M. A. Geography  
Semester-I

M. A. Geography Semester I shall consist the following papers :-

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Paper</th>
<th>Title</th>
<th>M.M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Written</td>
</tr>
<tr>
<td>1</td>
<td>I</td>
<td>Geomorphology</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>II</td>
<td>Climatology</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>III</td>
<td>Geographical Thought</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>IV</td>
<td>Geography of India</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>V</td>
<td>Practical-I : Advanced Cartography</td>
<td>80</td>
</tr>
</tbody>
</table>

1. The M.A.First Semester examination in Geography shall consist of 500 marks.

There shall be four theory papers each of 100 marks and one practical of 100 marks as follows :

Paper-I Geomorphology  
Paper-II Climatology  
Paper-III Geographical Thought  
Paper-IV Geography of India  
Paper-V Practical-I : Advanced Cartography

2. The theory papers shall be of three hours duration.

3. Candidates will be required to pass separately in theory and practical examinations.

4.(a) In the practical examination the following shall be the allotment of time and marks.

(i) Practical record 20%  
(ii) Lab Work(up to three hours) 70%  
(iii) Viva on i.ii 10%

(b) The external and internal examiners shall jointly submit marks.

(c) All the candidates shall present at the time of the practical examination their practical record regularly signed by the teachers concerned.
Nature and scope of Geomorphology; Fundamental concepts; Interior of the earth; Earth movement: epeirogenic and orogenic movements: Forces of crustal instability, isostasy, Geosyncline, plate tectonic and mountain building.

Exogenic processes: concept of gradation; Agents and processes of gradations: weathering, wasting and erosion, slope evolution, Arid and Semi-Arid and Karst topography.


SUGGESTED READINGS:
1. Ahnned, E.: Coastal Geomorphology of India.
10. कौशिक, एस.डी. : भू–आकृति विज्ञान
11. नेगी, बी.एस. : भू–आकृति विज्ञान
12. दयाल परमेश्वर : भू–आकृति विज्ञान
13. यादव तथा समस्तोश : भू–आकृति विज्ञान, ग्रन्थि, कानपुर
14. सिंह, सचिवन्द्र के. : भू–आकृति विज्ञान, शारदा पुस्तक भवन, इलाहाबाद

The application of general principles of elementary physical and synoptic meteorology to the study and classification of climate. Climatic classification of Koppen and Thornthwaite. Major climate of the world—tropical, temperate, desert and mountain climate. Climatic changes during geological and historical times, evidences, possible causes, global warming. Applied climatology.

**SUGGESTED READINGS:**

5. India Met. Deptt.: Climatologically Tables of Observatories in India, Govt. of India 1968.
12. तिवारी अनिल कुमार: जलवायु विज्ञान, राजस्थान हिंदी ग्रंथ अकादमी
13. सचिव न्याय: जलवायु विज्ञान
14. अलका गौतम: जलवायु विज्ञान स्तरोत्तम पब्लिकेशन्स मेंड
The Field of geography, its place in the classification of science, geography as a social science, and natural science. Definition, scope and functions of geography; Geography as science of relationship, as science of areal differentiation, as spatial science, Spatial Organisation, Geography and environmentalism: forms of man-nature relationship and current view; Dualism in geography; Regional Concept.

The growth of geographical knowledge from earliest times up to the 15th century. Contributions of Greek and Roman thinkers. Arab Geographers and their contributions. Geographical information in Ancient Indian literature. The dark age in Geography. The Great Age of Maritime Discovery and Exploration.

Contributions of various schools of thought in modern Geography:
(i) German School (ii) French School (in) British School (iv) American and Russian Schools.

SUGGESTED READINGS:
10. सिंह उजागिर : भौगोलिक चित्तन का विकास
11. त्रिपाठी एवं बिरले : भौगोलिक चित्तन का विकास एवं विधितंत्र
12. कौशिक, एस.डी. : भौगोलिक विचारधाराओं का इतिहास एवं विधितंत्र
13. सिंह , जगदीश : भौगोलिक चित्तन का मूलधार
14. वर्मा, एल.एन.पंडा : भौगोलिक चित्तन का विकास एवं विधितंत्र, म.प्र. हिन्दी गंध अकादमी, भोपाल
Physical and Biological elements in the Geography of India: Geological structure, relief, and climate Drainage, vegetation and soils.

(A) Agriculture: Major characteristics and problems, impart of infrastructural and institutional factors on agriculture. Important crops-wheat, rice, cotton, sugarcane, oil-seeds, tea and coffee, Agricultural regions. Green revolution, Agro-climatic regions.

(B) Sources of power: Coal; Petroleum, Natural gas. Hydroelectricity and Atomic energy.

Mineral resources with special reference to iron ore, manganese and bauxite.

Industrial development with special reference to iron and steel, cement, cotton, jute, sugar and paper industries; Industrial regions.


SUGGESTED READINGS:
10. अग्रवाल पी.सी. भारत का भौगोलिक प्रकाशन कं.रायपुर 2003
11. बंसल सुरेशचन्द्र, भारत का भौगोलिक प्रकाशन, मेरठ
**Graphs and Diagrams:** Triangular graph, Scatter graphs, climatograph. Proportional circles, spheres and cubes.

**Thematic Maps:** Choropleth maps, Isolines, Flow maps. Morphometric Analysis: Profiles, Slope Analysis; Altimetric, and Clinographic curves; Block Diagrams. Drainage Analysis order of streams, drainage texture

**SUGGESTED READING:**

2. मॉक हाउस एवं विलिक्सन (अनुप्रो.प्रेमचन्द अग्रवाल) : मानचित्र तथा आरेख, म.प. हिंदीग्रंथ अकादमी.
3. हीरालाल : प्रायोगिक भूगोल
4. जे० पी० शर्मा : प्रायोगिक भूगोल : रस्तोगी पब्लिकेशन्स मेरठ
M. A. Geography Semester-II (2017-18)

M. A. Geography Semester II shall consist the following papers:-

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Paper</th>
<th>Title</th>
<th>Written</th>
<th>Seminar</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I</td>
<td>Economic and Natural Resource Management</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>II</td>
<td>Oceanography</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>III</td>
<td>Regional Development and Planning</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>IV</td>
<td>Social Geography</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>V</td>
<td>Practical-II : Map Projections, Map Interpretation and Surveying</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

1. The M.A. Second Semester examination in Geography shall consist of 500 marks.

There shall be four theory papers each of 100 marks and one practical of 100 marks as follows:

Paper-VI Economic and Natural Resource Management

Paper-VII Oceanography

Paper-VIII Regional Development and Planning

Paper-IX Social Geography

Paper-X Practical-II : Map Projections, Map Interpretation and Surveying

2. The theory papers shall be of three hours duration.

3. Candidates will be required to pass separately in theory and practical examinations.

4.(a) In the practical examination the following shall be the allotment of time and marks.

(i) Practical record 20%

(ii) Lab Work (up to three hours) 40%

(iii) Field Work (up to three hours) 30%

(iv) Viva on i, ii & iii 10%

(b) The external and internal examiners shall jointly submit marks.

(c) Candidates shall be examined in survey individually. They will however be allowed to take the help of a labourer each at their own expense.

(d) All the candidates shall present at the time of the practical examination their practical record regularly signed by the teachers concerned.
Nature and scope of economic Geography; fundamental concepts in economic geography; classification of economics, sectors of economy (Primary, secondary, tertiary). Meaning, nature scope and classification of resources technological status and resources.

Appraisal of quality and quantity of human resources, relation between population and resource, natural resources and economic development, resource adequacy and scarcity, limits to growth.

Resource use, concept of absolute and relative abundance of resources, optimum, under use, misuse and over use of resources.

World pattern of major natural resources: land and soils, biotic resources, water resources mineral and energy resources, oceanic resources

Classification of industries, theories of industrial location; case studies of selected industries; Iron and Steel; Aluminium, cotton Textile.

Resource conservation and management methods. Policy making and resource management; sustainable development of resource.

SUGGESTED READINGS :
Ahemd, Jaleel - Natural Resources in Low Income Countries
Bennet, II.II. - Elements of Soil Conservation
Isard, Walter - Method of Regional Analysis
Mehta, M.M. - Human Resources Development Planning
Owens, O.S. - Natural Resource Conservation.
Peach, W.N. & James, A. - Zimmerman’s World Resources Contenting
Parkin’s E.A. & J.R. Whitakr - Our Natural Resource and their observation
Renner, G.T. - Conservation of National Resources.

Mohammad Hassan : आर्थिक भूगोल के तत्व, रस्तोगी पब्लिकेशन्स मेरठ
अलका गोलम : आर्थिक भूगोल के मूलतत्त्व, रस्तोगी पब्लिकेशन्स मेरठ
एस.डी.कौशिक : संसाधन भूगोल
Nature and scope of Oceanography: Distribution of land and water; Major features of ocean basins; Physical and chemical properties of sea water; Interlink between atmospheric circulation and circulation pattern in the ocean, surface currents, thermohaline, waves and tides.


SUGGESTED READINGS:

7. Ornmany, F.D. : The Ocean
10. नेगी शी.एस. जलवायु तथा समुद्र विज्ञान
11. समुद्र विज्ञान : सवंद्र रंग
Regional planning: Definition, Scope, evolution and Objectives.
Region and Regionalism, Planning Regions: Concept and Delineation. Type of Regions.
Spatial organisation: Central Place Theory, Concept of core and periphery Friedman’s Model of Spatial Organisation an economic Growth.
Regional Development Theories: Development Theories of Myrdal and Hirschman, Economic and export base model, Frank’s theory of Under development.
Approaches and strategies of Regional Development: Growth Pole Theory Agropolitan Development, Community Development, River Basin Planning, Metropolitan Planning (With reference to India).
Regional Planning in India. Regional Imbalances and inequalities, indicators of Regional Development; Relations and Multilevel planning, planning for special problem Regions: Hill area, tribal area, Drought prone areas, Command areas and River basin.

SUGGESTED READINGS:
2. Deakin, R.E. : City Region and Regionalism.
4. Golksin A. : Regional Planning and Development.
15. श्रीवस्तव की. के. एवं अन्य : प्रादेशिक नियोजन एवं संतुलित विकास
16. ओझा, रघुनाथ : प्रादेशिक नियोजन का भूमिका
17. वर्मा, राजीवलोचन : प्रादेशिक एवं नगरीय नियोजन
Definition, meaning and scope of social geography Nature and relationship with other Social Sciences.

Development of Social Geography, Approaches to the study of Social Geography. Concept of Space and Society- Environment, space and ecology, social space.

Social Geography of India-Social Stratification, Caste and Class.

Social organization and groups, Social transformation and change in India, Religion and linguistic group of India. Evolution of Socio-Cultural Regions of India.

Social well-being-meaning and indicators of Social well-being Economical and Environment of indicators, Pattern and bases of rural and urban society. Cultural Realms and Cultural Region of the World.

Social development planning- meaning and importance. Public policy and social planning in India : Review of Five year Plans strategies to improve social well being in tribal, hill, drought and flood prone Areas.

SUGGESTED READINGS:
5. Gregory, D. and J. Larry (Eds.) Social, relations and spatial structures. MCMillan. 1985
11. मीर्य, एस.डी. सामाजिक भूगोल शारदा पुस्तक भवन, 11 युनिवर्सिटी रोड, इलाहाबाद—2


dwitiya semesthar

sattr : 2017-18

vishya ka naam : Geography

prashan patra kramaak : X

prashan patra ka naam : Practical II Map Projections, Interpretation and Surveying

poonak : 100

uttarpoonak : 33

Practical II Map Projections, Interpretation and Surveying

Map Projections : Mathematical construction of world projections.
Interpretation of Maps : Geological Maps.
Principles and methods of topographical surveying involving the use of Theodolite and Dumpy level.
Solution of problems in Surveying.
Topographical Information – International series, South East Asia series, Indexing Classification & Interpretation of topographical sheets.

SUGGESTED READING :

2. Davis, R.C. & E. S. Forte : Surveying : Theory and Practical
4. मोक हाउस तथा विल्किन्सन (अनु.प्रो.प्रेमचंद अग्रवाल) : मानचित्र तथाआरेख, म.प्र. हिंदीग्रंथअकादमी.
5. हीरालाल : प्रायोगिकमूर्गल.
6. जे.पी.शर्मा : प्रायोगिक भूगोल, रस्तोम सर्लिक्षेन्स मेरठ
M.A. Geography
Semester-III
(2017-18)

M.A. Geography Semester III shall consist the following papers:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Paper</th>
<th>Title</th>
<th>M.M</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Written</td>
</tr>
<tr>
<td>1</td>
<td>XI</td>
<td>Population Geography</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>XII</td>
<td>Settlement Geography</td>
<td>80</td>
</tr>
<tr>
<td>3</td>
<td>XIII</td>
<td>Geography of Chhattisgarh</td>
<td>80</td>
</tr>
<tr>
<td>4</td>
<td>XIV</td>
<td>Research Methodology</td>
<td>80</td>
</tr>
<tr>
<td>5</td>
<td>XV</td>
<td>Practical – III : Remote Sensing, Interpretation of map, Geographical Excursion</td>
<td>--</td>
</tr>
</tbody>
</table>

1. The M.A. Semester III examination in Geography shall consist of 500 marks. The shall be four theory papers each of 100 marks and practical of 100 marks as follows:
   Paper XI    :   population Geography
   Paper XII   :   Settlement Geography
   Paper XIII  :   Biogeography and Ecosystem
   Paper XIV   :   Research Methodology

   The theory papers shall be of three hours duration.

2. Candidates will be required to pass separately in theory and practical examinations.

3. Candidates will be required to submit their field Report in three copies in hard bound at least one hundred pages for Valuation.

4. In the practical examinations the following shall be the allotment of time and marks.
   (i) Practical record : 20%
   (ii) Lab work (up to four hours) : 70%
   (iii) Viva : 20%

(b) The external and internal examiners shall jointly submit marks.
(c) All the candidates shall present at the time of the practical examination their practical record regularly signed by the teachers concerned.
Population Geography


Population composition in terms of age and sex, rural/urban residence, educational status and occupational structure. Significance of these elements in Population analysis, factors affecting their composition in Population, broad world patterns and detailed spatial patterns in India.

Migration of Population: Causes, characteristics and types. Methods of estimating value of internal migration. Important international migrations of the world, internal migration in India:


Population theory – Demographic transition.

SUGGESTED READINGS:-

SUGGESTED READINGS:
3. Alam, S.M. & V.V. Tokshishevesky: Urbanization in developing countries.
5. सिंह ऊजागिर : नगरीय भूगोल
6. मौर्य : अधिवास भूगोल
7. आर. सी. तिवारी : अधिवास भूगोल
Physical Setting: Location, Extent, Geology, Physical Features, Climate, Drainage, Soil and Vegetation.

Socio-Economic Setting: Land use, Major crops and Agriculture Region, Irrigation, Major irrigation projects, Mineral and power resources,

Major industries: Iron and Steel, Cement, Aluminium, Agro-Industries.

Population-Distribution of population Socio, Cultural Characteristics of population and Tribes of Chhattisgarh.

Transport and Trade

Tourist places of Chhattisgarh

SUGGESTED READINGS

1. Dr. K.K. Tiwari—Chhattisgarh Ka Bhugol
2. Dr. Premila Kumar—Chhattisgarh Ka Bhugol
Research Methodology - An Overview: Procedure of scientific Research, Defining Research Problem; Formulating Hypothesis; Research Design.

Methods of data collection: Observation, Questionnaire, Schedule and Interview; Sampling: Sampling Methods, Size of Sample;

Processing and Analysis of data: Processing - Editing, Coding, Classification and Tabulation, Analysis Measurement of central Tendency, Dispersion, correlation.

Preparation of Research Reports: Steps, Layout and Types of Reports.

SUGGESTED READINGS:-

1. **Principles of Photogrammetric:**- Air photo-stereo test, Orientation of stereo model under mirror stereoscope, preparation of photo/index and determination of photo scale, Use of parallax bar and determination of heights, Identification of features on aerial photograph, Tracing of details from stereo pair, Interpretation of physical and cultural details, preparation of land use map pre field interpretation, field visit for ground truthing.

2. **Remote Sensing:**- Study of satellite Image-Annotation Identification of features on FCC imageries, Tracing of details from satellite imageries, Basic principles of image interpretation, Interpretation of physical and cultural details, preparation of land use and land cover map using IRS Images. Pre field visit.

3. **Interpretation of Topographical Sheets:**- Study and Interpretation of Indian topographical sheets, classification and numbering system, Interpretation of topographical sheets with respect to cultural and physical features.

4. **Geographical Excursion**
1. **Principles of Photogrammetric:**- Air photo-stereo test, Orientation of stereo model under mirror stereoscope, preparation of photo/line index and determination of photo scale, Use of parallax bar and determination of heights, Identification of features on aerial photograph, Tracing of details from stereo pair, Interpretation of physical and cultural details, preparation of land use map pre field interpretation, field visit for ground trouthing.

2. **Remote Sensing:**- Study of satellite Image-Annotation Identification of features on FCC imageries, Tracing of details from satellite imageries, Basic principles of image interpretation, Interpretation of physical and cultural details, preparation of land use and land cover map using IRS Images. Pre field visit.

3. **Geographical Excursion.**

4. **Field Survey (Physical & Socio-Economic).**
M.A. Geography
Semester-IV
(2017-18)

M.A. Geography Semester IV shall consist the following papers:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Paper</th>
<th>Title</th>
<th>Written</th>
<th>Seminar</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XVI</td>
<td>Urban Geography</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>XVII</td>
<td>Agricultural Geography</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>XVIII</td>
<td>Environmental Geography</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>XIX</td>
<td>Field Work (Physics and Socio-Economic)</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>XX</td>
<td>Practical – Quantitative Techniques</td>
<td>--</td>
<td>--</td>
<td>100</td>
</tr>
</tbody>
</table>

5. The M.A. Semester III examination in Geography shall consist of 500 marks.

   The shall be four theory papers each of 100 marks and practical of 100 marks as follows:
   
   Paper XVI : Urban Geography
   Paper XVII : Agricultural Geography
   Paper XVIII: Environmental Geography
   Paper XIX  : Field Work (Physics and Socio-Economic)
   Paper XX   : Practical- quantitative techniques

6. The theory papers shall be of three hours duration.

7. Candidates will be required to pass separately in theory and practical examinations.

8. Candidates will be required to submit their field Report in three copies in hard bound at least one hundred pages for Valuation

9. In the practical examinations the following shall be the allotment of time and marks.

   (iv) Practical record : 20%
   (v) Lab work (up to four hours) : 70%
   (vi) Viva : 20%

   (b) The external and internal examiners shall jointly submit marks.
   (c) All the candidates shall present at the time of the practical examination their practical record regularly signed by the teachers concerned.

6. Field Work :

   In the field work following shall be the allotment of marks

   A. Seminar 20%
   B. Project Report 60%
   C. Power Point Presentation 20%
Definition, Objective and Scope of urban geography,
General Nature of City Structure.

Internal structure: Morphology and Land use.

Theories of Urban Structure: The Concentric Zone Theory, the Sector Theory, the Multiple Nuclei Theory. Commercial Structure of Cities: The Central Business District (CBD), Centrifugal and Centripetal forces in Geography, Economic Base of Towns: Basic/Non-basic concept.


Contemporary Urban Issues: Urban renewal, Urban sprawl, Slums, Environmental Pollution,

Urban Planning; Landuse Planning, Urban and Metropolitan Planning in India.

SUGGESTED READINGS:
2. Alam, Shah Manzoor : Hyderabad Secunderabad (Twin Cities) A. study in urban geography)
3. Alam, S.M. & V.V.Tokshishevesky : Urbanization in developing countries.
12. सिंह, उमाचारित : नागरिक भूगोल.
13. करन, एम.पी. : नागरिक भूगोल25.
14.बंसल सुरेश चन्द्र : नागरिक भूगोल.
15. रघु, आमप्रकाश : नागरिक भूगोल.
17. करन एवं यादव : आधिवास भूगोल.
18. यादव रामचंद्रेश : आधिवास भूगोल.

Determinants of agricultural land use - Physical, economic, social, and technological. Land holding and land tenure systems, Land reforms, land use. Agriculture policy and planning. Selected agricultural concepts and their measurements; cropping pattern, crop concentration, intensity of cropping, degree of commercialization, diversification and specialization, efficiency and productivity, crop combination regions.

Theories of agricultural location based on several multi-dimensioned factors: Von Thunen's theory of agricultural location and its recent modifications; Whittlesey's classification of agricultural regions; land use and land capability.

Contemporary Issues: Food, nutrition and hunger, food security, drought and food-security, food aid Programmes; role of irrigation, fertilizers, insecticides and pesticides, technologcal know-how.

SUGGESTED READINGS:
10. अनका गाँव : कृषि भूगोल, शारदा पुस्तक भवन, इलाहाबाद
11. शामी भारद्वाज : कृषि भूगोल, रसोई पब्लिकेशन्स भरत

Environmental hazards- natural and human made, environmental pollution : meaning definition, nature and types-air, water, noise and others. Ecological impacts of pollution. Resource use and ecological imbalance with special reference to soil, forests and water resources.


Suggested Readings :
5. अद्वै एन. एम. एवं आर.पी. तिवारी पर्यावरण भूगोल, मध्यप्रदेश ग्राम अकादेमीए भोपाल
6. नेगी, पी. एस. : पर्यावरण विकास एवं पर्यावरण भूगोल, संस्थागत एन्ड कम्पनी, मेघान, 1995。
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Physical - Trace the prominent features of area to be surveyed. Identify salient landform features of selected area on a topographical sheet.

Identify the landforms on the surface, while in the field. Also note the agents of erosion, transportation and deposition associated with the landforms.

Identity and classify the Bio-diversity in the area (Flora & fauna). Observe the relationship of various landforms, flora and fauna with land-use, settlement structure and life style of people.

**Socio – Economic**

Procure a cadastral map of the village/town for field mapping of the features of land-use and land quality. Procure/prepare the settlement –site map through rapid survey to map the residential, commercial, recreational (parks, playground), educational, religious and other prominent features.

Conduct a socio-economic survey of the households with a structured questionnaire. Supplement the information by personal observations and perceptions.

Based on observations of the land-use and results of the socio-economic enquiry of the households, prepare a critical field-survey report. Photographs and sketches, in addition to maps and diagrams, may supplement the report.
Quantitative Techniques:

- Running mean, Mean centre, Nearest Neighbor Analysis; Lorenz Curve, Normal distribution curve, Probability. Product moment and Rank Correlation Coefficients, Linear Regression. Hypothesis Testing: Chi-Square test, t-test & F test, Sampling Techniques, Point line and Area Sampling.

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