

SUNRISE UNIVERSITY ALWAR

Syllabus of PG- Two Year Master of Arts in

GEOGRAPHY (M.A.)

SESSION – 2025–26

Department of GEOGRAPHY



CURRICULUM STRUCTURE

Name of the Programme – Master of Arts (M.A.)

Subject – Geography

As per NEP 2020

YEAR – 1st

SEMESTER – 1st

Name of Programme: P G- M.A.(GEOGRAPHY)										
Subject/ Discipline: GEOGRAPHY										
Sr no	Subject code	Subject type	Subject Title				CREDITS	Internal Marks	External Marks	Total Marks
				L	T	P				
1	MAGEO-101	MJR	Geographical Thought (upto 18th Century))	6	0	0	4	40	60	100
2	MAGEO -102	MJR	Geomorphology	6	0	0	4	40	60	100
3	MAGEO -103	MJR	Advanced Economic Geography	6	0	0	4	40	60	100
4	MAGEO -104	MJR	Environmental Geography	6	0	0	4	40	60	100
5	MAGEO-105P	DSCP-I	Practical-I	2			2		50	50
6	MAGEO - SEM106		SEMINAR		0	0	2	50		50
TOTAL MARKS = 500										

MAGEO–101 (MJR)

Geographical Thought (Up to 18th Century)

Unit I – Origin and Early Development of Geographical Thought

Sub-Units:

1. Meaning of Geography
2. Nature and Scope of Geography
3. Development of Geography
4. Ancient Indian Geography
5. Ancient Greek Geography

Unit II – Classical Geographers

Sub-Units:

1. Contribution of Strabo
2. Contribution of Ptolemy
3. Roman Geographers
4. Arab Geographers

Unit III – Medieval and Renaissance Geography

Sub-Units:

1. Medieval Geographical Thought
2. Development of Geography during the Renaissance

Unit IV – Geography in the 17th and 18th Century

Sub-Units:

1. Development of Geography during the 17th–18th Century
2. Impact of the Age of Exploration

MAGEO–102 (MJR)

Geomorphology

Unit I – Fundamentals of Geomorphology

Sub-Units:

1. Nature and Scope of Geomorphology
2. Internal Structure of the Earth

Unit II – Endogenic Processes

Sub-Units:

1. Plate Tectonics Theory
2. Volcanoes
3. Earthquakes

Unit III – Exogenic Processes

Sub-Units:

1. Weathering
2. Erosion
3. Deposition
4. River Action
5. Glacial Action
6. Wind Action
7. Marine Action

Unit IV – Landform Development Theories

Sub-Units:

1. Development of Landforms
2. Cycle of Erosion – William Morris Davis

MAGEO–103 (MJR)

Advanced Economic Geography

Unit I – Foundations of Economic Geography

Sub-Units:

1. Concept of Economic Geography
2. Scope of Economic Geography
3. Classification of Resources

Unit II – Agricultural and Industrial Location Theories

Sub-Units:

1. Agricultural Geography
2. Industrial Geography
3. Agricultural Location Theory – Johann Heinrich von Thünen

Unit III – Industrial and Transport Geography

Sub-Units:

1. Industrial Location Theory – Alfred Weber
2. Transport
3. Trade

Unit IV – Global Economic Development

Sub-Units:

1. Globalization
2. Economic Regional Development
3. Service Sector
4. Information Technology

MAGEO–104 (MJR)

Environmental Geography

Unit I – Environmental Concepts

Sub-Units:

1. Concept of Environment
2. Components of Environment
3. Ecosystem

Unit II – Environmental Issues

Sub-Units:

1. Biodiversity
2. Conservation
3. Environmental Pollution

Unit III – Climate and Disaster Studies

Sub-Units:

1. Climate Change
2. Global Warming
3. Disaster Management

Unit IV – Sustainable Development and Policies

Sub-Units:

1. Sustainable Development
2. Environmental Policies
3. Environmental Laws

MAGEO–105 (DSCP-I)

Practical – I

Unit I – Cartographic and Statistical Techniques

Sub-Units:

1. Cartographic Techniques
2. Study of Topographical Maps
3. Statistical Methods
4. Diagram Construction

5. Map Projection
 6. Scale
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MAGEO–SEM106

Seminar

Unit I – Academic Presentation and Research Skills

Sub-Units:

1. Topic Presentation
2. Research Paper Writing
3. Group Discussion
4. Internal Assessment

Reference Books:

MAGEO–101 (MJR)

Geographical Thought (Up to 18th Century)

Reference Books:

1. Geographical Thought: A Critical History of Ideas – David N. Livingstone
 2. Perspectives in the History of Geographical Thought – Richard Hartshorne
 3. A History of Geographical Thought – Geoffrey J. Martin
 4. Geography and Geographers – Ron Johnston
 5. Geographical Thought – Majid Husain
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2. MAGEO–102 (MJR)

Geomorphology

Reference Books:

1. Geomorphology – Savindra Singh
 2. Principles of Geomorphology – W. D. Thornbury
 3. Geomorphology – C. D. Ollier
 4. Fundamentals of Geomorphology – Richard J. Huggett
-

3. MAGEO–103 (MJR)

Advanced Economic Geography

Reference Books:

1. Economic Geography – Alexander B. Murphy
 2. Economic Geography – Hartshorne & Alexander
 3. Economic Geography – R. C. Chandna
 4. Location and Space Economy – (Central Place Theory Reference)
-

4. MAGEO–104 (MJR)

Environmental Geography

Reference Books:

1. Environmental Geography – Savindra Singh
 2. Environmental Studies – Anubha Kaushik
 3. Environmental Geography – R. C. Sharma
 4. Principles of Environmental Science – Cunningham & Cunningham
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5. MAGEO–105P (DSCP-I)

Practical – I

Reference Books:

1. Practical Geography – Gopal Singh
 2. Map Work and Practical Geography – R. L. Singh
 3. Statistical Methods in Geography – P. R. Sharma
-

6. MAGEO–SEM106

Seminar

Reference Books:

1. Research Methodology – C. R. Kothari
2. Research Methods in Geography – Basil Gomez & John Paul Jones
3. How to Write and Publish a Scientific Paper – Robert A. Day

YEAR – 1st

SEMESTER – 2nd

Postgraduate Programme (M.A. Geography)

Name of Programme: P G- M.A.(GEOGRAPHY)										
Subject/ Discipline: GEOGRAPHY										
Sr no	Subject code	Sub-type	Subject Title				CREDITS	Internal Marks	External Marks	Total Marks
				L	T	P				
1	MAGEO-201	MJR	Geographical Thought (Modern)	6	0		4	40	60	100
2	MAGEO - 202	MJR	Advanced Climatology and Oceanography	6	0		4	40	60	100
3	MAGEO - 203	MJR	Principles and Theory of Economic Geography	6	0		4	40	60	100
4	MAGEO - 204	MJR	Environment Management and Sustainable Development	6	0	0	4	40	60	100
5	MAGEO-205P	DSCP -II	Practical-II	0	0	2	2		50	50

6	MAGEO-SEM206		Village PROJECT	2	0	0	2	50		50
TOTAL MARKS = 500										

MAGEO–201 (MJR)

Modern Geographical Thought

Unit I – Development of Modern Geography

Sub-Units:

1. Development of Modern Geography
2. Determinism
3. Possibilism

Unit II – Major Contributors to Modern Geography

Sub-Units:

1. Contribution of Alexander von Humboldt
2. Contribution of Carl Ritter
3. Friedrich Ratzel and Human Geography

Unit III – Regional and Possibilist Approaches

Sub-Units:

1. Paul Vidal de la Blache and Possibilism
2. Richard Hartshorne and Regional Geography

Unit IV – Contemporary Trends in Geography

Sub-Units:

1. Quantitative Revolution
2. Behavioural Geography

3. Humanistic Geography
 4. Recent Trends in Geography
-

MAGEO–202 (MJR)

Advanced Climatology and Oceanography

Unit I – Structure and Elements of Climate (Climatology)

Sub-Units:

1. Structure of the Atmosphere
2. Temperature
3. Atmospheric Pressure

Unit II – Wind and Climate Systems

Sub-Units:

1. Wind Systems
2. Monsoon
3. Climate Classification – Wladimir Köppen

Unit III – Fundamentals of Oceanography

Sub-Units:

1. Structure of Oceans
2. Ocean Currents

Unit IV – Marine Phenomena and Management

Sub-Units:

1. El Niño
2. La Niña

3. Marine Resources
 4. Coastal Management
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MAGEO–203 (MJR)

Principles and Theories of Economic Geography

Unit I – Spatial Distribution of Economic Activities

Sub-Units:

1. Spatial Distribution of Economic Activities
2. Primary Sector
3. Secondary Sector
4. Tertiary Sector

Unit II – Central Place and Market Theories

Sub-Units:

1. Central Place Theory – Walter Christaller
2. Market Area Theory – August Lösch

Unit III – Industrial and Regional Development

Sub-Units:

1. Industrial Localization
2. Globalization
3. Regional Economic Inequality

Unit IV – Trade and Service Economy

Sub-Units:

1. Trade Networks

2. Transport Networks
 3. Service Sector
 4. E-Commerce
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MAGEO–204 (MJR)

Environmental Management and Sustainable Development

Unit I – Environmental Management Concepts

Sub-Units:

1. Concept of Environmental Management
2. Resource Conservation

Unit II – Environmental Assessment and Biodiversity

Sub-Units:

1. Environmental Impact Assessment (EIA)
2. Biodiversity Conservation

Unit III – Sustainable Development Framework

Sub-Units:

1. Sustainable Development Goals (SDGs)
2. Water Resource Management
3. Energy Resource Management

Unit IV – Climate Policy and Risk Reduction

Sub-Units:

1. Climate Change Policies

2. Disaster Risk Reduction

MAGEO–205P (DSCP-II)

Practical – II

Unit I – Statistical and Mapping Techniques

Sub-Units:

1. Mean
 2. Standard Deviation
 3. Correlation
 4. Thematic Mapping
 5. Introduction to GIS
 6. Introduction to Remote Sensing
 7. Data Analysis
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MAGEO–SEM206

Village Project

Unit I – Field Survey and Analysis

Sub-Units:

1. Regional Survey of Selected Village
2. Socio-Economic Profile
3. Resource Mapping
4. Field Report Writing
5. Presentation
6. Viva-Voce

MAGEO–201 (MJR)

Modern Geographical Thought

Reference Books:

1. Geographical Thought: A Critical History of Ideas – David N. Livingstone
 2. Geography and Geographers – Ron Johnston
 3. A History of Geographical Thought – Geoffrey J. Martin
 4. Geographical Thought – Majid Husain
 5. Perspective on the Nature of Geography – Richard Hartshorne
 6. Principles of Human Geography – Friedrich Ratzel
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MAGEO–202 (MJR)

Advanced Climatology and Oceanography

Reference Books:

1. Climatology – D. S. Lal
 2. Atmosphere Weather and Climate – Barry & Chorley
 3. General Climatology – H. J. Critchfield
 4. Oceanography – G. L. Pickard
 5. Introduction to Physical Oceanography – Robert H. Stewart
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MAGEO–203 (MJR)

Principles and Theories of Economic Geography

Reference Books:

1. Economic Geography – Alexander B. Murphy
 2. Economic Geography – R. C. Chandna
 3. Central Places in Southern Germany – Walter Christaller
 4. The Economics of Location – August Lösch
 5. The Theory of Industrial Location – Alfred Weber
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MAGEO–204 (MJR)

Environmental Management and Sustainable Development

Reference Books:

1. Environmental Geography – Savindra Singh
 2. Environmental Impact Assessment – Kathleen M. Wood
 3. Our Common Future – WCED (Brundtland Report)
 4. Sustainable Development – John Blewitt
 5. Disaster Management – Harsh K. Gupta
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MAGEO–205P (DSCP-II)

Practical – II

Reference Books:

1. Statistical Methods for Geography – P. R. Sharma
 2. Practical Geography – Gopal Singh
 3. Geographical Information Systems and Science – Paul A. Longley et al.
 4. Remote Sensing and Image Interpretation – Lillesand & Kiefer
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MAGEO–SEM206

Village Project

Reference Books:

1. Research Methodology – C. R. Kothari
2. Rural Development – Katar Singh
3. Field Methods in Geography – N. K. Thakur
4. Survey Research Methods – Floyd J. Fowle

YEAR – 2nd | SEMESTER – 3rd

Name of Programme: P G- M.A.(GEOGRAPHY)											
Subject/ Discipline: GEOGRAPHY											
Sr no	Subject code	Sub-type	Subject Title					CRED ITS	Internal Marks	External Marks	Total Marks
				L	T	P					
1	MAGEO-301	MJR	Advanced Geography of India	6	0	0		4	40	60	100
2	MAGEO -302	MJR	Agriculture Geography OR Disaster Perception and Management	6	0	0		4	40	60	100
3	MAGEO -303	MJR	Urban Geography OR Regional Planning and Development	6	0	0		4	40	60	100
4	MAGEO -304	MJR	Research Methodology	6	0	0		4	40	60	100
5	MAGEO-305P	DSCP-III	Practical-III	0	0	2		2		50	50
6	MAGEO - SEM306		Jurnalism and mass communication	2	0	0		2	50		50
TOTAL MARKS = 500											

MAGEO–301 (MJR)

Advanced Geography of India

Unit–I: Physical Structure of India

Sub-Units:

- 1.1 Geographical Location and Strategic Importance
 - 1.2 Physiographic Divisions of India
 - 1.3 Drainage System and River Basins
 - 1.4 Climate and Monsoon Mechanism
 - 1.5 Natural Vegetation and Soil Types
-

Unit–II: Resources of India

Sub-Units:

- 2.1 Water Resources: Availability and Utilization
 - 2.2 Mineral Resources: Distribution and Production
 - 2.3 Energy Resources (Conventional & Non-Conventional)
 - 2.4 Forest Resources and Biodiversity
 - 2.5 Resource Conservation and Management
-

Unit–III: Population and Economic Development

Sub-Units:

- 3.1 Distribution, Density and Growth of Population
 - 3.2 Population Composition and Problems
 - 3.3 Agricultural Development and Green Revolution
 - 3.4 Industrial Development and Industrial Regions
 - 3.5 Transport and Communication Network
-

Unit–IV: Regional Development of India

Sub-Units:

- 4.1 Major Physical and Economic Regions of India
- 4.2 Regional Imbalances and Disparities

4.3 Planning Regions of India

4.4 Sustainable Development Goals in Indian Context

MAGEO–302 (MJR)

(A) Agricultural Geography

Unit–I: Nature and Scope of Agricultural Geography

Sub-Units:

1.1 Definition and Scope

1.2 Determinants of Agriculture (Physical & Economic)

1.3 Types of Agriculture

Unit–II: Agricultural Patterns

Sub-Units:

2.1 Cropping Pattern in India

2.2 World Agricultural Regions

2.3 Green Revolution and Its Impact

Unit–III: Agricultural Productivity

Sub-Units:

3.1 Measurement of Agricultural Productivity

3.2 Irrigation and Technological Inputs

3.3 Land Use Pattern

Unit–IV: Agricultural Development and Environment

Sub-Units:

4.1 Agricultural Regionalization

4.2 Sustainable Agriculture

4.3 Environmental Issues in Agriculture

OR

(B) Disaster Perception and Management

Unit–I: Concept of Disaster

Sub-Units:

- 1.1 Definition and Classification of Disasters
- 1.2 Hazard, Risk and Vulnerability
- 1.3 Disaster Cycle

Unit–II: Types of Disasters

Sub-Units:

- 2.1 Earthquakes
- 2.2 Floods
- 2.3 Cyclones
- 2.4 Drought

Unit–III: Disaster Risk Reduction

Sub-Units:

- 3.1 Mitigation and Preparedness
- 3.2 Early Warning Systems
- 3.3 Community Participation

Unit–IV: Disaster Management in India

Sub-Units:

- 4.1 Institutional Framework in India
- 4.2 National Disaster Management Policy
- 4.3 Role of GIS and Remote Sensing

MAGEO–303 (MJR)

(A) Urban Geography

Unit–I: Foundations of Urban Geography

Sub-Units:

- 1.1 Concept and Scope
- 1.2 Urbanization Process
- 1.3 Theories of Urban Growth

Unit–II: Urban Structure and Classification

Sub-Units:

- 2.1 Classification of Towns
- 2.2 Functional Classification
- 2.3 Metropolitan Cities

Unit–III: Urban Land Use Models

Sub-Units:

- 3.1 Concentric Zone Model
- 3.2 Sector Model
- 3.3 Multiple Nuclei Model

Unit–IV: Urban Planning and Problems

Sub-Units:

- 4.1 Urban Planning Concepts
- 4.2 Smart Cities
- 4.3 Urban Environmental Issues

OR

(B) Regional Planning and Development

Unit–I: Concept of Region

Sub-Units:

- 1.1 Types of Regions
- 1.2 Regionalization Methods
- 1.3 Need for Regional Planning

Unit–II: Theories of Regional Development**Sub-Units:**

- 2.1 Central Place Theory
- 2.2 Growth Pole Theory
- 2.3 Core-Periphery Model

Unit–III: Regional Planning in India**Sub-Units:**

- 3.1 Planning Regions of India
- 3.2 Five Year Plans
- 3.3 Regional Development Programmes

Unit–IV: Sustainable Regional Development**Sub-Units:**

- 4.1 Rural-Urban Linkages
- 4.2 Balanced Regional Development
- 4.3 Sustainable Development Strategies

MAGEO–304 (MJR)**Research Methodology****Unit–I: Research Fundamentals****Sub-Units:**

- 1.1 Meaning and Types of Research

- 1.2 Research Problem and Hypothesis
- 1.3 Research Design

Unit–II: Methods of Data Collection

Sub-Units:

- 2.1 Primary Data Collection
- 2.2 Secondary Data Sources
- 2.3 Sampling Techniques

Unit–III: Data Analysis Techniques

Sub-Units:

- 3.1 Statistical Methods
- 3.2 Cartographic Techniques
- 3.3 Use of GIS

Unit–IV: Report Writing

Sub-Units:

- 4.1 Structure of Research Report
- 4.2 Citation and Referencing
- 4.3 Presentation of Data

MAGEO–305P (DSCP–III)

Practical – III

Unit–I: Map Preparation

Unit–II: Statistical Techniques

Unit–III: GIS Applications

Unit–IV: Field Survey and Project Report

MAGEO–SEM306

Journalism and Mass Communication

Unit–I: Introduction to Journalism

Unit–II: News Writing and Reporting

Unit–III: Media Forms (Print, Electronic, Digital)

Unit–IV: Media Ethics and Development Communication

References:

MAGEO–301 (MJR) – Advanced Geography of India

Core References:

1. **R. L. Singh** – India: A Regional Geography
2. **Majid Husain** – Geography of India
3. **S. D. Maurya** – Geography of India
4. **Khadg Singh Valdiya** – The Making of India: Geodynamic Evolution
5. **Government of India** – Economic Survey of India (Latest Edition)
6. **Ministry of Environment, Forest and Climate Change** – India State of Forest Report

MAGEO–302 (MJR)

(A) Agricultural Geography

1. **J. C. Weaver** – Crop Combination Regions in the Middle West
 2. **Majid Husain** – Agricultural Geography
 3. **R. L. Singh** – Agricultural Geography
 4. **Jasbir Singh** – Agricultural Geography
 5. **Food and Agriculture Organization** – FAO Reports (Latest)
-

(B) Disaster Perception and Management

1. **H. K. Gupta** – Disaster Management
 2. **National Disaster Management Authority** – NDMA Guidelines
 3. **United Nations Office for Disaster Risk Reduction** – UNDRR Reports
 4. **P. D. Sharma** – Ecology and Environment
-

MAGEO–303 (MJR)

(A) Urban Geography

1. **R. E. Dickinson** – City and Region
 2. **O. H. K. Spate** – India and Pakistan: A General and Regional Geography
 3. **Majid Husain** – Urban Geography
 4. **Chauncy Harris & Edward Ullman** – Multiple Nuclei Model
-

(B) Regional Planning and Development

1. **Walter Christaller** – Central Place Theory
 2. **August Lösch** – The Economics of Location
 3. **John Friedmann** – Regional Development Policy
 4. **Myrdal Gunnar** – Economic Theory and Underdeveloped Regions
-

MAGEO–304 (MJR) – Research Methodology

1. **Kothari C. R.** – Research Methodology: Methods and Techniques
 2. **B. L. S. Prakash Rao** – Statistical Methods in Geographical Studies
 3. **Sudhir Wanmali** – Research Methodology in Geography
 4. **Ian Heywood** – An Introduction to Geographical Information Systems
-

MAGEO–305P (DSCP–III) – Practical III

1. **R. P. Misra** – Fundamentals of Cartography
2. **Monkhouse F. J.** – Maps and Diagrams
3. **Peter A. Burrough** – Principles of Geographical Information Systems

4. **Survey of India** – Topographical Maps

MAGEO–SEM306 – Journalism and Mass Communication

1. **Keval J. Kumar** – Mass Communication in India
2. **Rangaswami Parthasarathy** – Journalism in India
3. **B. N. Ahuja** – Theory and Practice of Journalism
4. **Press Council of India** – *Media Ethics Guidelines*



YEAR – 2nd |
SEMESTER – 4th

Name of Program : P G- M.A.(GEOGRAPHY)										
Subject/ Discipline: GEOGRAPHY										
Sr no	Subject code	Sub-type	Subject Title				CREDITS	Internal Marks	External Marks	Total Marks
				L	T	P				
1	MAGEO-401	MJR	Advanced Geography of Rajasthan	6	0	0	4	40	60	100
2	MAGEO -402	MJR	Advanced Geomorphology	6	0	0	4	40	60	100
3	MAGEO -403	MJR	Fundamentals of Remote Sensing	6	0	0	4	40	60	100
4	MAGEO -404	MJR	BioGeography	6	0	0	4	40	60	100
5	MAGEO-405P	DSCP-IV	Practical-IV	0	0	2	2		50	50
6	MAGEO -SEM406		Dissertation	2	0	0	2		50	50
TOTAL MARKS = 500										

1. MAGEO–401 (MJR)

Advanced Geography of Rajasthan

Unit–I: Physical Environment of Rajasthan

Sub-Units:

- 1.1 Location, Extent and Physiographic Divisions
- 1.2 Aravalli Mountain System
- 1.3 Climate and Climatic Regions
- 1.4 Drainage System and Water Resources
- 1.5 Soils and Natural Vegetation

Unit–II: Resources of Rajasthan

Sub-Units:

- 2.1 Mineral Resources and Mining Regions
 - 2.2 Power Resources (Thermal, Solar, Wind)
 - 2.3 Forest Resources
 - 2.4 Water Resource Development (Indira Gandhi Canal Project)
 - 2.5 Conservation of Resources
-

Unit–III: Population and Economic Development

Sub-Units:

- 3.1 Distribution and Growth of Population
 - 3.2 Urbanization in Rajasthan
 - 3.3 Agricultural Development
 - 3.4 Industrial Development
 - 3.5 Transport and Tourism
-

Unit–IV: Regional Development and Issues

Sub-Units:

- 4.1 Regional Imbalances in Rajasthan
 - 4.2 Desertification and Environmental Problems
 - 4.3 Drought and Water Scarcity
 - 4.4 Sustainable Development Strategies
-

2. MAGEO–402 (MJR)

Advanced Geomorphology

Unit–I: Fundamentals of Geomorphology

Sub-Units:

- 1.1 Nature and Scope of Geomorphology
 - 1.2 Endogenic and Exogenic Processes
 - 1.3 Plate Tectonics Theory
 - 1.4 Earth Movements
-

Unit–II: Fluvial and Arid Geomorphology

Sub-Units:

- 2.1 Fluvial Processes and Landforms
 - 2.2 Drainage Patterns
 - 2.3 Arid Landforms
 - 2.4 Desertification
-

Unit–III: Coastal and Glacial Geomorphology

Sub-Units:

- 3.1 Coastal Processes and Landforms
 - 3.2 Marine Erosion and Deposition
 - 3.3 Glacial Processes and Landforms
 - 3.4 Periglacial Features
-

Unit–IV: Applied Geomorphology

Sub-Units:

- 4.1 Geomorphology in Engineering
- 4.2 Environmental Geomorphology
- 4.3 Slope Development Theories
- 4.4 Quantitative Geomorphology

3. MAGEO–403 (MJR)

Fundamentals of Remote Sensing

Unit–I: Basics of Remote Sensing

Sub-Units:

- 1.1 Definition and History
 - 1.2 Electromagnetic Radiation
 - 1.3 Interaction of EMR with Atmosphere and Earth Surface
 - 1.4 Types of Remote Sensing
-

Unit–II: Platforms and Sensors

Sub-Units:

- 2.1 Aerial Photography
 - 2.2 Satellite Platforms
 - 2.3 Sensor Types (Active and Passive)
 - 2.4 Resolution (Spatial, Spectral, Temporal, Radiometric)
-

Unit–III: Image Interpretation and Analysis

Sub-Units:

- 3.1 Visual Interpretation Techniques
 - 3.2 Digital Image Processing
 - 3.3 False Colour Composite
 - 3.4 Image Classification
-

Unit–IV: Applications of Remote Sensing

Sub-Units:

- 4.1 Agriculture and Forestry
 - 4.2 Urban Planning
 - 4.3 Disaster Management
 - 4.4 Water Resource Management
-

4. MAGEO–404 (MJR)**Biogeography****Unit–I: Fundamentals of Biogeography****Sub-Units:**

- 1.1 Meaning and Scope
 - 1.2 Biosphere and Ecosystem
 - 1.3 Biomes of the World
 - 1.4 Biodiversity
-

Unit–II: Plant and Animal Distribution**Sub-Units:**

- 2.1 Factors Affecting Distribution
 - 2.2 Zoogeographical Regions
 - 2.3 Phytogeographical Regions
 - 2.4 Endemism
-

Unit–III: Ecological Concepts**Sub-Units:**

- 3.1 Food Chain and Food Web
- 3.2 Ecological Succession

3.3 Ecotone and Edge Effect
3.4 Ecological Balance

Unit–IV: Environmental Conservation

Sub-Units:

4.1 Environmental Degradation
4.2 Wildlife Conservation
4.3 Protected Areas of India
4.4 Sustainable Development

5. MAGEO–405P (DSCP–IV)

Practical – IV

Unit–I: Aerial Photo Interpretation

Unit–II: Satellite Image Interpretation

Unit–III: Geomorphological Mapping

Unit–IV: Field Survey and Project Report

6. MAGEO–SEM406

Dissertation

Components:

- Selection of Research Topic
- Review of Literature
- Research Methodology

- Field Work / Data Collection
- Data Analysis
- Report Writing
- Viva-Voce Examination

References:

MAGEO–401 (MJR) – Advanced Geography of Rajasthan

Core References:

1. **H. S. Sharma** – Geography of Rajasthan
 2. **L. R. Bhalla** – Modern Geography of Rajasthan
 3. **R. L. Singh** – Regional Geography of India (Rajasthan Chapters)
 4. **Government of Rajasthan** – Rajasthan Economic Review (Latest Edition)
 5. **Central Arid Zone Research Institute** – Research Publications on Desert & Arid Studies
 6. **Geological Survey of India** – Reports on Mineral Resources of Rajasthan
-

MAGEO–402 (MJR) – Advanced Geomorphology

Core References:

1. **Richard J. Chorley** – Geomorphology
 2. **Arthur N. Strahler** – Physical Geography
 3. **Savindra Singh** – Geomorphology
 4. **Lester C. King** – The Morphology of the Earth
 5. **William D. Thornbury** – Principles of Geomorphology
-

MAGEO–403 (MJR) – Fundamentals of Remote Sensing

Core References:

1. **Lillesand Thomas M. & Ralph W. Kiefer** – Remote Sensing and Image Interpretation

2. **Anji Reddy M.** – Remote Sensing and GIS
 3. **Jensen John R.** – Introductory Digital Image Processing
 4. **Indian Space Research Organisation** – NRSC Publications & Bhuvan Portal
 5. **National Remote Sensing Centre** – Training Manuals & Reports
-

MAGEO–404 (MJR) – Biogeography

Core References:

1. **C. B. Cox & Peter D. Moore** – Biogeography: An Ecological and Evolutionary Approach
 2. **Savindra Singh** – Environmental Geography
 3. **Tivy Joy** – Biogeography: A Study of Plants in the Ecosphere
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