



**North Maharashtra University,
Jalgaon.**

Defence & Strategic Studies

Syllabus for M.A. PART - I

Semester Pattern

W.E.F. June - 2014

North Maharashtra University, Jalgaon.
Defence & Strategic Studies
M.A. PART - I
Semester – I

Compulsory Papers

- DEF - 111 - Defence Economics.
DEF - 112 - Research Methodology.
DEF - 113 - Geopolitics.

Optional Paper (Any one)

- DEF - 114 - Terrorism.
DEF - 115 - Science, Technology and Computer Application in Defence
Management-I.
DEF - 116 - Evolution of Warfare-I.

Semester - II

Compulsory Papers

- DEF - 121 - Defence Production in India.
DEF - 122 - Research Methodology and Techniques.
DEF - 123 - Military Geography.

Optional paper (Any One)

- DEF - 124 - Counter terrorism : Theory & Practice.
DEF - 125 - Science, Technology and Computer Application in Defence
Management-II.
DEF - 126 - Evolution of Warfare-II.

Members of Sub-Committee.

- 1) Dr. V.Y. Jadhav : Nandurbar, Chairman of B.O.S. invited Member.
- 2) Dr. K. B. Patil : Smt. H. R. Patel Arts Mahila College, Shirpur
(Chairman Sub Committee)
- 3) Dr. G. H. Nikumbh : Pratap College, Amalner
- 4) Dr. K. N. Patil : Nutan Maratha College, Jalgaon
- 5) Dr. L. P. Wagh : M. J. College, Jalgaon
- 6) Prof. T.G. Raysing : N. M. U. Jalgaon

Defence & Strategic Studies

M.A. PART - I

DEF-111 - Defence Economics

(60+40=100)

Semester - I	Period
1) Contemporary Economic Theories- Adam Smith, Marshal, Hemilton i) Economic Welfare and National income - Meaning, Scope, Relation between Economic Welfare & National income. ii) Gross National Product and Gross Domestic Product- Definition & Concept.	10
2) India's Economic planning. i) Defence budgeting - Objectives & Functions. ii) Principles of Defence budget. iii) Parliamentary control over the budgeting. iv) Determinant & Performance of Defence budget.	10
3) Resources of Mobilization for War and their problems. i) Economic Mobilization ii) Man Power Mobilization iii) Natural Resources Mobilization iv) Industrial Mobilization v) Technological Mobilization	10
4) War Economy & their Problems & Effects. i) Techniques of War Financing a) Taxation b) Borrowing c) Inflation ii) Peace time Economy iii) War time Economy iv) Post war Economy	10
5) Analysis of India's Defence expenditure since 1947 to till date.	10

Reference Books

1. Mishra S.K.P. & Puri V.K., Indian Economy, Himalaya Publication, Delhi, 2012.
2. Raju Thomas, Defence Production in India – A Budgetary perspective , the Mac Milan, New Delhi, 1978.
3. K. Subrahmanyam, Perspective in Defence planning, Abhinav Publishing Co. New Delhi, 1972.
4. Y. Lakshmi, Trends in India's Defence Expenditure, ABC, New Delhi, 1998.
5. Comdr. Jasjeet sing, India's Defence Spending, 2nd Edn, Knowledge ,World, Delhi, 2001.
6. A N Agarwal, Economic Mobilization for National Defence, Asia Publishing House, Bombay, 1968..
7. Military Year Book of Various Years.
8. Annual Report of Ministry of Defence (Govt. of India)
९. विंग कमांडर मनमोहन बाला - रक्षा विज्ञान , प्रभात प्रकाशन , नवी दिल्ली , १९९७
१०. डॉ. लल्लनजीसिंह - राष्ट्रीय रक्षा और सुरक्षा , प्रकाश बुक डेपो, बरेली , १९९३

Defence & Strategic Studies
M.A. PART - I
DEF-112 - Research Methodology (60+40=100)

Semester - I		Period
1)	Scientific & Social Research - Meaning, Definitions, characteristics & Objectives	10
2)	Types of Social Research - Basic assumptions of social research steps, importance and utility of social Research.	10
3)	Information of problems in social Research i) Meaning of formulation of problems. ii) Factors in formulation of problems. iii) Process of formulation of problems. iv) Essential conditions of formulation of problems.	10
4)	Hypothesis - i) Meaning, Definitions & Scope. ii) Characteristics & Sources of Hypothesis iii) Types, Importance & Utility of Hypothesis	10
5)	Research Design i) Meaning & Definitions ii) Characteristics & Objectives iii) Types of Research Design	10

Reference Books

- १) डॉ. प्रविण आगलावे - संशोधन पध्दतीशास्त्र व तंत्रे, विद्या प्रकाशन, नाशिक, Jan-२०००
- २) डॉ. गंगाधर वि. कायदे पाटील - संशोधन पध्दती, चैतन्य ब्ब्लिशन, नाशिक, २००६
- 3) Dr. J.A. Khan- Research Methodology, APH, Publishing Corporation, Delhi, 2006.
- 4) O.R. Krishnaswami, M. Ranganathan - Methodology of Research in Social Sciences, Himalaya Publishing House, Mumbai. 2001.
- 5) C.R. Kothari - Research Methodology, Methods & Techniques, New Age International Publisher, New Delhi, 1996.
- 6) Khanzode, Research Methodology Techniques and Trends AHP Publishing Corporation, New Delhi, 1995.

Defence & Strategic Studies

M.A. PART - I

DEF-113 – Geopolitics

(60+40=100)

	Semester - I	Period
1)	Geopolitics : i) Meaning, Definition and Concept, Origin. ii) Objectives, Nature and Scope. iii) Geopolitics in war and Peace. iv) Importance.	10
2)	Evolution of Geopolitical Thoughts Since 19 th Century : i) Dr. Karl Haushofer. ii) A. T. Mahan. iii) Alford Mackinder. iv) Guilio Douhet.	10
3)	Geostrategy : i) Meaning, Definition, Concept, Scope and Importance. ii) Models of Geostrategic Pan. Regions. iii) Strategic regions by S. B. Chohen.	10
4)	Strategic Minerals : i) Importance and Meaning. ii) Uses.	10
5)	Territory and State : i) Territory - Definition, Concept and Elements. ii) Nation - State - Concept and Elements.	10

Reference Books

- 1) Peter Alis and P. G. Estel - Ministry Geography, East West, New Delhi, 1981.
- 2) Sali M.L. Military Geography, Manas Publication, Delhi, 2010.
- 3) Marie lall(ed), The Geopolitics of Energy in South Asia, Institute of South East Asian Studies, Jan-2009.
- 4) Colling John M, Military Geography, Washing D.C, National Defence University, 1998.
- 5) Kuldip sing Bajwa, Indias National Security-Military Challenges and responses, Vol-I, Har Anand Publication, 2008.
- 6) Stephen P. Cohen, India-Emerging power, Brookings Institution Press, 2001.
- 7) Guillemard, Outline of Military Geography, Cambridge university Press, 2011.
- 8) Mahan A T Sea Power, Methuen and Co, London, 1972 .
- 9) Blij Harman J. - Systemic Political Geography, John Wiew Sons, New York, 1973.

Defence & Strategic Studies
M.A. PART - I
DEF-114 – Terrorism

(60+40=100)

Semester - I	Period
1) Introduction	
a) Meaning & Concept	12
b) Significance & Relevance	
c) Causes - Political, Social backwardness, Economical, Fundamentalism.	
d) Pre requisites for a successful Terrorist Organization	
2) International Terrorism	10
a) Meaning & Concept	
b) Aims & Objectives	
c) Causes	
d) Threats (Sectarian Fundamentalism, Chemical, Biological, Nuclear, Cyber, Narcotic generation, Ideological, extremism, economics of Terrorism)	
e) Effects – Cultural Clash, Economical Ideology, Environmental, (Weapons of Mass Destruction) Human rights, Media, Gun Culture, National security etc.	
3) Globalization & Terrorism - Future Threats	08
4) War against Terrorism	10
a) Prevailing Global Environment	
b) US Experience of 9/11/ 2000	
c) Few Incidents of PLO	
d) Joint war operations against Terrorism Agreement (India & FBI)	
e) Impact & Lessons	
5) Indian Experience	10
a) International Terrorism experience	
b) Naxalism	
c) Islamic Fundamentalism & their attempts (various Bomb Blast, Attack on Parliament)	
d) Impact & Lessons	

References -

1. Anand V.K., Terrorism & Security, Deep & Deep, Delhi, 1984.
2. Anand V.K., Insurgency & Counter Insurgency, Deep & Deep, Delhi, 1986.
3. Bhatnagar Ved, Challenges to India's Intehrety, Rawat Publication, Delhi, 1998.
4. Kartha Tara, Tools of Terrorism, Knowledge World, Delhi, 1999.
5. Kumar Gopa, International Terrorism and Global Order in the 21st Century, Kanishka Publishers, Delhi, 2003.

Defence & Strategic Studies
M.A. PART - I
DEF-115 - Science, Technology and Computer Application
in Defence Management – I (60+40=100)

Semester - I	Period
1. Relevance of Science and Technology in National Security aspects.	10
2. Industrial Revolution	10
i) Impact of Sociology and Economic aspect.	
ii) Changes in Military Equipments and Tactics.	
3. Technologies in first world war and second world war- U. Boats, Tanks, Aircrafts, Aircraft Carriers.	10
4. Emergence of New Technologies - Aeronautical, Marine, Electronics, Space, Missiles.	10
5. Nuclear Technology in war and peace.	10

Reference Books

- 1) Macacy Kannets - Technology in world, Arms and Armour, London, 1981
- 2) Nanda B.S. - Science & Technology in India's Transformation, Concept, New Delhi, 1986.
- 3) Malaonkar D.D. - Technologies for Economic Development, Oxford & IBH Publishing, New Delhi, 1987.
- 4) Lee P. G. - Introduction to Battle Field weapons system and Technology, Brasseys, Oxfore, 1981.
- 5) Donald H. Sanders, Computer Today, McGraw Hill Book Company, New Delhi, 2000.
- 6) M. K. Roy, COBOL Programming, Tata McGraw Hill Book Company, New Delhi, 2001.

Defence & Strategic Studies
M.A. PART - I
DEF-116 - Evolution of Warfare – I (60+40=100)

Semester - I	Period
1) Military system of Greek. Organization, Weapons, Art of War.	08
2) Military Systems of Romans Organization, Weapons, Art of War.	08
3) Hannibal & Scipio - Contribution of Art of war Battle of Zama, Battle of Cannae.	08
4) Age of Cavalry - Development of military organization, Weapons & Art of war.	08
5) Revival of Infantry - Development of Military Organization, Weapons & Art of War.	09
6. Gun Powder & Fire Arms - Development of military Organization, Weapons & Art of war.	09

Reference Books

1. Montgomery - History of warfare, London William Collins, 1968.
2. Earle E.M. - Modern Strategy, Princeton University Press, 1971.
3. Bamme- Air Power, Meerut, English book Depot, 1974.
4. Halperin - Morton, Contemporang Military Strategy, London, Faber and Faber, 1972.

Defence & Strategic Studies
M.A. PART - I
DEF-121 - Defence Production in India (60+40=100)

Semester - II		Period
1)	Defence Production of India. i) Defence production Organization ii) Defence Research & Development Organization, Role & Functions in Defence Production.	10
2)	Defence Industries. i) Govt. Public Sector Undertaking ii) Public Sector. iii) Ordnance Factories - Objectives, Products, Range , etc.	10
3)	Role of Private sector in Defence Production in India.	10
4)	Self Sufficiency and Self Reliance in Defence Production. i) Arms and Ammunitions ii) Electrical, Electronics and Engineering Equipments. iii) Heavy Vehicles and Light Vehicles iv) Air Craft Production. v) Ships Building etc.	10
5)	Foreign Collaboration for Defence Production - Meaning, Types of Collaboration and Problems.	10

Reference Books

- 1) Rao Maroag, Defence Production in India, ABC publishing , New Delhi,1989.
- 2) Ron Mathew, The Military Industrial Complex – A reassessment, sage Publication,1985.
- 3) Maj. Gen. Pratap Narain, (Retd) Indian Armed Bazar, Shipla Publication New Delhi,1998.
- 4) Lt. Gen. R.K. Jasbir Singh, Indian Defence Year Book (various Vol.s), Natraj Publication, Dehradun.2000.
- 5) Military Yearbook of Various years.
- 6) Annual Report of Ministry of Defence.(Govt. of India)
- 7) डॉ. लल्लनजीसिंह - रक्षा प्राद्योगकी में भारत., प्रकाश बुक डेपो, बरेली१९९२.
- 8) विंग कमांडर मनमोहन बाला - रक्षा विज्ञान , प्रभात प्रकाशन , नवी दिल्ली १९९७
- 9) डॉ. लल्लनजीसिंह - राष्ट्रीय रक्षा और सुरक्षा , प्रकाश बुक डेपो , बरेली, १९९३

Defence & Strategic Studies
M.A. PART - I
DEF-122 - Research Methodology & Techniques (60+40=100)

Semester - II		Period
1)	Data Collection - i) Meaning & Importance of Data Collection. ii) Types & Tools of Data.	10
2)	Research Techniques - i) Types of Research Techniques. ii) Meaning, Nature, characteristics of projective Techniques. iii) Main Projective technique.	10
3)	Research Methods - i) Explanatory. ii) Descriptive. iii) Diagnostic iv) Experimental, Historical, Case Study. v) Field studies & Survey. vi) Statistical Methods.	10
4)	Research Report Writing. - Determinants, Characteristics and Objectives.	10
5)	Computer Application in Research. i) Name & Characteristics of Computer. ii) Use of Computer in Research Coating.	10

Reference Books

१. पु. ल. भांडारकर - सामाजिक संशोधन पध्दती Jan-२०००
२. डॉ. प्रविण आगलावे - संशोधन पध्दतीशास्त्र व तंत्रे, विद्या प्रकाशन, नागपूर २००६.
३. डॉ. गंगाधर वि. कायदे पाटील - संशोधन पध्दती, चैतन्य पब्लिशिंग, नाशिक
4. Understanding Research methods by Gerold R. Adams by Jay D.
5. Dr. J.A. Khan- Research Methodology, APH, Publishing Corporation, Delhi,2006.
6. O.R. Krishnaswami, M. Ranganathan - Methodology of Research in Social Sciences, Himalaya Publishing House, Mumbai,2001.
7. C.R. Kothari - Research Methodology, Methods & Techniques, New age International Publisher, New Delhi,1996.

Defence & Strategic Studies
M.A. PART - I
DEF-123 - Military Geography (60+40=100)

Semester - II		Period
1)	Military Geography : i) Meaning, Definition, Concept, Scope and Importance. ii) Planning Process, Geography as a Planning Factor. iii) Man and Environment - Determinism and Positivism.	10
2)	Geography and Warfare : i) Land Warfare. ii) Air Warfare. iii) Amphibious Warfare. iv) War and Environment. v) Cyber Warfare.	10
3)	Logistics : i) Definition and Scope. ii) Importance of Resources and Industries in Supply, Chain and Logistics.	10
4)	Transportation and Communication : i) Importance, Transportation and Communication by Land, Air and Sea. ii) Problems and Logistics Supply, Jungle, Desert, Plain, High Altitudes and Rivers Crossing.	10
5)	Current Trends : i) Geo-Economics. ii) Globalization and Security.	10

Reference Books

- 1) Peter Alis and P. G. Estel - Ministry Geography, East West, New Delhi, 1981.
- 2) Sali M.L. Military Geography, Manas Publication, Delhi, 2010.
- 3) Marie Iall(ed), The Geopolitics of Energy in South Asia, Institute of South East Asian Studies, Jan-2009.
- 4) Colling John M, Military Geography, Washing D.C, National Defence University, 1998.
- 5) Kuldip sing Bajwa, Indias National Security-Military Challenges and responses, Vol-I, Har Anand Publication, 2008.
- 6) Stephen P. Cohen, India-Emerging power, Brookings Institution Press, 2001.
- 7) Guillemard, Outline of Military Geography, Cambridge university Press, 2011.
- 8) Mahan A T Sea Power, Methuen and Co, London, 1972 .
- 9) Blij Harman J. - Systemic Political Geography, John Wiley Sons, New York, 1973.

Defence & Strategic Studies
M.A. PART - I
DEF-124 - Counter Terrorism : Theory & Practice. (60+40=100)

Semester - II	Period
1) Counter Terrorism	10
a) Meaning and definition	
b) Differences between Terrorism, Insurgency plot, Armed Insurrection etc.	
2) Preventive Measures against Terrorism	12
a) Economical Factors	
b) Social Factors (Religious, Communal, Minority, Homogeneous)	
c) Psychological Factors (Awareness, lack of Loyalty, Supporting Surrounding Devising, Obstacles)	
d) Political Factors (Corruption, Democracy, Communist etc.)	
e) Other (Recruitment of Force against Terrorist, Role of Media, Cut the Logistics, Intelligence Sharing, Freeze Bank Accounts, etc.)	
3) Security Measures against Terrorism	10
a) Responsive Approach	
b) Residential Protection	
c) Working Place Security	
d) Transits Safety	
e) Institutional Aid	
4) Suppression of Terrorism	08
a) Role of Individual	
b) Problem of Extradition	
c) UN role and International Law	
5) Experience of India	10
a) Drawback in India	
b) Human Rights & Other Laws	
c) Other Related problems and Remedies	

References -

1. Anand V.K., Terrorism & Security, Deep & Deep, Delhi, 1984.
2. Anand V.K., Insurgency & Counter Insurgency, Deep & Deep, Delhi, 1986.
3. Bhatnagar Ved, Challenges to India's Integrity, Rawat Publication, Delhi, 1998.
4. Kartha Tara, Tools of Terrorism, Knowledge World, Delhi, 1999.
5. Kumar Gopa, International Terrorism and Global Order in the 21st Century, Kanishka Publishers, Delhi, 2003.

Defence & Strategic Studies
M.A. PART - I
DEF-125 - Science, Technology and Computer Application
in Defence Management II **(60+40=100)**

Semester - II	Period
1) Computer application in Defence Management.	10
2) New Technologies and their relevance to security- i) Computers, Electronics and Artificial intelligence. ii) Material Science. iii) Communication and Information Technology. iv) Mass Production. v) Bio-Technology. vi) Transportation vii) Thine Film and Nano-Technology.	10
3) Military application in Computer. i) Application in weapon system. ii) Night vision. iii) Flyby wire. iv) Missile system. v) C ⁴ I ² vi) Surveillance. vii) Communication. viii) Decision making. ix) R & D Cumulate.	10
4) Use of computer Technology in various warfare- i) Electronic war. ii) Star War. iii) Cyber War.	10
5) Transfer of Technology. Dual use of Technology and Impact on Security.	10

Reference Books

- 1) Macacy Karnds - Technology in world, Arms and Amour, London, 1981
- 2) Nanda B.S. - Science & Technology in India's Transformation, Concept, New Delhi, 1986.
- 3) Malaonkar D.D. - Technologies for Economic Development, Oxford & IBH Publishing, New Delhi, 1987.
- 4) Lee P. G. - Introduction to Battle Field weapons system and Technology, Brasseys, Oxfore, 1981.
- 5) Donald H. Sanders, Computer Today, McGraw Hill Book Company, New Delhi.1998.
- 6) M. K. Roy, COBOL Programming, Tata McGraw Hill Book Company, New Delhi,2000.
- 7) Kapoor V. & Ningham Jai, Battle field Information System, Role of Army Association,Nasik,1994.
- 8) Rice M A & Sanmer A J,Communication and Information System for Battle field Command & Control,Vol.5,UK, Brasscy 1989.

Defence & Strategic Studies
M.A. PART - I
DEF-126 - Evolution of Warfare – II (60+40=100)

	Semester - II	Period
1)	Assessment of Contribution in At of War Gustavas Adolphes, Fredric the Great & Napoleon Bonapart.	08
2)	Strategies during the First World War. Magino Line & Schliffen Plan.	08
3)	Various Kinds of Warfare Trench Warfare, Armor Warfare, Chemical Warfare, Psychological Warfare.	09
4)	Sea Warfare during world war I. Role of U-Boats.	08
5)	Strategies during the world war II Blitzkrieg War Technique & Panzer Division of Germany, Japanies Strategy.	09
6)	Tactical & strategic use of Air power in world war - II Aircraft Carrier.	08

Reference Books

1. Montgomery - History of Warfare, London William Collins, 1968.
2. Earle E.M. - Modern Strategy, Princeton University Press, 1971.
3. Bamme- Air Power, Meerut, English Book Depot, 1974.
4. Halperin Morton, Contemporang Military Strategy, London, Faber and Faber, 1972.

North Maharashtra University, Jalgaon.

Defence & Strategic Studies

Syllabus for M.A. PART - I

W.E.F. June 2014

Equivalence Courses.

Sem. I

Sr. No	Old Paper Code No.	Old Course W.E.F. 2011	New Paper Code No	New Course W.E.F. 2014
	Compulsory Paper		Compulsory Paper	
1	DEF. 111	Defence Economics	DEF. 111	Defence Economics
2	DEF. 112	Research Methodology	DEF. 112	Research Methodology
3	Any two DEF. 113	Geopolitics	DEF. 113	Geopolitics
4	DEF. 114	Indian Military System	Any one DEF. 114	Terrorism
5	DEF. 115	International Relations in Modern Times	DEF. 115	Science, Technology and Computer Application in Defence Management-I
6			DEF. 116	Evolution of warfare-I

Sem. II

Sr. No	Old Paper Code No.	Old Course W.E.F. 2011	New Paper Code No	New Course W.E.F. 2014
	Compulsory Paper		Compulsory Paper	
1	DEF. 121	Defence Production in India	DEF. 121	Defence Production in India
2	DEF. 122	Research Methodology and Techniques	DEF. 122	Research Methodology and Techniques
3	Any two DEF. 123	Military Geography	DEF. 123	Military Geography
4	DEF. 124	Maratha Military System	Any one DEF. 124	Counter terrorism : Theory & Practice
5	DEF. 125	India & her Neighbours	DEF. 125	Science, Technology and Computer Application in Defence Management-II
6			DEF. 126	Evolution of Warfare-II

Dr. K. B. Patil
Chairman, Syllabus Sub Committee
Defence & Strategic Studies
N.M.U. Jalgaon

Dr. V. Y. Jadhav
Chairman, BOS
Defence & Strategic Studies
N.M.U. Jalgaon

संरक्षण आणि सामरिक शास्त्र विषयाच्या अभ्यासक विद्यार्थ्यांकरीता रोजगाराच्या संधी व करीयर
करण्याच्या संधी पुढील प्रमाणे आहेत

Job Opportunities in Defence & Strategic Studies

After Graduation

1. Industrial Security Sector
2. Security Guard
3. Air Force Ground Duty Officer
4. Maharashtra Pubic Service Commission
5. Union Public service Commission
6. Indian Police Service
7. Indian Forest Service
8. Army Education Officer
9. Defence industries
10. Para Military Forces
11. N.C.C. (B Cert.& C Cert.) Direct Entry Armed Forces (CDS)
12. Education Field
13. Law (Military Law & International Law)
14. Defence Journalism (If Foreign Language Diploma)

After Post Graduate

1. Civil Defence (Various 24 Branches – Territorial Army to Fire Fighting Officer Cadre)
2. Industrial Security Officer
3. Armed Forces
4. NET/ SET Examination
5. Competitive Examination(Civil Services, IPS, Railway,)
6. Banking
7. Defence Journalism
8. Scientist in Defence Laboratories.
9. International Relations Analyzer
10. Military (Defence) Analyzer

- **Please Recommend This Opportunities & display on University web.**
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Chairman
BOS Defence & Strategic Studies