa and administration Ministry of Defence: Higher Defence Organizations of India Power of the President of India in relation of Defence. Role and function of Ministry of Defence. Composition and function of Defence Committees. Chief of Staff and joint service Organization
- b) The Indian Defence Forces: Recruitment methods for Defence services. Important training institution of the three services. Second line of Defenses: Armed Force of the Union, History, formation, Division, function. Paramilitary Forces: Indian Coast Guard, Assam Rifles, Special Frontier Forces. Central Armed Police Forces: CRPF, BSF, ITBP, SSB, and CISF. Other Forces: NSG, SPG, RPF. Special Forces: Para Special Force [Para (SF)], Ghatak Force, marine Commando (MARCOS), Garud Commando Force. National Cadet Corps (NCC). Territorial Army
- c) Organisation and administration of Defence forces Army, Navy and Air Force.

Functional Organisation of Indian Army: (1) Army: Organization of army Headquarters - Static and Field formation- infantry and Armoured Corps – Arms and Services - Artillery – Air Defence, Engineers, Signals and Military aviation – Role of ASC,EME,AMC and Engineers in Logistic management- Role of intelligence, education, legal. Weapons of Indian Army. (2) Air Force Organization of India: Organization of Air Force Headquarters. Static and Field formation of Indian Air Force. Types of Aircrafts. (3) Navy Organization of India: Organization of Naval Headquarters. Static and Field formation of Indian Navy. Types of Warships.

- d) Rank Structure of the Three Services: Army, Navy and Air Force.
- **C: Defence Pacts and Agreements:** Pacts and Treaties Concepts and Scope. NATO, WARSAW, CENTO, SEATO, Tashkhand treaty and Panchsheel. SAARC economic and social Cooperation. Non-Aligned Movements (NAM). Role of SAARC and NAM in establishing world peace. India's relation with other Powers USA, Russia, UK, France, China, India & Israel, India & BRICKS, India &

Afganistan. Disarmaments – NPT, Civil Nuclear Agreements, Future Nuclear Cooperation, Pokhran I & II.

D: Military Geography:

Introduction: Meaning, nature, scope and elements of Military Geography. Role of geography in military application. Military Geography in India and defense problem. Role of geography in different warfare. Communication routes- land, sea and aerial- strategic scope. Population and Power.

Evolution of Military Geography: a) History & Development. b) Founders of Military Geography - F. Ratzal,, A.T. Mahan, Sir. Halfred Mackinder, Karl Haushofer, N.J. Spykman.

Applied Military Geography: Brief idea and application of a) Global Positioning System (GPS) b) Global Information System (GIS) c) Remote Sensing.

E: Map Reading

Theoretical aspects of Map Reading: Definition of Map, Introduction to types of Maps, Civil and Military Map, Conventional Signs. Scales & Grid System. Topographical forms and technical terms. Basic knowledge of Relief, Contours and Gradients. Cardinal points and Types of North. Types of bearings and use of Service Protractor. Prismatic compass and its use. Setting of a Map.

DSC1CP: Practical Credits 02

A. Map Reading:

- 1. Map civil and military.
- 2. Topographical sheet
- 3. Preparation of index to sheet.
- 4. Determination and construction of different types of scales.
- 5. Conventional sign civil and military
- 6. Map reference: Latitude and Longitude. Four and Six figure reference. Use of Romer.
- 7. Compass and its use.
- 8. Service protector and its use.
- 9. Bearing & conversion of bearing.
- 10. Field sketching, eye and memory sketching.
- 11. Location and identification of objects from ground to map and vice-versa.
- 12. Relief and its representation.
- 13. Contour line and their uses.
- 14. Determination of Gradients.
- 15. Determination of intra-visibility contour, Gradient and Proportion methods.
- 16. Preparation of night march chart.
- 17. Preparation of weather chart.
- 18. Determination of visibility of survey maps of hilly region by comparing gradients and section drawing methods.

B. Sketching of different strategically information on maps of the world and India:

ASEAN, European Union, G-14 and G-15. NATO, NAM Countries, Nuclear Nations of the world, SAARC and UNO Countries. Nuclear power station of India, Border Roads of India.

C. Field visit report

Field visit to the installation of military significance so as to enable the students to understand the ground realities. Based on the field study the students have to prepare their respective tour reports and the candidate would be examined at the time of practical examination of the subjects.

D. Laboratory Note Books

Students will be required to maintain records of all works done in connection with the topics taught in this paper.

Skill Enhancement Course (SEC)

SEC-1: Defence Management

Credits 02

SEC1T: Defence Management

Suggested Reading:

Unit – I:

Principles of Management: motivation, communication, decision - making process; Leadership. Defence Management: Definition, Scope.

Unit - II:

Defence organization – nature and structure - Line and staff organization, Pyramid hierarchy in Army, Navy and Air Force.

Unit – III:

Personnel Management – Staffing: Recruitment and Training.

Unit - IV:

System Analysis – Qualitative management and evaluation of Defence Forces.

Unit – V:

Cost Effectiveness – Force Level, Production and procurements of weapons systems and Research & Development.

SEC-1: Basics of Defence Journalism

Credits 02

SEC1T: Basics of Defence Journalism

Course Contents:

Unit -II:

Introduction: Definition, nature and scope of Journalism - Qualifications, Duties and Responsibilities of Journalists - Journalism as a profession - Media and Society.

Characteristics of Mass Media: Newspaper, Magazine, Radio, TV, Cinema.

Defence Journalism: its features, Differences between Civil and Defence Journalism. Defence Writing: need. Defence Journalism – Profession. Journalistic writing, characteristics and types - news, features, articles, editorials, columns, letters to the editors & review. Code of ethics for media - brief introduction to recent trends in mass media; Cultural imperialism, Infotainment, media activism, agenda setting, gate keeping.

Unit-II:

Defence News: a) Meaning and Defining Defence News, b) Kinds of sources of Defence News, c) Defence Writing Procedure.

Unit-III:

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-IV:

Defence Terminology: a) Defence terms & abbreviations, b) Military terms – weapons, weapons system, c) Defence organization – Rank and Rank structure in the services in India. Structure of the Defence establishments in India.

Unit-V:

Problem in Defence writing: a) Media Ethics, b) Media Laws, c) Problem in Defence writing-Political pressure, Official secrecy, etc. d) Introducing existing Defence Journals Sainik, Samachar, Trishul, Strategic digest, Strategic analysis, etc.

Or

SEC-1: Consumer Protection Rights

Credits 02

SEC1T: Consumer Protection Rights

Course Contents:

Unit-I: Consumer and Consumerism: Basic concepts.

Unit-II: Consumer Protection: International Scenario - Consumer Protection India - Consumer Protection Act- Consumer Forums.

Unit-III: Adulteration and Consumer, Environment and Consumer, Insurance and Consumer.

Unit-IV: Misleading Advertisement and Consumer, Defective Goods and Services and Consumer, Cosmetics and Consumer.

Unit-V: Consumer Movement in India.

Vidyasagar University

Curriculum for B. Sc (General) in Defence Studies

[Choice Based Credit System]

Semester-IV

Course	Course Code	Name of the Subjects	Course Type/		Teaching Scheme in hour per week			Marks
	Couc		Nature	L	T	P	-	
DSC-1D		DSC1DT: Science & Technology for Defence and National Security, Weapons & Armaments and Arms control & Disarmament DSC1DP: Practical	Core Course	4	0	4	6	75
DSC-2D	TBD	DSC-2D (Other Discipline)	Core Course				6	75
DSC-3D	TBD	DSC-3D (Other Discipline)	Core Course				6	75
SEC-2		SEC-2: TBD	Skill Enhancement Course -2	1	1	0	2	50
		Semester Total					20	275

L=Lecture, T=Tutorial, P=Practical, CC = Core Course, TBD = To be decided,

DSC-1 = Discipline Specific Core of Subject-1, **DSC-2** = Discipline Specific Core of Subject-2,

DSC-3 = Discipline Specific Core of Subject-3. **SEC** - Skill Enhancement Course.

List of Core Courses (CC) and Electives

Core Course (CC)

DSC-1D: Science & Technology for Defence and National Security, Weapons & Armaments and Arms control & Disarmament

Skill Enhancement Courses (SEC)

SEC-2: India's Strategic Culture

Or

SEC-2: Logistics Management to the Indian Armed Forces

Or

SEC-2: Defense Industrial Potential, Transportation and Communication

System in India

Or

SEC-2: Fundamentals of Peace



DSC-1D (CC-4): Science & Technology for Defence and National Security, Weapons & Armaments and Arms control & Disarmament. Credits 06

DSC1DT: Science & Technology for Defence and National Security, Weapons & Armaments and Arms control & Disarmament.

Credits 04

Course Contents:

A. Science, technology for Defence and National Security

- **1.** Military Technology Introduction to Military Technology its relevance to National Security.
- **2.** Warfare and Technology: Introduction, concept, historical evolution of warfare, evolution of science & technology, synergy of warfare and science & technology.
- **3. Science & technology and its Scope :** (a) S&T applications Military, Non-military, and Dual usage. (b) Industrial revolution & new technologies- IC- Engine, Radio, Electricity, (c) Emerging Technologies- Introduction to emerging technologies Energy, Electronics, Computers, nanotech and Artificial Intelligence, Material Science, Biotechnology, Transportation and vehicle technology, Nuclear science, Oceanography, Space technology. Emerging technologies & warfare (a) Information Technology and communication warfare. (b) Robotics and Cyber war.
- (c) R M A revolution in military affairs.
- **4.** Application of technologies to: i. Armament and Weapon systems Weapons Technology & Warfare (a) Weapons of Land Warfare- types of arms and armaments & artillery. (b) Naval Weapons- types of ships, aircraft carrier, submarines, torpedeo. (c) Aerial War Weapons- types of aircrafts, missiles, satellites, radars. ii. Missile Technology. iii. Communications and Radar technology, iv. Electronic Warfare and Information Warfare. **v.** RNBC Warfare and Nuclear Energy, vi. Intelligence, vii. Logistics (transport, supplies, inventory, medical, repair, clothing and equipment), viii. Border Management.
- **5.** Impact of developing technologies on Military Doctrine and conduct of warfare.
- **6.** Application of new technologies for internal security, disaster management, training and administration.
- **7.** Non military use of modern technologies and their impact on National Security (Power and energy, Trade, Economy, Banking, Media etc).
- **8.** Weapons Technology and India- (a) Pioneering institutions and its contributions.
- (b) S & T policy of India. (c) D R D O its role in weapons development.

B. Weapons and Armaments:

- a. Evolution of arms and armaments in art of war.
- b. **Modern weapons** Small Arms Theories of small arms. History, characteristics, design, variant, operating mechanism and military significance of following common arms used in Indian Army: Glock, Mouser, IM1 Galil snaiper. .22 Rifle, .303 Rifle, 7.62 Self Loading Rifle . INSAS, LMG, 5.56 mm Rifle. Light Machine Gun (LMG).Multi caliber Individual Weapon System (MCIWS). Modern Submachine Carbine (MSMC), Artillery: Artillery Gun, No 35 HE Grenade, 2 inch Mortar. 40mm L-60 and L-70 BOFFORS GUN. DRDO 155 mm artillery gun, Dhanush Howitzer Indian Fields Gun. Shell and Ammunition: Explosive, Rockets and Mortar-Properties & Types. Missiles: Concept, characteristics, types. Anti Tank: Brief idea. Nuclear explosive: History, uses, effects, science for formation of nuclear bomb.

Weapon Carriers: Characteristics, mechanisms of operation, fire power and military importance of following: Land war weapon carrier, Naval war weapon carrier, Air war weapon carrier, Strategic transport aircraft, Tactile transport aircraft. Military Glider, Military Helicopter Fighter airplane, Bomber, Fighter- Bomber Airplane.

Weapons of Mass Destruction - Chemical & Biological Weapons: concept, characteristics and , uses. Nuclear weapons: Nuclear Command Authority in India. Strategic forces command, Indian land based nuclear armed ballistic missile, : Indian Sea based nuclear armed ballistic missiles, Nuclear armed cruise missiles. Air Defense: Brief idea.

C. Arms control and Disarmament

- 1. Introduction: a. Definition of arms control, Arms limitations, Arms reduction and Arms trade. b. Differences between Arms control, Arms limitations, Arms reduction and Arms trade. c. Nature and Scope of arms control and Disarmament. d. Efforts towards Disarmament from Treaty of Westphalia to World War II
- **2.** UN and Disarmament: Efforts towards the formation of the UNO. UN's Perception on Disarmament and Arms control. Major efforts till the Disarmament decade. Causes and failures. Disarmament Efforts Success story.
- 3. Disarmament efforts by other Bodies- a. NAM b. Nuclear Free Zones c. Efforts of India

DSC1DP: Practical Credit 02

A. Weapons Systems

1. Demonstrate following arms small arms: .22 Rifles. .303 Rifle, 7.62 Self Loading Rifles(SLR), Indian Small Arms System (INSAS) 5.56 mm Rifle, Light Machine Gun (LMG), Sten Machine Carbine. Modern Submachine Carbine (MSMC), Pistol & Revolvers. No 36 HE Grenade, 2 inch Morter. Artillery Gun, Air Defense Gun, Indian Field gun 105 mm., Multiple Rocket Launchers.

Students will be required to draw Labeled sketch and explain the important stages of mechanism of the above weapons.

2. Students will be required to draw sectional diagrams showing the parts connected with the mechanisms of movements and firing of the following armaments: Tanks, Air craft - Fighters, Bombers, Transport, Helicopters. Naval Ships - Frigates, Destroyers, Submarine and Torpedo.

B. Tactical Exercise without Troops

- 1. Sand model on the following: a) attack, b) defense.
- 2. Sand model exercise on rescue operations.
- 3. Outline organization of Infantry Battalion in Lab Note Book.
- 4. Chart showing organization, weapons at equipments at platoon level.
- 5. Message Writing
- **C. Project Report:** Preparation of Project Report out of the data collected from field visit t to different defense establishment and geo-strategic areas of importance.

D. Laboratory Note Books

Students will be required to maintain records of all works done in connection with the topic taught in this paper.

Skill Enhancement Courses (SEC)

SEC-2: India's Strategic Culture

Credits 02

SEC2T: India's Strategic Culture

Course Contents:

- 1. Concept of strategic culture.
- 2. Strategic culture and International relations theory.
- 3. Sources of Indian strategic culture.
- 4. Understanding Indian strategic culture.
- 5. Applying strategic culture in Indian context:
 - a. Internal security issues
 - b. Nuclear policy

SEC-2: Logistics Management to the Indian Armed Forces. Credits 02

SEC2T: Logistics Management to the Indian Armed Forces.

Course Contents:

- 1. Nature of Modern War- Spectrum and Tools of Conflict, Economic Resources and Industrial base.
- 2. Meaning, Scope and Principles of Logistic management.
- 3. Organisational Structure for Logistic Support.
- 4. Logistic Planning in war and peace times.
- 5. Higher direction of Defence Logistics- Procurement of goods and services, financial implications, Contract management.
- 6. Reforms in Logistic management.

Or

SEC-2: Defense Industrial Potential, Transportation and Communication System in India Credits 02

SEC2T: Defense Industrial Potential, Transportation and Communication System in India

Course Contents:

Unit-I: Defense Industrial Potential in India

- 1. Resource Definition, importance. Resource and its importance in national security.
- 2. Role of industrialization in Defense. Effects of industrialization on economy and defense of a country. Industrialization of India and its impacts on defense.
- 3. Scientific and industrial development in India since independence. Defence industries development of India since independence. Conversion of civil industries to defense industries.
- 4. Strategic minerals and logistic problems of India.
- 5. Defense industrial centers of India.

Unit-II: Transportation System in India

- 1. Transportation system in Indian- concept, types.
- 2. Significance and importance of transport in National Security.
- 3. Development of Roadways, Railways, Airways and Naval ways.

Unit-III: Communication System in India

- 1. Communication system in India- concepts. Significance and importance of communications in National security. Types of communications: Postal services in India, Telegraph, telephones, wireless, internet. Postal and Telecom service in Defense. Role of other communication system for defense.
- 2. Media: Public information, Publicity and Propaganda and its impact on National security.

Or

SEC-2: Fundamentals of Peace

Credits 02

SEC2T: Fundamentals of Peace

Course Contents:

Unit -I: Introduction to Peace

- a) Concept of peace meaning and definition, typology of peace.
- b) Approaches to peace Disarmament, International Law.
- c) Peace movement: Anti nuclear Movements CND etc,
- d) Zones of peace and nuclear free zones.

Unit -II: Mechanics of Peace

- a) Settlement of international disputes [Amicable].
- b) Peace keeping, Peace keeping Operations.
- c) Peace Building, Peace Making and Peace Research.
- d) Role and function of International organizations League of Nations, UNO.
- e) Amicable means to settle Inter-state conflicts.

Unit -III: Diplomacy

Diplomacy - Scope & Function. Type of diplomacy - its features.

Vidyasagar University

Curriculum for B.A. (General) in Defence Studies [Choice Based Credit System]

Semester-V

Course	Course Code	e Name of the Subjects	Course Type/ Nature		ing Scl ir per v		Credit	Marks
	Code		Nature	L	T	P	_	
DSE-1A		DSE1AT:Non Traditional Security Threats or International Terrorism	Core Course	4	0	0	6	75
		DSE1AP:Practical		0	0	4		
DSE-2A	TBD	Other Discipline (Any one from Discipline 2)/TBD	Core Course	5	1	0	6	75
GE-1		GE1T:International Relations or Military Sociology	Generic Elective	4	0	0	6	75
		GE1P: Practical		0	0	4		
SEC-3		SEC3T: Strategic Leadership or General Studies and Current Affairs	Skill Enhancement Course	1	1	0	2	50
	I	Semester Total					20	275

L=Lecture, **T**=Tutorial, **P**=Practical, **DSE**= Discipline Specific Electives, **GE**= Generic Elective, **SEC**= Skill Enhancement Course, **TBD** = To be decided.

Semester-V

Discipline specific Elective (DSE)

DSE-1A: Non Traditional Security Threats

Or

DSE-1A: International Terrorism

Skill Enhancement Course (SEC)

SEC-3: Strategic Leadership

Or

SEC-3: General Studies and Current Affairs

Generic Elective(GE)

GE-1: International Relations

Or

GE-1:Military Sociology

Semester-V

Discipline Specific Elective (DSE)

DSE-1A: Non Traditional Security Threats

Credits 06

DSE1AT: Non Traditional Security Threats

Credits 04

Course contents:

Unit I: Human Security; Definition, Meaning, Concept, Threats & Challenges in the Indian Context

Unit II: Environment Security: Definition, Meaning, Concept and Contemporary Issues in the Indian Context

Unit III: Illegal Migration: Definition, Meaning, Concept and Contemporary Issues in the Indian Context

Unit IV: Organised Crimes: Definition, Meaning, Concept, Recent Trend in the Indian Context

DSE1AP: Practical Credits 02

Course contents:

- 1. Paper Clippings on Security related Issues and a Case Study Report thereon.
- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and/or Strategic Defence.
- 3. Laboratory Note Book: Sand Model on Human Security/ Illegal Migration/Organised Crime.

Suggested Readings:

- Noakim Palme, Kristof Tamas (2006): Globalizing Migration Regime: New Challenges to Transnational Cooperation
- NoufidaGoucha, John Crowley (2008): Rethinking Human Security
- NahrbanouTadjbakhsh, Anuradha M. Chenoy (2007): Human Security: Concepts and Implications, Rutledge Advances and International Relations and Global Politics
- Nachard A Matthew and John Barnett Bryan Macdonald and Karen L. O'Brien (2010): Global Environmental Change and Human Security
- National Threats; Smuggling and Trafficking in Arms, Drugs and Human Life

- N Lal Marie (2008): The Geopolitics of Energy in South Asia, Institute of Southeast Asian Studies, Singapore
- N Leena (2000): Energy Infrastructure; Priorities, Constraints and Strategies for India, Oxford

Or

DSE-1A: International Terrorism

Credits 06

DSE1AT: International Terrorism

Credits 04

Course contents:

Unit I: Terrorism, Meaning, Concept, Philosophy and Historical Perspective

Unit II: Causes of Terrorism: Social, Economic, Political and Religious

Unit III: International Terrorism, State Terrorism and State-sponsored Terrorism Context

Unit IV: Terrorism and National Security, Strategy for fighting against Terrorism

DSE1AP: Practical Credits 02

Course contents:

- 1. Paper Clippings on Security related Issues and a Case Study Report thereon
- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and Strategic Defence
- 3. Laboratory Note Book: Sand Model on Human Security/ Illegal Migration/Organised Crime
- 4. Educational Tours and Its Reports

Suggested Readings:

- N Brass, Paul R., (1991): Ethnicity and Nationalism, New Delhi, Sage Publications.
- N Combs, Cindy C., (1997): Terrorism in the Twenty-first Century, New Jersy, Prentice Hall.
- N Kartha, Tara (1999): Tools and Terror: Light Weapons and India's Security, New Delhi, Knowledge World and ISDA
- N Lequer, Walter (1999): The New Terrorism, Oxford, Oxford University Press
- Ñ Sondhi M L.(ed), (1999): Terrorism and Political Violence-A Source Book, New Delhi
- N Wardlaw, Grant(1982): Political Terrorism, Cambridge

Skill Enhancement Course (SEC)

SEC-3:Strategic Leadership

Credits 02

SEC3T:Strategic Leadership

Course contents:

Unit I: Introduction to Strategic Leadership; Meaning and Significance; Leadership Styles

Unit II: Group Dynamics-Roles- Morale-Conflict-Groups and Conflict Management

Unit III: Team Building and Management- Developing Team Resources- Designing Team Participation and Repercussion- Team Building Activities

Unit IV: Military Leadership: Meaning, Attributes and Characteristics; Principles of Armed Force Leadership

Suggested Readings:

- N Koontz, Harold and O'Donnel Cyril (2000): Essentials of Management, Tata McGraw-Hill, New Delhi
- Ñ Fred Luthans (2007): Organizational Behaviour, Tata McGraw Hill, New Delhi
- N Aswathappa (2007): Organizational Behaviour, Himalaya Publishing House, Mumbai
- New Delhi. Robbin Stephen P. (1996): Organizational Behaviour, 9th Edition, Prentice Hall of India, New Delhi.

Or

SEC-3: General Studies and Current Affairs

Credits 02

SEC3T:General Studies and Current Affairs

Course contents:

Unit I: Topic on Current Affairs, General Awareness in National and International Significance

Unit II: General Knowledge Syllabus & Topics of the Indian and World History along with Freedom Movement in India.

Unit III: General Knowledge and Current Affairs Topics on Indian Polity, Indian Constitution, Government, Government Policy and Political System.

Unit IV: General Knowledge Questions on Environmental Science, Biodiversity and Ecology related Topics.

Suggested Readings: Newspapers; Journals; Magazines

Generic Elective(GE)

GE-1:International Relations

Credits 06

GE1T: International Relations

Credits 04

Course contents:

Unit I: Introduction to the Understanding of International Relations, Theories and Approaches

Unit II: Diplomacy and Foreign Policy: Theoretical Background, Contemporary Issues in Indian Context

Unit III: International Relation of India with its Neighbouring Countries (Pakistan, Bangladesh, Nepal, Sri Lanka, Bhutan and China)

Unit IV: End of Cold War and Emergence of New World Order (after 9/11/2001)

GE1P: Practical Credits 02

Course contents:

- Strategic Maps of India: India and her Neighbouring Countries; India and Indian States and Union Territories with Capital, Strategic Raw Materials, Defence Industries and Atomic Reactors
- 2. Short Presentation/ Lecture
- 3. Records
- 4. VIVA VOCE

Suggested Readings

- 1. Aron, Raymond (2003) Peace and War: A Theory of International Relations, Transaction Publishers
- 2. Couloumbis, T. A and Wolfe, W. H. (1986): International Relations: Power and Justice, Prentice Hall, New Jersey
- 3. Kumar Mahendra (2017): Theoretical Aspects of International Politics, ShivlalAgarwala and Co, New Delhi.
- 4. Frenkel Joseph (1968): Making of Foreign Policy: An Analysis of Decision Making, Oxford University Press, London
- 5. Calvocoressi, Peter (2008): World Politics Since 1945, 9th Edition, Longman

GE-1: Military Sociology

Credits 06

GE1T: Military Sociology

Credits 04

Course contents:

Unit I: Social Impact of War: Impact on Society and Impact on Military

Unit II: Post-War Social Problems: Social Problem of Re-settlement of War Victims and Post-War Reconstruction

Unit III: Impact on Military Demobilization, Rehabilitation and Social Adjustment of Released Military Personnel

Unit IV: Role of Women in Armed Forces: Contemporary Issues and Trends

GE1P: Practical Credits 02

Course contents:

- 1. Paper Clippings on Security related Issues and a Case Study Report thereon
- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and Strategic Defence
- 3. Laboratory Note Book: Sand Model on Human Security/ Illegal Migration/Organised Crime'
- 4. VIVA VOCE

Suggested Readings

- 1. Baynes J. C. M. (1972): The soldiers in Modern Society, Eyre Methuen, London
- 2. Doorn, Jacques Van (1975): The Soldiers and Social Change, Sge publications, New Delhi.
- 3. Janowitz Morris (1959): Sociology and the Military Establishment, Russell Sage Foundations
- 4. Parmer Leena (1994): Society, Culture and Military System, Rawat Publications, Jaipur
- 5. Shaw Martin(ed),(1984): War, State and Society, Macmillan Press, London
- 6. Johnson, John (ed), (1962): Race, Caste and Military: The Role of Militaryin Underdeveloped Countries, Princeton University Press.

Vidyasagar University

Curriculum for B.A. (General) in Defence Studies [Choice Based Credit System]

Semester-VI

Course	Course Code	e Name of the Subjects	Course Type/ Nature	Teaching Scheme in hour per week			Credit	Marks
				L	T	Р		
DSE-1B		DSE1BT: India's Defence Mechanism or Contemporary Issues to India's National Security	Core Course	4	0	0	6	75
		DSE1BP: Practical		0	0	4		
DSE-2B	TBD	Other Discipline (Any one from Discipline 2)/ TBD	Core Course	5	1	0	6	75
GE-2		GE2T: India and Her Neighbouring Countries or Conflict Resolution and Peace Building	Generic Elective	4	0	0	6	75
		GE2P: Practical		0	0	4		
SEC-4		SEC4T: Armed Forces or Indian Navy or Indian Air Force	Skill Enhancement Course	1	1	0	2	50
	•	Semester Total	•				20	275

L=Lecture, T=Tutorial, P=Practical, DSE= Discipline Specific Electives, GE= Generic Elective, SEC= Skill Enhancement Course, TBD = To be decided.

Semester-VI

Discipline specific Elective (DSE)

DSE-1B: India's Defence Mechanism
Or
DSE-1B: Contemporary Issues to India's National Security
Skill Enhancement Course (SEC)
SEC-4: Armed Forces (Specialized Subject)
Or
SEC-4: Indian Navy (Specialized Subject)
Or
SEC-4: Indian Air Force (Specialized Subject)
Generic Elective (GE)
GE- 2: India and Her Neighbouring Countries
Or
GE-2: Conflict Resolution and Peace Building

Discipline Specific Elective (DSE)

DSE-1B: India's Defence Mechanism

Credits 06

DSE1BT: India's Defence Mechanism

Credits 04

Course contents:

Unit I: India's Defence Forces

- a) Rank Structure of three Services
- b) Recruitment Methods of three Services
- c) Important Training Institutions of three Services
- d) Second Line of Defence(Introduction to Paramilitary Forces, in brief)

Unit II: Defence Organizations in India

- a) Power of President of India in relation to Defence
- b) Role and Functions of Ministry of Defence, Government of India
- c) Composition and Function of Defence Committee/National Security Council(NSC)
- d) Chief of Staff (COS) and Joint Service Organization

Unit III: Army Organization

- a) Organization of Army Headquarter; Role of Chief of Army Staff(COAS) and Principal Staff Officers(PSOs)
- b) Static and Field Formation of Indian Army
- c) Arms and Services

Unit IV: Air Force Organization

- a) Organization of Air Force Headquarter;
- b) Role of Chief of Army Staff(COAS) and Principal Staff Officer(PSOs)
- c) Static and Field Formation of Indian Air force

Unit V: Navy Organization

- a) Organization of Air Force Headquarter
- b) Role of Chief of Army Staff(COAS) and Principal Staff Officer(PSOs)
- c) Static and Field Formation of Indian Navy

DSE1BP: India's Defence Mechanism (Practical)

Credits 02

Course contents:

- 1. Paper Clippings on Defence related Issues and a Case Study Report thereon.
- 2. Field Visit: Field Visit to a Place/Unit having importance on National Security and/or Strategic Defence.

- 3. Laboratory Note Book
- 4. Viva-Voce

Suggested Readings:

- Government of India (1924): The Army of India and its Evolution, Calcutta
- Ministry of Defence, Government of India, Indian Arm Forces, Year Book(Annual)
- Palit, D. K. (1989):Essentials of Military Knowledge, New Delhi
- Singh Nagendra (1967): Defence Mechanism of Modern State, New Delhi
- Venkateswaran A. L. (1967): Defence Organization in India, New Delhi

Or

DSE-1B: Contemporary Issues to India's National Security Credits 06

DSE1BT: Contemporary Issues to India's National Security Credits 04

Course contents:

Unit -1: National Security

- i) Meaning
- ii) Definition
- iii) Concept
- iv) Nature & Scope

Unit -2: Challenges to Indian Armed Forces

- i) Aspects of India's National Security Problems
- ii) Various types of challenges and its application to Indian Armed Forces
- iii) Role of awareness about the role of Indian Armed Forces

Unit- 3: Contemporary Issues – case studies

- i) Kashmir Issue
- ii) McMahon Line
- iii) Terrorism
- iv) Indian Ocean
- v) Naxalism
- vi) Siyachin
- vii) Tamil Problem.

DSE1BP: Practical Credits 02

Project Work:

- i) Project submission related to contemporary issues.
- ii) Interview with Indian Armed Forces Serviceman/Ex-Serviceman

Suggested Readings:

- Indian Army E.H.E. Choen.
- Ministry of Defence Annual Reports
- Organisation and Administration in the Indian Army Brigadier Rajendra Singh.

Skill Enhancement Course (SEC)

SEC-4: Armed Forces (Specialized Subject)

Credits 02

SEC4T: Armed Forces

Course contents:

Unit I: Organizations

- a) Basic Organizations of Armed Forces
- b) Organization of Army
- c) Badges and Ranks

Unit II: Infantry Weapon and Equipments

- a) Characteristics of Rifle and 7.62 mm SLR,
- d) Ammunition, Fire Power, Stripping, Assembling and Cleaning

Unit III: Military History

- a) Biographies of Renowned Generals
- e) Indian Army War Heroes-PVCs

Unit IV: Communications

- a) Types of Communications
- f) Characteristics of Wireless Technology (Mobile, WiFi etc)

Or

SEC-4: Indian Navy (Specialized Subject)

Credits 02

SEC4T: Indian Navy

Course contents:

Unit I: Orientation and Service Subjects

- a) History of Indian Navy- In Pre and Post Independent India, Gallantry Award Winners
- b) Organization of Navy Head Quarter- Commands, Fleets, Ships and Shore Establishment

- c) Types of Warships and their Role
- d) Ranks of Officers and Sailors, Equivalent Ranks in other Services

Unit II: Ship and Boat Modelling

- a) Principle of Ship Modelling
- b) Maintenance of Care of Tools

Unit III: Search and Rescue

SAR Organization in the Indian Ocean

Unit IV: Swimming

Floating for Three Minutes and Free Style Swimming

Or

SEC-4: Indian Air Force (Specialized Subject)

Credits 02

SEC4T: Indian Air Force

Course contents:

Unit I: General Service Knowledge

- a) Development of Aviation
- b) History of Indian Force

Unit II: Principle of Flight

- a) Introduction
- b) Laws of Motion
- c) Glossary of Terms

Unit III: Airmanship

- a) Introduction
- b) Airfield Layout
- c) Role of the Air, Circuit Procedure
- d) ATC/RT Procedures
- e) Aviation Medicine

Unit IV: Maintenance

- a) Aero Engine Introduction
- b) Minimum Mechanical Knowledge for Maintenance
- c) Ammunition, Fire Power, Stripping, Assembling and Cleaning

Suggested Readings:

- DG NCC, New Delhi: Cadet's Handbook- Common Subjects, All Wings
- DG NCC, New Delhi: Specialized Subjects, Army, Navy and Air Force
- DG NCC, New Delhi: OTA Precise
- Gupta, N. L.: Humanistic Traditions of India, Mohit Publications, New Delhi
- Baron & Byrne: Social Psychology, Pearson Publications, 12th Ed
- Pillai, R and Shivnandan: Chanakya's Seven Secret of Leadership, Jaice
- Iyer Prakash: The Habit of Winning, Penguine India, 2011
- Goldratt E: The Goal, The North River Press, 1994
- Bipan Chanda: Freedom Struggle, National Book Trust
- Lambert M & Henssonow F: National Civil Defence Cadet Corps, 2011

Generic Elective (GE)

GE-2: India and Her Neighbouring Countries

Credits 06

GE2T: India and Her Neighbouring Countries

Credits 04

Course contents:

Unit I: India and her Neighbouring Countries

Study of Geo-Strategic Factors Relating to Pakistan, China, Bangladesh, Nepal, Bhutan, Myanmar, Maldives, and Sri Lanka

Unit II: Emergence of Pakistan as an Independent State

Pakistan's foreign and Defence Policies to India; Recent Trends of Bilateral Relations between Bangladesh and India

Unit III: Emergence of China and Global Power Policies

Political System in China, Ethnic Composition of China; Recent Trends of Bilateral Relations between China

Unit IV: Emergence of Bangladesh as an Independent State

Strategic Relations of India with Bangladesh; Recent Trends of Bilateral Relations between Bangladesh

Unit V: Strategic Relations of India

Strategic Relations of India with Nepal, Bhutan, Myanmar, Maldives and Sri Lanka; The issue of Immigration and Infiltration.

GE2P: Practical Credits 02

Course contents:

1. Strategic Maps of India and her Neighbours with identification of and Special emphasis on Strategic Geographical locations, boundaries, Cities, Transport and Communication, Strategic Raw Materials, Defence Industries and Atomic Reactors, National Anthem, Symbol, Flower, Language, Culture and Customs.

- 2. Short Presentation/ Lecture
- 3. Records
- 4. Viva Voce

Suggested Readings

- U. S. Bajpai: India and Its Neighbours
- C. P. Bhambri: Foreign Policy of India
- A. Shah: Indian Defence and Foreign Politics
- Cohen, Stephen Philip: The Idea of Pakistan
- Veena, Kukreja: Contemporary Pakistan, Political Processes, Conflict and Cases
- Iftikar H. Malik; Culture and Customs of Pakistan

Or

GE-2: Conflict Resolution and Peace Building

Credits 06

GE2T: Conflict Resolution and Peace Building

Credits 04

Course contents:

Unit I: Conflict Resolution and Peace Building: Concept and Significance

Unit II: Nature of Conflict: Inter-State and Intra-State

Unit III: Method of Conflict Resolution

- a) Pacific Methods
- b) Coercive Methods

Unit IV: Peace Building: Legal, Regional and International Perspective

UNIT V: Confidence Building Measures; Concept and Techniques; Conflict Resolution and Peace Building: Role of IGOs, Role of NGOs and Role of UN.

GE2P: Practical Credits 02

Course contents:

- 1. Paper Clippings with issues relating to Conflict resolution and Peace Building
- 2. Short Presentation/ Lecture
- 3. VIVA VOCE

Suggested Readings

- 1. Barash, D. P (2014): Approaches to Peace: A Reader in Peace Studies, Oxford University Press.
- 2. Garnett, J (1970): Theories of Peace and Security, Palgrave Macmillan, London
- 3. Gultung, J (1996): Peace by Peaceful Means: Peace and Conflict Development and Civilizzation, Sage Pub
- 4. Kadloor, S (2015): Conflict Resolution and Peace Building
- 5. Murty, K. S (1986): quest for Peace, Ajanta Pub, New Delhi
- 6. Ursula, O (ed.) (2000): Peace Studies from Global Perspective, Maadhyam Books, New Delhi
- 7. Veena, Kukreja: Contemporary Pakistan, Political Processes, Conflict and Case
