



Date :- 01/08/2024

NOTIFICATION

Sub :- CBCS Syllabi of M. A. in Defense and Strategic Studies (Sem. III & IV)

Ref. :- Decision of the Academic Council at its meeting held on 27/07/2024.

The Syllabi of M. A. in Defense and Strategic Studies (Third and Fourth Semesters) as per **NATIONAL EDUCATION POLICY – 2020 (2023 Pattern)** and approved by the Academic Council as referred above are hereby notified for implementation with effect from the academic year 2024-25.

Copy of the Syllabi Shall be downloaded from the College Website
(www.kcesmjcollege.in)

Sd/-
Chairman,
Board of Studies

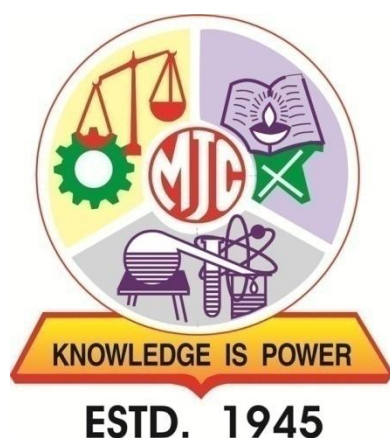
To :

- 1) The Head of the Dept., M. J. College, Jalgaon.
- 2) The office of the COE, M. J. College, Jalgaon.
- 3) The office of the Registrar, M. J. College, Jalgaon.

Knowledge is Power

Khandesh College Education Society's
MooljiJaitha College, Jalgaon
An "Autonomous College"

Affiliated to
KavayitriBahinabaiChaudhari
North Maharashtra University, Jalgaon-425001



STRUCTURE AND SYLLABUS

B.A. Honours / Honours with Research (S.Y.M.A. Defence & Strategic Studies)

Under Choice Based Credit System (CBCS)

and

As per NEP-2020 Guidelines

[W.e.f. Academic Year: 2024-25]

Preface

Capable Human Resource is a prerequisite in Higher Education, and it is to be acquired thorough knowledge of theoretical concepts and hands-on laboratory methods of the subject. The MooljiJaitha College (Autonomous) has adopted a Department-Specific Model as per the Guidelines of UGC, NEP-2020 and the Government of Maharashtra. The Board of Studies in Defence & Strategic Studies of the college has prepared the Syllabus for the First-year undergraduate of Defence & Strategic Studies. The syllabus cultivates theoretical and practical know-how of different fields of Defence & Strategic Studies. The contents of the syllabus have been prepared to accommodate the fundamental aspects of various disciplines of Defence & Strategic Studies and to build the foundation for various applied sectors of Defence & Strategic Studies.

Defence and Strategic Studies is a subject of Great importance in today's complex and interconnected World. It encompasses the study of Defence policies, Military strategy, National Security, and the Broader Geopolitical landscape. **National Security:** Understanding Defence and strategic concepts is vital for ensuring the Security and Protection of a Nation. It involves analyzing potential threats, developing effective Defence policies, and formulating Military strategies to deter aggression and safeguard the interests of the country. **Conflict Prevention and Management:** Defence and Strategic Studies help in identifying the root causes of conflicts and exploring ways to prevent or manage them effectively.

Military Planning and Operations: The subject provides insights into Military planning, Operations, and Decision-Making processes. It equips Military leaders and Policymakers with the knowledge and skills necessary to assess threats, develop appropriate responses, and conduct successful Military Campaigns while minimizing casualties and collateral damage. **Geopolitical Analysis:** Defence and Strategic Studies involve analyzing Geopolitical trends and understanding the dynamics of International Relations. This knowledge helps Policymakers and Strategists Comprehend the interests, Motivations, and actions of other States and Non-state actors, enabling them to make informed decisions on alliances, Security Partnerships, and resource allocation. **Technology and Innovation:** The subject also examines the impact of emerging technologies on Defence and security. It explores the role of artificial intelligence, Cyber warfare, Space capabilities, and other advanced technologies in Modern warfare, thereby informing Defence planners and policymakers about the potential risks and opportunities associated with these developments. **Diplomacy and Negotiation:** Defence and Strategic Studies contribute to the study of Diplomacy and Negotiation, which are crucial in resolving conflicts peacefully and achieving favorable outcomes for National interests. It provides insights into the strategies and tactics employed during Negotiations and the role of Military Power in shaping Diplomatic outcomes.

Military History and Lessons Learned: The subject delves into Military History, Analyzing past conflicts and their outcomes. By studying Historical examples, both successful and unsuccessful, scholars can draw lessons that inform current Defence policies, strategic thinking, and military Doctrines. **Defence Industry and Economic Implications:** Defence and Strategic Studies explore the connections between Defence policies, Military capabilities, and Economic considerations. It examines the Defence Industry, Defence budgets, Arms trade, and the impact of Defence spending on National Economies. This understanding is crucial for policymakers, as it helps in allocating resources effectively and fostering Economic development while maintaining a strong Defence posture.

In summary, Defence and Strategic Studies is of paramount importance as it equips individuals with the knowledge and skills needed to analyze and address Contemporary Security Challenges. It provides a comprehensive understanding of Defence policies, Military Strategy, and International Relations, helping to ensure National Security, Promote Peace, and effectively respond to evolving threats in the Global landscape.

The overall curriculum of three / four-year covers Strategic Thinking about Military Strategy and the Art of War. They will study concepts such as Grand Strategy, Operational Planning, Tactics, and the role of Leadership in Warfare. This knowledge enables students to think strategically and assess the effectiveness of different Military approaches. They develop a broader perspective on the complex factors that contribute to Armed Conflicts. Professional opportunities studying War can lead to various professional opportunities. Graduates may pursue careers in Academia, Research Institutions, Think Tanks, Government Agencies, Military Organizations, International Organizations, Journalism, and Advocacy Groups focusing on War, Conflict Resolution, Security, and International Relations. The detailed syllabus of each paper is appended with a list of suggested readings.

Credit distribution structure for Three/ Four year Honors/ Honors with Research Degree Programme with Multiple Entry and Exit

Sem- Semester, **DSC-** Department Specific Course, **DSE-** Department Specific Elective, **T-** Theory, **P-** Practical, **CC-Co** curricular **RM-** Research Methodology, **OJT-** On Job Training, **FP-** Field Project, **Int-** Internship, **RP-** Research Project.

Multiple Entries and Multiple Exit options: The multiple entry and exit options with the award of UG certificate/ UG diploma/ or three-year degree depending upon the number of credits secured;

Levels	Qualification Title	Credit Requirements		Semester	Year
		Minimum	Maximum		
4.5	UG Certificate	40	44	2	1
5.0	UG Diploma	80	88	4	2
5.5	Three Year Bachelor's Degree	120	132	6	3
6.0	Bachelor's Degree- Honours Or Bachelor's Degree- Honours with Research	160	176	8	4

S. Y. M. A. Defence& Strategic Studies Course Structure

Semester	Course Module	Credit	Hours/ week	TH/ PR	Code	Title
III		4	4	TH	DEF- DSC- 611	Indian Military Operations -I
		4	4	TH	DEF- DSC- 612	Role of Science and Technology in National Security
		4	4	TH	DEF- DSC- 613	Environmental Security
		2	2	TH	DEF- DSC- 614	Human Security
		4	4	TH	DEF- DSE- 615-A)	India's Border Security Challenges
				TH	DEF- DSE- 615-B)	Skill of Diplomacy
		4	8	PR	DEF- RP- 616	Research Project-I
		22				
IV		4	4	TH	DEF- DSC- 621	Global Security Issues
		4	4	TH	DEF- DSC- 622	Strategic Thinkers
		4	4	TH	DEF- DSC- 623	Security Pillars and Threats
		4	4	TH	DEF- DSE- 624-A)	Arms Control and Disarmaments
				TH	DEF- DSE- 624-B)	Make in India and India's Defence Sector
		6	12	PR	DEF- RP- 625	Research Project-II
		22				

DSC : Department-Specific Core course
DSE : Department-Specific elective
GE/OE : Generic/ Open elective
SEC : Skill Enhancement Course
MIN : Minor course
AEC : Ability Enhancement Course
VEC : Value Education Courses

ENG : English
ES : Environmental studies
CI : Constitution of India
IKS : Indian Knowledge System
CC : Co-curricular course
TH : Theory
PR : Practical

SYMA

SEMESTER-III

SYMA
SEMESTR-III
DEF- DSC- 611:Indian Military Operations -I

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	- To understand the Indian Military Structure - To understand the Indian Armed Forces Operations methods. - Student can understand the importance of Indian Military Operations. - To aware about joint operations.	
Course outcomes	After successful completion of this course, students are expected to: - Students can identify the national border security issues and challenges - Student can acknowledge the Armed Special operation - Student can suggest the counter operational zones.	
Unit	Contents	Hours
Unit I	Introduction a) Indian Military Structure b) Indian Border Management System c) Conflict Issues on Border d) Types of Operations Transaction Methodology : Classroom Teaching	15
Unit II	Operation by Indian Army a) Operation Polo (1948) b) Operation Blue Star (1984) c) Operation Meghdoot (1984) d) Operation Bluebird (1987) e) Operation Pawan (1987) Transaction Methodology: Classroom Teaching	15
Unit III	Operation by Indian Navy a) Operation Vijay –Goa (1961) b) Operation Trident (1971) c) Operation Python (1971) d) Operation Sukoon (2006) e) Operation Nisar (2018) Transaction Methodology : Classroom Teaching	15
Unit IV	Operation by Indian Air Force a) Operation Poomalai (1987) b) Operation Cactus (1988) c) Operation Safed Sagar (1999) d) Operation SankatMochan (2016) e) Balakot Airstrike (2019) Transaction Methodology: Classroom Teaching, Documentary	15
Study Resources	1) Joginder Singh, Behind the Scene: An Analysis of India's Military Operations, 1947-1971, Lancer International, New Delhi, 1993. (Online Available for read) 2) Ashok K Chordia, Operation Cactus: Anatomy one of India's Most Daring Military Operation, KW Publishers, 2017 3) H.K. Pandey and M.R. Singh, India's Major Military & Rescue Operations, Horizon Books, 2017 (Online Available for read)	

	4) P C Khatoch, India's Special Forces History and Future of India's Special Forces, Vij Books, New Delhi, 2013. (Online Available for read) 5) K.S. Brar, Operation Blue Star the true story, USB Publishers, 1993. 6) SiddharthThorat, Operation For Hunt, Srithi Publishers New Delhi, 2014. (Online Available for read).	
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SYMA
SEMESTR-III

DEF- DSC- 612:Role of Science and Technology in National Security

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	- Science and Technology is deep impact of National Security in 21ST century every Sovereign Stop the build the cover to protect our self via Science and Technology & Preparedness.	
Course outcomes	After successful completion of this course, students are expected to: - To analyze the technological issues and threats in India - Student can identify the R&D weakness as per modern development.	
Unit	Contents	Hours
Unit I	Introduction to Military Technology-its relevance to National Security a) Energy b) Electronics, Computers, Nano Technology& Artificial Intelligence c) Material Science d) Biotechnology e) LASERS/ Satellite Transaction Methodology : Classroom Teaching	15
Unit II	Application of Technologies to a) Logistics (Transport, Supplies, Inventory, Medical, Repair, Clothing & Equipment) b) Border Management c) Electronic Warfare, NMD, Stealth d) RNBC Warfare & Nuclear Energy e) UAV's Transaction Methodology: Classroom Teaching	15
Unit III	Introductions to Emerging Technologies a) Armament & Weapon Systems b) Missile Technology c) Communication & Information Technology d) Revolution of Military Affairs e) Information & Communication Technology (ICT) /Cyber/Hacking f) Revolution in Military Affairs (RMA) : Challenges and option for India g) Application of Electronic System in Military Activities, C5I2SR Transaction Methodology : Classroom Teaching	15
Unit IV	Technologies and Military Doctrine a) The Roll of Doctrine. b) Technology and Military Doctrine c) Insight of Technologies and Doctrine d) Growth & Development of Ocean Technology in India e) Achievements, Problems & Limitations Transaction Methodology: Classroom Teaching, Documentary	15

Study Resources	1) Nanda B.S. Science & Technology in India's Transformation,(Concept Publication, NewDelhi:1986) 2) Jayanta Kumar Ray, Security in the Missile Age,(Allied Publication, New Delhi,2006) 3) MacacyKannets, Technology in World Arms and Armor,(London,1961) 4) ShantanuDayal, C4I2SR for Indian Army: A Cost Effective System,(K.W.Publishers,2012, New Delhi) 5) Kenneth Maksey Technology in War (London,1961) 6) M.R. Bhagwan Technological Advance in the Third World : Strategies & Prospects (Popular Publication,Bombay,1990) 7) Science & Technology & their Implications for Peace & Security (UN, Dept. ofDisarmament, New York,1990) 8) Deva Yashwant, Duel-use of Information Technology (An Indo Centric Perspective, NewDelhi, IDSA,1996) 9) Hard David, Nuclear Power in India,(George Allen.London,1983) 10) John Erickson, The Military Technical Revolution: Its impact on Strategy &foreignPolicy, Frederick A (Prager,New York,1996) 11) KhannaS.K.India: A Nuclear Power (Commonwealth Publishers, New Delhi,1998) 12) Sen S.K. Military Technology and DefenseIndustrialization,(Manas Publication, NewDelhi,2000) 13) Tewari R &Tewari V.M. The High-Tech War of Twentieth Century (VikasPublicationHouse, New Delhi 1996) 14) Thee Marek, Military Technology,Military Strategy & Arms Race,(GroomHelm,London,1956) 15) Chaudhari A.P. Development of Science & Technology Nirali Prakahana.Pune.	
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SYMA
SEMESTR-III
DEF- DSC- 613:Environmental Security

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	1) Understand the importance of global environment safety 2) Analyze the causes and effects of global warming. 3) Identify the hazardous activities and challenges.	
Course outcomes	After successful completion of this course, students are expected to: 1) Student knows the values of environment safety. 2) Student can perform our role as a safety officer. 3) To guide the Indian industrial and private sector about the environment protocol. 4) To suggest ideas to control imbalance nature cycle	
Unit	Contents	Hours
Unit I	Approaches and Issues a) Concept, scope, importance b) Pollution - types and effects c) Ecological management d) Issues - Deforestation, Pollution, Water Scarcity & Water Pollution, Loss of Biodiversity, Overpopulation, Waste Disposal, Land Management & Urban Sprawl, Public Health, e) Hazardous substances Transaction Methodology : Classroom Teaching, Documentary	15
Unit II	Environments Agreements a) United Nations Environment Assembly - Role b) Nuclear safety treaties - - Comprehensive Test Ban Treaty 1996 - Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention), Vienna, 1986 - Convention on Early Notification of a Nuclear Accident (Notification Convention), Vienna, 1986 - Convention on Nuclear Safety, Vienna, 1994 - Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space, and Under Water Vienna Convention on Civil Liability for Nuclear Damage, Vienna, 1963. c) <u>Kyoto Protocol</u> - 1997 - importance Transaction Methodology: Classroom Teaching	15
Unit III	Environmental cooperation and solutions a) Economics and environment b) Renewable energy - agreements c) North-South Dialogue on Carbon emission d) Trends in environment cooperation e) Climate diplomacy Transaction Methodology : Classroom Teaching, Industry visit	15
Unit IV	India' Environment Doctrine a) Environment Challenges in India b) Forest and Climate Change - Carbon	15

	c) Water Policy d) Maritime Environment Safety policies and agreement e) Rio to Paris: India in global climate politics Transaction Methodology : Classroom Teaching, Documentary	
Study Resources	1) Peter H. Sand, The Effectiveness of International Environmental Agreements: A Survey of Existing Legal Instruments, Cambridge University Press, 1992(Online E Books Availbale) 2) Amitrajeet A Batabyal, The Economics of International Environmental Agreements, Routledge, 04-Dec-2017. 3) Sebastian Oberthür, Hermann E. Ott, The Kyoto Protocol: International Climate Policy for the 21 st Century, Springer Science & Business Media, 20-Oct-1999. 4) Rajiv Nayan, The Nuclear Non-Proliferation Treaty and India, Routledge, 13-Sep-2013. 5) Mary E. Pettenger, The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses, Ashgate Publishing, Ltd., 28-Mar-2013. 6) Ronald B Mitchell, International Politics and the Environment, SAGE Publications Ltd, 13-Nov-2009. 7) Vice Admiral Pradeep Kaushiva, Commander Abhijit Singh, Indian Ocean Challenges: A Quest for Cooperative Solutions: A Quest for Cooperative Solutions, KW Publishers Pvt Ltd, 15-Feb-2013. 8) C. M. Abraham, Environmental Jurisprudence in India, MartinusNijhoff Publishers, 15-Sep-1999. 9) Prakash Chand Kandpal, Environmental Governance in India: Issues and Challenges, SAGE Publications, 17-Jan-2019. 10) Giacomo Cao, Roberto Orrù, Current Environmental Issues and Challenges, Springer Science & Business, 29-Apr-2014. 11) Dr Vijay Sakhuja, Dr Kapil Narula, Maritime Safety and Security in the Indian Ocean, VijBooksIndiaPvt Ltd, 01-Sep-2016. 12) William Sweet, Climate Diplomacy from Rio to Paris: The Effort to Contain Global Warming, Yale University Press, 06-Dec-2016.	

SYMA
SEMESTR-III
DEF- DSC- 614:Human Security

Credits- 2
Marks: 50

Internal Examination: 20
External Examination: 30

Course Objectives	1) Understand the importance of value of human security. 2) Acknowledge the key structure of human security.	
Course outcomes	After successful completion of this course, students are expected to: 1) Students can perform duty in human rights unit. 2) Students can raise the human security issues for society welfare.	
Unit	Contents	Hours
Unit I	Introduction a) Meaning, Concept, Scope, Importance b) Types of human security c) United Nations and human security d) Human Security in Theory and Practice e) Legal provisions in India Transaction Methodology : Classroom teaching	8
Unit II	Issues a) Implementation of human rights b) Unbalanced economic globalization leads to economic crisis and poverty. c) Unbalanced use of natural resources results in destruction of the d) Environment, pollution and famine. e) Unbalanced provision of basic health services results in the spread of pandemics. f) Unbalanced security measures, declining civic responsibility, results. Transaction Methodology: Classroom Teaching	7
Unit III	Challenges a) Monopolist ideology b) Genocide - Economic, Political, Social, Psychological c) Human Trafficking, Terrorism, d) Urban violence and, ultimately, e) Coordination of governments. Transaction Methodology : Classroom teaching	8
Unit IV	Responses a) Basic needs and basic human rights b) Balance between needs and resources, c) Rights and duties, and order and tolerance d) Judiciary system, e) Freedom from fear and anxiety Transaction Methodology : Classroom teaching	7
Study Resources	1) ShahrbanouTadjbakhsh, AnuradhaChenoy, Human Security: Concepts and implicationsRoutledge, 12-Feb-2007 2) Georg Frerks, Berma Klein Goldewijk, Human Security and International Insecurity Wageningen Academic Publishers, 08-Dec-2006 3) Sangmin Bae, Makoto Maruyama, Human Security, Changing States and Global Responses: Institutions and Practices, Routledge, 05-Dec-2014 4) Annamarie BindenagelŠehovic, Reimagining State and Human Security Beyond Borders, Springer, 11- Jan-2018	

	7) https://www.un.org/humansecurity/wp-content/uploads/2017/10/h2.pdf	
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SYMA
SEMESTR-III
DEF- DSC- 615-A):India's Border Security Challenges

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	- To understand the India's Border - To study about challenges on Indian Border - To aware the Governments policies of Border security	
Course outcomes	After successful completion of this course, students are expected to: - Students can analyze the India's Border security challenges - Students can find the lacuna on Borders - Students can identify the terrorist activities	
Unit	Contents	Hours
Unit I	Indian Geography a) Introduction b) India's Borders after 1947 c) India's Land Borders d) India's Sea Borders e) India's Air Territory's f) Border Policy by Home Affairs g) UN resolutions h) Water and border treaties Transaction Methodology : Classroom Teaching	15
Unit II	India's Land Boarder Security challenges a) Terrorism b) Illegal migration c) Drug trafficking d) Fake Currency e) Drone Surveillance by enemy f) Fake information g) Climate and geographical challenges Transaction Methodology: Classroom Teaching	15
Unit III	India's Sea Border Security Challenges a) Small Arms Supply b) Anti national elements c) Illegal Fishing d) Surveillance by enemy ships e) Navigation and timely information Transaction Methodology : Classroom Teaching	15
Unit IV	Air Warfare Challenges a) Concept, Meaning and Scope b) Satellite surveillance c) Spying Drones d) Strategic Defence Initiative (SDI) e) Counter and upgraded technology f) Maintenance Transaction Methodology: Classroom Teaching, Documentary	15

Study Resources	1) https://www.idsa.in/book/IndiasBorderManagement 2) Border Management, Annual Report 2008-09, Ministry of Home Affairs, New Delhi 3) Coast Guard, Annual Report 2008-09, Ministry of Defence, New Delhi 4) Development of National Highways in North Eastern Region, Border Roads Organisation, Annual Report 2007-08, Ministry of Surface Transport and Highways, New Delhi 5) The Land Port Authority of India Bill, 2008 Border Area Development Programme (revised guidelines-2008), Ministry of Home Affairs, New Delhi 6) Trends in Outright smuggling (Commodity-wise & Sector-wise), Annual Report 2006-07, Directorate of Revenue Intelligence, Ministry of Finance, New Delhi 7) Schemes, policies and programmes of the Ministry, Extracts from the 126th Report of the Standing Committee on Home Affairs, presented to the Rajya Sabha on April 26, 2007 8) Multipurpose Identity Cards Scheme, Extracts from the 124th Report of the Standing Committee Home Affairs, presented to the Rajya Sabha on March 20, 2007. 9) Sashastra Seema Bal, 123rd Report on Sashastra Seema Bal Bill 2006, presented to the Rajya Sabha on 27 February 2007 Sashastra Seema Bal Bill 2006 (Extracts) 10) Border Management, Reforming the National Security System - Recommendations of Group of Ministers', Ministry of Home Affairs, February, 2001 11) Report on Illegal Migration to Assam, by Lt. General (Retd) S.K. Sinha (Submitted to President of India), November 8, 1998. 12) Transforming the Northeast, High Level Commission Report to the Prime Minister, Planning Commission, Government of India, March 7, 1997	
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SYMA
SEMESTR-III
DEF- DSC- 615-B):Skills of Diplomacy

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	• Students can understand the basic concept of diplomacy • Students must know about importance of diplomacy • Students can understand the diplomatic situations	
Course outcomes	After successful completion of this course, students are expected to: • Students can analyze the Diplomatic patches • Students can find the lacuna on diplomatic decisions • Students can identify the critical diplomacy solutions.	
Unit	Contents	Hours
Unit I	Introduction of Diplomacy a) Concept of Diplomacy, definition b) scope of diplomacy c) Importance of Diplomacy d) Informational skills e) Relational skills f) Operational skills Transaction Methodology : Classroom Teaching	15
Unit II	Skills of Diplomacy a) Communication b) Conflict Resolution c) Empathy d) Problem Solving e) Understanding Workplace diplomacy f) Active Listening g) Critical thinking h) Analytical Skills Transaction Methodology: Classroom Teaching	15
Unit III	Methods of using Diplomacy a) Understanding critical diplomacy b) Finding weakness in diplomacy c) Use positive words d) Take responsibility e) Practice diplomacy in real-life situations f) Transaction Methodology : Classroom Teaching	15
Unit IV	Transaction Methodology: Classroom Teaching, Documentary	15

Study Resources	1) SorinDumitrascu, Communicating with Diplomacy and Tact A Practical Guide ,Amazon Digital Services LLC –Kdp, 2016. 2) Prem K. Budhwar, Making of a Diplomat Hone Your Skills, Konark Publishers, 2013 3) Kishan S. Rana , 21st-Century Diplomacy A Practitioner's Guide, Bloomsbury Academic 2011	
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SYMA
SEMESTR-III
DEF- DSC- 616: Research Project-I

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	1. To give exposure to the students to research culture and technology 2. To introduce students to how to select a research topic, plan, perform experiments, collect and analyze the data 3. To foster self-confidence and self-reliance in the students as they learn to work and think independently.
Course outcomes	After successful completion of this course, students are expected to: 1. Conceive a problem based on published research and conduct a comprehensive security observations and survey. 2. Plan and carry out the tasks in the given framework of the dissertation and present the work in writing and viva. 3. Learn about area studies maps and photographs. 4. Learn how to present the project in PowerPoint and answer the queries to examiners and the science of writing.
Unit	Contents
Unit I	Identification of a research topic, formulation of research problem, objectives, sample size and hypothesis, etc.
Unit II	Preparation of Outline
Unit III	Review of literature
Unit IV	Bibliography
	The systematic approach towards the execution of the project should be as follows: (Wherever applicable) 1. The complete tenure of the research project should be one year. It should be allotted during the third semester and completed in the fourth semester. 2. Weekly 8 hours should be allotted to the research project in a regular timetable. 3. In the third semester, students will be evaluated based on a credit distribution mentioned above. In the fourth semester, students should perform further research work, collect and analyze the data, compile the results and prepare and submit the final dissertation. 4. Students may be given an opportunity to participate in ongoing research activities in the respective Departments/Schools/Supervisors' laboratories. This will familiarize them with the literature survey and give them a fundamental understanding of designing and executing a research project. 5. Students may work individually or in groups (not more than 3 students) to be decided by the concerned department/supervisor. 6. Each research group should have a different research topic with some possible level of novelty.

	7. The student should select the topic relevant to priority areas of concern or allied subjects with the guidance of supervisor/ head of the department. 8. Students are encouraged to work on multidisciplinary and applied projects, but it is not mandatory criteria. 9. At the beginning, students should submit the outline of the research work to be carried out in the project. (Writing in order: Title, Aim and objectives, Literature to be collected, Experimental plan or method design, expected outcome etc.) 10. Write and submit a Literature Review Report and Research outline Tentative order for review: Title of the Project, Certificates, Acknowledgment, Abstract and Keywords, Contents, Introduction, Literature Review, Aim of the Project, Materials and Methods, Bibliography/reference etc. Tentative order for research outline: Title page, introduction, background and significance of study, problems to be investigated, objective, hypothesis, chapter scheme, bibliography. 11. At the end of the third semester, each student should submit a detailed Literature Review Report and research outline. 12. An appropriate and essential conclusive statement must be drawn at the end of the study. 13. Students should maintain lab notebooks, and the Supervisor may ask them to submit the mid-semester progress report. 14. For documents related to project submission: Font- Times New Roman, Heading Font Size-14, Normal Text Size-12, spacing-1.5, both sides justified and 1 inch margin on all side, both side printing on A-4 size. 15. Three copies of the Literature Review Report, research outline should be prepared (one copy for each department, guide, and student). 16. At the end of the semester, the candidate should prepare and present research work using a PowerPoint presentation with modern ICT tools and present the same in front of his/ her respective department during the Internal Examination. 17. For external examination the candidate will have to present the research work and face viva voce. 18. Students may present their research work in Avishkar/Webinars/Conferences. 19. Students should note that plagiarism is strictly prohibited. Internal examination (40 marks): Components of continuous internal assessment: ● Draft Research Outline (10 marks) ● Draft Review of literature (10 marks) ● Working Bibliography (10 marks) ● PowerPoint presentation, and oral examination (10 marks) External examination (60 marks) and Components of external assessment: ● Final submitted review report, research outline in bound form at the time of examination (40 marks) ● Overall presentation reflecting the contribution of work, response to questions (20 marks)
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S.Y. M.A.

Semester –IV

SYMA
SEMESTR-IV
DEF- DSC- 621: Global Security Issues

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	- This course will cover a number of looming global environmental problems, what society can do about them, and the reasons why we aren't doing more. - The socio-economic factors that contribute to environmental issues, and use them to gain insight into and draw parallels between specific environmental problems.	
Course outcomes	After successful completion of this course, students are expected to: - Students can identify the global crisis issues and challenges - Students can suggest the solutions over global security issues - Students can making draft for peace agreement.	
Unit	Contents	Hours
Unit I	Introduction a) Concept, scope b) Environmental issues c) Cyber issues d) Industrial race e) Human security issues f) Health and Food issues Transaction Methodology : Classroom Teaching	15
Unit II	Military Issues a) Mass weapons competition b) Tactical weapons issues c) Military Alliances (NATO Vs QWAD) d) Defence Budgeting issues e) Nuclear and detent Transaction Methodology: Classroom Teaching	15
Unit III	Geopolitical Issues a) Border conflicts b) Illegal migration c) Water conflicts d) Supply and Chain issues Transaction Methodology : Classroom Teaching	15

Unit IV	Geo-economic Issues a) World Funding system b) Trade Route Conflicts c) Energy pipelines issues d) Financial Communication Safety issues Transaction Methodology: Classroom Teaching, Documentary	15
Study Resources	1. Bill McKibben, <i>The End of Nature</i>, 1989 2. Bruce E. Johansen Desk Reference, The Global Warming, 2022 3. John T. Houghton Global Warming: The Complete Briefing Cambridge University Press 2004 4. https://www.reference.com/science-technology/examples-environmental-issues 5. https://www.unops.org	

SYMA
SEMESTR-IV
DEF- DSC- 622: Strategic Thinkers

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	- To enable students to understand the theories of world's great strategic thinker and to enable them to apply the knowledge to related situation. - Students will understand the ancient to modern war theories. - Strategic Thinkers approaches will enlighten to students.	
Course outcomes	After successful completion of this course, students are expected to: - Students can analyse the strategic quest during conflict - Students can identify the war module and methods - Students can suggest the war planning and preparation.	
Unit	Contents	Hours
Unit I	Kautilya a) Introduction b) Types of Military Forces and War c) Elements of State d) Factors of War Planning e) King and Army Transaction Methodology : Classroom Teaching	15
Unit II	Sun Tzu a) Introduction b) Strategic Considerations –posture of Army c) Initiative and Flexibility in War d) Formation of Force Transaction Methodology: Classroom Teaching	15
Unit III	Carl Von Clausewitz a) Military and political vision of Clausewitz b) Element and Strategy of War c) Clausewitz theory of War d) Relevance of Clausewitz theory in 21 Century Transaction Methodology : Classroom Teaching	15

Unit IV	Napoleon Bonaparte a) Introduction of Napoleon Empire b) War Tactics and Strategic Planning c) Military and political vision of Napoleon d) Causes of Failure of Napoleon Transaction Methodology: Classroom Teaching, Documentary	15
Study Resources	1) KhandJitendraDhoj, Strategic Thoughts, (AaratiPrapti, AjeetaKhand, Kathmandu, 2005) 2) AdhikariShekhar, Modern Strategic Thought-Machiavelli to Nuclear Warfare,(AhbhinavPublication House,Allahabad,2013) 3) Halperin Morton, Contemporary Military Strategy,(Faber London, ,1972) 4) Paret Peter (ed) Makers of Modern Strategy: From Machiavelli to Nuclear Age, (Oxford,1986) 5) Baylis John, Booth Ken, Garnett John & Williams Phil, Contemporary Strategy: Theories &Concepts Vol I & II (Lodon: Groom Helm, 1987) 6) Bobbit Philip &others (ed) Us Nuclear Strategy: A Reader (New York : New YorkUniversity Press,1989) 7) BajpaiKanti&Mattoo Amitabh (ed) Securing India: Strategic Thought & Practice (NewDelhi: Manohar,1996) 8) ParanjpeShrikant, Samrikshastra (in Marathi) , (Continental Prakashan,Pune,1994) 9) Jasjit Singh &ManpreetSethi, Nuclear Deterrence & Diplomacy (KnowledgeWolrd, NewDelhi,2004) 10).Bamme, Air Power, (English Book Depot,1974) 11)H. Beiloe, Military History of the Western World 12)Chuadhari A.P. LashkariVicharvant (Marathi) (Jalgaon: Prashant Publication,2003) 13) DharmadhikariK.D.SamrikVicharvant,(Marathi),(Nashik: Punyayog Prakashan,2013) 14) Lekurwale J.D., ‘YUDDHA’ (Marathi) (Atharva Publications, Jalgaon-2014)	

SEMESTR-IV
DEF- DSC- 623: Security Pillars and Threats

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	• Students can understand the Security Pillars • Students will acknowledge about Security Pillars Strategies • Students will identify the National Security issues and challenges	
Course outcomes	After successful completion of this course, students are expected to: • Students can Identify the Weakest Pillar in National Security\ • Student can work with Social, Military Engagements for strengthening the Security Pillars.	
Unit	Contents	Hours
Unit I	Basics of security pillars a) Importance of Security of nation b) National Security Doctrine c) Security pillars : (Economic, Political, Military, Social, Strategic, Geography, Ethnic, Technology) d) Strong and Weak Security Pillars Transaction Methodology : Classroom Teaching	15
Unit II	Hard Security pillars a) Geography b) Military c) Political d) Economic e) Natural Resources Transaction Methodology: Classroom Teaching	15
Unit III	Soft Security Pillars a) Social b) Ethnic c) Science and Technology d) Cultural e) Strategic f) Diplomatic Transaction Methodology : Classroom Teaching	15

Unit IV	Threats to Security Pillars a) Terrorist infiltration b) Ethnic Migration c) Trade deficiency d) Unstable political leadership e) Corruption f) Blocked of Latest Science and Technology g) Spying h) Miss information in Society i) Riots and non cooperation Transaction Methodology: Classroom Teaching, Documentary	15
Study Resources	1) Nayef R.F. Al-Rodhan, The Three Pillars of Sustainable National Security in a Transnational World, LIT-Verlag, 2008 2) Navniit Gandhi, National Security : Emerging Dimensions and Threats, Pentagon Press, 2010 3) William Henry Beveridge, The Pillars of Security And Other War-time Essays and Addresses, Allen & Unwin, 2016 4) Gabriele Jacobs, Ilona Suojanen, Kate E. Horton, Petra Saskia Bayerl, International Security Management New Solutions to Complexity, Springer International Publishing, 2020	

SEMESTR-IV
DEF- DSC- 624-A): Arms Control and Disarmaments

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	1) Acknowledge about world's arms race and market. 2) Understanding the peace and conflict in world affairs.	
Course outcomes	After successful completion of this course, students are expected to: 1) Students can suggest the methods of disarmaments and arms controlling pacts. 2) Students can suggest path between India and other nations to control arms smuggling. 3) Students can do analysis the data and identified the nexus of illegal arms suppliers.	
Unit	Contents	Hours
Unit I	Introduction and Approaches a) Arms race in WW II - importance of arms power, b) Arms race in cold war c) Arms and economic development approaches d) Weapon of Mass Destruction e) Geneva Protocol 1925 Transaction Methodology : Classroom Teaching	15
Unit II	Arms Conventions a) The Chemical Weapons Convention (CWC) b) The Biological and Toxin Weapons Convention (BTWC) c) The Global Health Security Agenda (GHSA), d) The Convention on Cluster Munitions e) International Convention for the Suppression of Acts of Nuclear Terrorism Transaction Methodology: Classroom Teaching	15
Unit III	Arms Treaties and disarmaments a) Arms Trade Treaty (ATT) b) Nuclear non-proliferation treaty (NPT) c) Comprehensive Test Ban Treaty d) Treaty on the limitation of Antiballistic Missiles (ABM) e) Strategic Arms Reduction Treaties (START I and II) f) Treaty on Certain Conventional Weapons (CCW) g) Chemical Weapons Convention (CWC)	15

	Transaction Methodology : Classroom Teaching	
Unit IV	India's Role in Arms Control and Disarmaments a) Nehru's nuclear vision b) Nuclear ideology in Indian public c) Partial Test Ban Treaty (PTBT) d) Nuclear Deterrence e) NPT and India's nuclear vision for development and peace Transaction Methodology: Classroom Teaching, Documentary	15
Study Resources	1) Paolo Foradori, Giampiero Giacomello, Alessandro Pascolini, Arms Control and Disarmament: 50 Years of Experience in Nuclear Education, Springer, 26-Oct-2017. 2) http://disarmament.un.org/treaties/ 3) https://www.armscontrol.org/treaties 4) Michael Crowley, Malcolm Dando, Lijun Shang, Preventing Chemical Weapons: Arms Control and Disarmament as the Sciences Converge, Royal Society of Chemistry, 20-Aug-2018. 5) Oliver Meier, Christopher Daase, Arms Control in the 21st Century: Between Coercion and cooperation Routledge, 02-May-2013 - Political Science.	

SEMESTR-IV
DEF- DSE- 624-B): Make in India and India's Defence Sector

Credits- 4
Marks: 100

Internal Examination: 40
External Examination: 60

Course Objectives	1) To understand India's Defence Production challenges 2) To understand Make India Policy 3) To understand the importance of Defence Sector in India	
Course outcomes	After successful completion of this course, students are expected to: 1) To find out the solutions on Defence Production Challenges. 2) To understand the role of Privatization in India's Defence Production. 3) Students can analyze the defence sectors production.	
Unit	Contents	Hours
Unit I	Introduction a) India's Defence Budget policy b) Role government in Defence Production planning c) Defence Committees Transaction Methodology : Classroom Teaching	15
Unit II	India's Defence Production Unit a) Parliamentary Process b) Role of Defence Production Unit c) Purchasing policy Transaction Methodology: Classroom Teaching	15
Unit III	India's Make in India Policy a) India's Make in India Policy b) A.P.J. Abdul Kalam's Vision c) PM Modi's Vision d) Challenges in Make in India policy implementation Transaction Methodology : Classroom Teaching	15
Unit IV	Privatization in Defence Production a) Previous policy in Defence Production b) Need of Privatization c) Challenges to share Privatization Transaction Methodology: Classroom Teaching, Documentary	15

Study Resources	1) Laxman Kumar Behera, Indian Defence Industry: An Agenda for Making in India, Pentagon Press, 2016 2) Harsh Pant, Hand Book of Indian Defence Policy Themes, Structure and Doctrines, Reutledge, Delhi, 2016 3) Ron Matthews, Defence Production in India, ABC Pub. House, 1989 4) Laman Kumar Behera, Indian Defence Industry, : Issues of Self-reliance, IDSA, 2013 5) V.S. Srinivas, Defence Offsets: International Experiences and Implication for India, KW Publishers, 2010. 6) C. Vinodan, Defence and National Security of India: Concerens and Strategies, New Century Publications, 2017. 7) Annual Reports, Ministry of Defence, Government of India.	
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SEMESTR-IV
DEF- DSC- 625: Research Project-II

Credits- 6
Marks: 150

Internal Examination: 60
External Examination: 90

Course Objectives	1. To give exposure to the students to research culture and technology 2. To introduce students to how to select a research topic, plan, perform experiments, collect data and analyze the data 3. To foster self-confidence and self-reliance in the students as they learn to work and think independently	
Course outcomes	After successful completion of this course, students are expected to: 1. Conceive a problem based on published research and conduct a comprehensive literature survey. 2. Plan and carry out the tasks in the given framework of the dissertation and present the work in writing and viva. 3. Learn handling of instruments, use of chemicals and how to conduct the experiments 4. Learn how to present the project in PowerPoint and answer the queries to examiners and the science of writing.	
Unit	Contents	Hours

	The systematic approach towards the execution of the project should be as follows: (Wherever applicable) 1. The complete tenure of the research project should be one academic year. It should be allotted during the third semester and completed in the fourth semester. 2. Weekly 12 hours should be allotted to the research project in a regular timetable. 3. In the fourth semester, students should perform further experimental work, analyze the data and compile the results. 4. Students may be given an opportunity to participate in ongoing research activities in the respective Departments/Schools/Supervisors' laboratories. This will familiarize them with the literature survey and give them a fundamental understanding of designing and executing a research project. 5. Students may work individually or in groups (not more than 3 students) to be decided by the concerned department/supervisor. 6. Each research group should have a different research topic with some possible level of novelty. 7. The student should select the topic relevant to priority areas of concern or allied subjects. 8. Students are encouraged to work on multidisciplinary and applied projects, but it is not mandatory criteria. 9. Students are expected to work in line with the research outline and literature review, which was submitted in the third semester. 10. Students are expected to learn how to execute the research work systematically and overcome the hurdles. Students will get the opportunity to learn about practical aspects of many characterization techniques or models and further how to effectively employ them in the research work. Students should be able to critically evaluate the literature on the topic, identify the research gaps, plan and perform the experiments, interpret the results, understand the limitations of the work and draw conclusions. 11. At the end of the semester, each student should submit a detailed Research Report. 12. The format of the final research report shall be as per the guidelines of respective department. (Example: Title of the Project, Certificates, Acknowledgment, Abstract and Keywords, Contents, Introduction, Literature Review, Aim and objective, Materials and Methods, Result, Data analysis and Discussions, conclusion, limitations, suggestion, future scope, Bibliography, Appendix etc.) 13. An appropriate and essential conclusive statement must be drawn at the end of the study. 14. Students should maintain lab notebooks, and the supervisor may ask them to submit the mid-semester progress report. 15. For documents related to project submission: Font- Times New Roman, Heading Font Size-14, Normal Text Size-12, spacing-1.5, both sides justified and 1 inch margin on all side, both side printing on A-4 size. 16. Three copies of the dissertation should be prepared (one copy for each department, guide, and student). 17. At the end of the semester, the candidate should prepare and present	180
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	research using a PowerPoint presentation using modern ICT tools during the Internal and External Examination. 18. Besides writing a dissertation, students are encouraged to write a manuscript/patent if the results obtained are worthy of publication. 19. Students may present their research work in Avishkar/Webinars/Conferences. 20. Students should note that plagiarism is strictly prohibited. Internal examination (60 marks): Components of continuous internal assessment: • Literature collected, methodological planning, analysis of data, design and work, progress reports etc (30 marks) • Presentation in Webinars/Conferences/publication and departmental presentation etc (20 marks) • Oral examination (Viva Voce) (10 marks) External examination (90 marks) and Components of external assessment: • Evaluation of dissertation submitted in bound form at the time of examination (60 marks) • Presentation (PPT format) (15 marks) • Overall presentation reflecting the contribution of work, Response to questions (15 marks)	
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BOS Panel

Sr. No.	Name of Members	Designation
1	Dr. L. P. Wagh	Chairman
2	Prof. Dr. L. A. Khan	Member
3	Prof. Dr. D. G. Vispute	Member
4	Dr. J. D. Lekurwale	Member
5	Dr. Ramesh I. Raut	Member
6	Major Laxikant H. Daware (Retd.)	Member
7	Capt. (Dr.) Y. S. Borse	Member