

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

SCHEME OF EXAMINATION & DISTRIBUTION OF MARKS

SEMESTER - I

| Paper No. | Title of the Paper(s) | Internal Assessment | Term End Exam | Total Marks |
|-----------|------------------------------------|---------------------|---------------|-------------|
| 1. | Geomorphology | 20 | 80 | 100 |
| 2. | Climatology | 20 | 80 | 100 |
| 3. | Evolution of Geographical thoughts | 20 | 80 | 100 |
| 4. | Geography of India | 20 | 80 | 100 |
| Prac-1 | Instrumental Survey | - | - | 100 |
| | | | Total | 500 |

SEMESTER - II

| Paper No. | Title of the Paper(s) | Internal Assessment | Term End Exam | Total Marks |
|-----------|---------------------------|---------------------|---------------|-------------|
| 1. | Applied Geomorphology | 20 | 80 | 100 |
| 2. | Oceanography | 20 | 80 | 100 |
| 3. | Geographical Methodology | 20 | 80 | 100 |
| 4. | Geography of Chhattisgarh | 20 | 80 | 100 |
| Prac-1 | Cartography | - | - | 100 |
| | | | Total | 500 |

SEMESTER - III

| Paper No. | Title of the Paper(s) | Internal Assessment | Term End Exam | Total Marks |
|-----------|------------------------------------------------------|---------------------|---------------|-------------|
| 1. | Rural Settlement Geography | 20 | 80 | 100 |
| 2. | Resource Geography | 20 | 80 | 100 |
| 3. | Regional Planning & Development | 20 | 80 | 100 |
| 4. | Population Geography with special reference of world | 20 | 80 | 100 |
| Prac-1 | Statistical Technique & field survey | - | - | 100 |
| | | | Total | 500 |

SEMESTER - IV

| Paper No. | Title of the Paper(s) | Internal Assessment | Term End Exam | Total Marks |
|-----------|------------------------------------------------------|---------------------|---------------|-------------|
| 1. | Population Geography with special reference of India | 20 | 80 | 100 |
| 2. | Urban Geography | 20 | 80 | 100 |
| 3. | Agricultural Geography | 20 | 80 | 100 |
| 4. | Resource Conservation & Management | 20 | 80 | 100 |
| Prac-1 | Advanced Cartography | - | - | 100 |
| | | | Total | 500 |

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M.A. GEOGRAPHY**

SEMESTER-II

**PAPER-I
GEOMORPHOLOGY**

M.M.

OBJECTIVE

- If being a course at the interface of Geography with earth, the student has to be sensitized to the background knowledge of geography and environmental sciences.
- The objectives of the course is one to familiarize the students with the need for understanding of geomorphology with reference to set and fundamental concepts, focusing on the unity of geomorphology in the earth materials and the process with or without an element of time process component of geomorphology is segmented into the internal and external processes of landscape evolution.
- Finally, a few selected applications of geomorphology to societal requirements and quality of environment are dealt with.

COURSE CONTENTS:

UNIT-I

Nature and scope of geomorphology

Fundamental concepts- Geological structures and landforms, multi cyclic and polygenic evolution of landscapes, concepts of threshold.

UNIT-II

Interior of the earth

Origin of the continents and ocean Basin (Wegener Theory and Plate Tectonic theory), Earth movement

Epeirogenic, Orogenic and Cymatogenic earth movements

Forces of Crustal Instability : Faults & Folds

UNIT-III

Isostasy, vulcanicity, earth quack

UNIT-IV

Exogenic processes

Concepts of gradation, agents and processes of gradation, causes, types and classification of weathering, mass movement emotional and depositional processes and resultant landforms and soil formation.

Suggested Readings :

1. Chodley, R.J. Spatial Analysis in Geomorphology, Methuen, London 1972.
2. Duty, G.H. The Face to the Earth, Penguin Harmondsworth 1959,
3. Fairbridge, R.W. Encyclopedia of Geomorphology, Reinholdis New York, 1968.
4. Garner, H.F. The Origin of landscape A Synthesis of Geomorphology, Oxford University Press, London, 1974
5. सिंह, सचिन्द्र के. : भू-आकृति विज्ञान: शास्त्र एवं प्रस्तुक मन्त्र, इलाहाबाद
6. यादव तथा रामसुरेश : भू-आकृति विज्ञान, पृथ्वी का अपुर
7. यापत्री प्रशाद : भू-आकृति विज्ञान

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M.A. GEOGRAPHY**

SEMESTER - I

**PAPER-II
CLIMATOLOGY**

M.M. 100

OBJECTIVES:

The main objectives of the course is to provide.

Understanding of weather phenomena and generation of climatic phenomena and Dynamics of global climate.

COURSE CONTENTS:

Unit 1

Nature and scope of climatology and its relationship with meteorology. Composition and structure of atmosphere. Isolation and heat balance of the earth. Green house effect.
Temperature: - Vertical, horizontal and regional distribution.

Unit 2

Air pressure, Atmospheric motion :- Permanent wind, Local wind, and Jet stream, and monsoon winds. Humidity, evaporation

Unit 3

Precipitation: Types world pattern precipitation, Acid rain. Concept of Air masses and fronts. Cyclones., El Nino, and La Nina.

Unit 4

Classification of climates: - koppen, & Thornthwaite, General classification of world climate(temperate, desert, and Tropical)
Climate change geological and historical times, evidences, possible causes, and global warming, Applied climatology Depletion of ozone layer.

SUGGESTED READINGS :-

- 1 . Barry, R.G. and Chorley P.J. : Atmosphere, Weather and Climate, routledge London and New York, 1998.
2. Critchfield JH : General Climatology. Prentice Hall, India. New Delhi. 1987.
3. Das, P.K. : Monsoons National Book Trust. New Delhi, 1987.
4. Fein, J. S. and Stephens, P. N. : Monsoons Wiley Interscience.
5. India Met. Deptt. Climatological Tables of Observatories in India. Govt. of India 1968.
6. Lal D.S. : Climatology, Chaitanya publication, Allahabad. 1986.
7. Lydolph, P.E. : The Climate of the Earth. Rowman. 1985.
8. Menon P.A. : Our Weather, N.B.T. New Delhi, 1989.
9. Peterson, S. : Introduction to Meteorology McGraw Hill Book, London. 1969.
10. Robinson. : P.J. and Henderson 8: Contemporary Climatology. Henlow. 1999.

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER - I
EVOLUTION OF GEOMORPHICAL THOUGHTS
PAPER - III**

M.M.

OBJECTIVES:

To introduce the students to the philosophical and methodological foundations of the subject and its place in the world of knowledge. To familiarize them with the major landmarks in development of geographic thought at different periods of time.

Course Contents :-

Unit-I

- The field of geography :- It place in the classification of science, geography is a social-science and natural science. Selected concepts in the philosophy of geography :-

Unit - II

Distribution, Relationship, Interactions, areal differentiation and spatial Organization. Dualism in geography :- Determinism! possibilism systematic / Regional.

Unit - III

Classical Age :- The begining of geography in classical age contribution of Greek and Roman to geography, with special reference to the work of Herodotus, Eratosthenes, Posidonius, Strabo and Pliny. Geography in ancient Indian period. Middle age :- Geography in the middle age contribution by Arab geographers - Al-Beruni, Idrisi Ibn Battuta, Ibn-e-Khurda - ben Ibn Khaldun. Geography in Ancient period, Geography in Middle Age .

Unit-IV

Contribution of the modern geographers :-

- (i) German school of geographic thought Horoldt Reitter, Richthofen & Ratzel.
- (ii) French School of geographic thought - Blache, Brunhes.
- (iii) American geographic thought - Davis, Sauer.
- (iv) British geographic thought - Mackinder, Harbertson, stamp
- (v) Study of geography in modern India.

SUGGESTED READINGS :-

1. Abler, Ronald; Adams, John S. Gold, Peter: Spatial Organization: The Geographers view of the world. Prentice Hall, N. J. 1971.
2. Au S. M. : The Geography of Puranas, Peoples Publishing House, Delhi. 1968.
3. Amedeo, Douglas : An Introduction to Scientific Reasoning in Geography, John Wiley, U.S.A. 1971.
4. Dikshit, R. D. (ed.) : The Art & Science of Geography Rand McNally & Co. 199.
5. Hertshorne, R. : Perspectives on Nature of Geography Rand McNally & Co. 1959.
6. Husain, M. : Evolution of Geographic Thought, Rawat Pub. Jaipur. 1984.
7. Johnston, R. J. : The Future of Geography, Methuen, London, 1988.
8. Au, S. M. : Arab Geography.
9. Taylor, G. : Geography in the 20th Century.
10. Dikshit, R. D. : Geographical Thought : A Contextual History of Ideas, Prentice Hall of India, New Delhi.
11. Harvey D. : Explanation in Geography.
12. त्रिपाठी एवं विरले : गौणोलिक वित्तन का विकास एवं विधि संत्र
13. कौरीक एस.डी. : गौणोलिक विद्यारथाराजों का इतिहास एवं विधिसंत्र
14. हुसैन गाजिद : गौणोलिक वित्तन
15. पण्डि बी.पी. एवं वर्मा एल.एल : गौणोलिक वित्तन का विकास एवं विधिसंत्र

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

SEMESTER - I

**PAPER- IV
GEOGRAPHY OF INDIA**

M.M.C.

UNIT- I

India in the context of Asia in the world-

Land, major Taran units and their characteristics, drainage system, the Indian monsoon, regional and seasonal variation of weather, climatic division, soil types and their characteristics, distribution problems, forest resources and their conservation.

UNIT- II

Mineral and power resources reserves-

Production and problems of conservation of major minerals, population numbers, distribution with special reference to post independence period and its implications, literacy and education, special urbanization and characteristics of Indian cities

UNIT- III

Economy-

An overview of Indian economy and impact of globalization on 8 cultivated land use pattern, characteristics and problems of agriculture comma irrigation development of spatial pattern, technological development in agriculture green revolution and its consequences for agricultural regionalization of India.

UNIT- IV

Industry-

industrial development and overview, locational factors and spatial pattern of major industries in India Iron and Steel, Engineering goods, Textiles, Chemicals, cement, sugar and paper industrial regions of India Transport and trade International and internal trade of India composition and change. Regions of India- Basic of regional division, macro and micro regional divisions of India by O H K spat end RL Singh

SUGGESTED READINGS

- 1- Das, P. K. The Monsoon. National Book Trust of India, New Delhi.
- 2- Government of India The Gazetteer of India. Vol. I : The land and people. Publication Division, New Delhi.
- 3- Deshpande, C.D. : India- A Regional Interpretation. Northern Book Cetrc, New Delhi.
- 4- Mukherjee, A. B. & A. Ajazuddin, eds. India-Culture, Society & Economy. Inter india, New Delhi.
- 5- Sharma, T. C. & O. Countinho Economic and Comimercial Geography of India, Vikash Publication , New Delhi.
- 6- Singh, Jagdish India. Gyanodaya, Gorakhpur.
- 7- Singh, M. B. Industrial Development in India. Lotus, Varanasi, 1985.
- 8- Singh, R.L. : India : A Regional Geography, National Geographical Society of India, Varansi, 1971
- 9- सिवारी विजय कूपार : भारत का वृहद मूर्गेल हिमाजल य प्रज्ञिकेशन, मुम्बई, 2000
- 10- सिवारी, आरसी. : भारत का वृहद मूर्गेल

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M.A. GEOGRAPHY

**M.A. I SEMESTER PRACTICAL
INSTRUMENTAL SURVEY**

1. Surveying- importance of instrumental surveying and application -survey instruments.
2. **Prismatic Compass-**
Method of prism pass surveying: Radiation, inter section and traverse, correction of bearing, Elimination the closing error, Bow ditch method;
3. **Plane table-**
Plan preparation, methods of plane table surveying - radiation, inter section, traverse & resection method.
4. **Dumpy level:-**
Meaning of the terms used in leveling Method of leveling:- simple leveling, differential leveling. Profile.
5. **Theodolite:** Meaning of terms used in theodolite surveying, measurement of horizontal distance & vertical height, accessible and non accessible method, digital surveying equipment- Electronic Distance measurement (EDM) instruments, total station, global positioning system (GPS).

SUGGESTED READINGS-

- 1.. Monkhouse, F.J. & H.R. Wilkinson : Map and Diagrams, methuen; London.
2. Singh, L. R. : Practical Geography.
3. शर्मा, जे.पी., आयोगिक भूगोल
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल
5. यादव, हीरालाल, प्रायोगिक भूगोल
6. यद्कारपी. सर्वेक्षण विधि तंत्र, एस. शारदा पब्लिकेशन, बिलासपुर
7. SarkarAashish Practical Geography

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

1. The M.A. Semester -I examination in Geography shall consist of 500 marks.
2. The theory papers shall be of three hours duration.
3. Candidates will be required to pass separately in theory and practical examination.
4.
 - a) In the practical examination the following shall be allotment of time and marks.

| | | |
|------|--------------------------|-----------|
| i) | Practical Record | 20% Marks |
| ii) | Survey (up to six hours) | 70% Marks |
| iii) | Viva on i and ii | 10% Marks |
 - 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.

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M.A. GEOGRAPHY**

**SEMESTER II
APPLIED GEOMORPHOLOGY
PAPER-I**

COURSE CONTENTS :-

Unit-I

Applied Geomorphology :-

Nature scope and subject matter of applied of Geomorphology. Quantitative applied Geomorphology :- morphometry.

Unit-II

The concept of cycle of erosion:- Erosion cycle according to Davis & Penck. Normal cycle of erosion, Rejuvenation and polycyclic Landscape.

Unit-III

Geomorphic Process :

Dynamic of Fluvial, glacial, Aired, marine and karst process and resulting land forms. Slopeevolution : concept of Davis, Penck, wood & king. Denudation chronology and erosion surface Drainage system and pattern.

Unit-IV

Geomorphic Application :-

Geomorphic application in applied geomorphology; Land use and agricultural planning, urban geomorphology, Hydrogeomorphology, Environmental Geomorphology.

SUGGESTED READING :-

1. Dexcy, F. 1962. Applied geomorphology, S. Afr. Geogr. J. 44, 3.24.
2. Douglas, I. 1971 : Dynamic equilibrium in applied geomorphology : two case studies S earth science J. 5,29-35.
3. Horton, R. E. 1932. Drainage basin Characteristics Trans Am. Geophys 13,350-61.
4. King C.A.M. 1966. Techniques in geomorphology.London : Edward Arnold.
5. Morsisawa, M (ed) 1981. Quantitative geomorphology, London, george Allen & Unwin.
6. Rice ; R . J . 1977 Fundamental o f geomorphology.London Longman.
7. Seti,, S. A. 1972 River morphology. stroudsberg pa Dowden. Hutchinson & Rose.
8. Sparks, B. V. 1972. B.W. 1972.Geomorphology 2 and edn.London Longman.
9. Strahier, A. M. 1954. Statistical analysis in gđinmorphice research 3. Geol. 62.1.25.
10. Singh savindra; 2007 :- Geomorphology;- Vāsundh&a, Prakasan, Allahabad.
11. सिंहसविन्द्र :- गृ-आकृतिविज्ञान

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M.A. GEOGRAPHY

**SEMESTER-II
OCEANOGRAPHY
PAPER II**

OBJECTIVE

The objective of the course are to introduce students to the many facets of Oceans, Such as, evolution of the oceans, Physical and chemical properties of sea water, atmospheric and oceanographic circulation, The fascinating world of marine life and the characteristic of marine environment and the impact of man on the marine environment.

COURSE CONTENT -

Unit-I

Nature and scope & Oceanography, History of Oceanography. Distribution of land and water. Major features of ocean basin :- Continental shelf, Continental slope, deep sea plains and Oceanic deep.

Unit 2

Physical and chemical properties of sea water, Temperature and salinity, density of ocean water. Inter link between atmospheric circulation and circulation patterns in the Oceans :- Surface currents, waves and tides.

Unit 3

Marine biological environmental :- Biozones of the Ocean, Types of organisms, plankton, Nekton and Benthos, Ocean Deposits and Formation of Coral reefs

Unit 4

Food and mineral resources of the sea. Impact of Human on the marine Environment Major Ocean routes of the world

Suggested Reading :-

1. Davis, Richard J. A. Oceanography. An introduction to the Marine Environment. Wm C. Brown Iowa 1986.
2. Gross, M. Grant Oceanography for Geographers 1962.
3. Lal D. S. : Climatology and Oceanography. shardapustak Bhavan. Allahabad.
4. Sharma, R. C. "The Oceans" Rajesh N. Delhi 1985.
5. Unnemurkutty, A.N.P. Science of the Oceans and Human Life. NBT New Delhi 19
6. सिंहसविन्द्र : जलवायु विज्ञान
7. लालजी.एस. : जलवायुविज्ञान
8. गौतमअल्का : जलवायुविज्ञान

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M.A. GEOGRAPHY**

**SEMESTER-II
GEOGRAPHICAL METHODOLOGY
PAPER - III**

COURSE CONTENTS :-

Unit-I

Development of - quantitative revolution in geography. Pattern of quantitative revolution, importance of the techniques. Scientific explanations : Routes Scientific explanations (Inductive/Deductive). Type of explanations, cognitive description : cause & effect.

Unit-II

Analytical approaches in Geography : Locational Analysis : Concept of locational analysis . (Von Thunen Theory ,Weber Theory) Spatial Analysis : Importance, methods and pattern of spatial analysis, System analysis and ecological analysis.

Unit-III

Laws , theories and model : use of model, characteristic necessity of models , types of models,

Unit-IV

Philosophical background of geographical thinking: Dulism in geography, positivism and its reactions, Behaviouralism, paradigms of geography. Recent trends in geography.

SUGGESTED READINGS :-

1. Abler, Ronald; Adamis, John S. Guld, Peter : Spatial Organization : The Geographersview of the world, Prentice Hall, N. 3. 1971.
2. Au S. M. : The Geography of Puranas, Peoples Publishing House, Delhi. 1966.
3. Amédeo, Döuglas : An Introduction to Scientific Reasoning in Geography, John Wiley, U.S.A. 1971.
4. Dikshit, R. D. (ed.) : The Art & Science of Geography Integrated Readings, Prentice Hall of India, New Delhi 1994.
5. Hartshorne, R. : Perspectives on Nature of Geography Rand McNally& Co. 1959
6. Husain, M. : Evolution of Geographic Thought, Rawat Pub. Jaipur, 1984.
7. Johnston, R. J. : Philosophy and Human Geography, Edward Arnold, London, 1983.
8. Johnston, R. B. : The Future of Geography, Methuen, London, 1988.
9. Minshull, R. B. : The ChangingNatureof Geography, Hutchinson University Library,London, 1970.
10. प्रशांतीषी. एवं कामा. एस.एम. : मौजूदोलिक वित्तनका विकास एवं विभिन्नता
11. त्रिपाठी एवं बिरले : मौजूदोलिक निपुण का विकास एवं विभिन्नता

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**SEMESTER-II
GEOGRAPHY OF CHHATTISGARH
PAPER IV**

OBJECTIVES:

The aim of the course is to finalize the student with meso micro region of the country. To prepare the student for understanding the Chhattisgarh region as a dynamic entity emerging from the interaction of the physical and regional structure over time.

COURSE CONTENT

Unit -1

Physical elements of geography of Chhattisgarh :- Location, Extent, Geology, Physical Features, Climate, Drainage, Soil and Vegetation.

Unit -2

Agriculture : Major characteristics, Important Crops -Paddy, Wheat, Maize, Kodo Kutaki , Pulses, Oilseeds, Sugarcane. Agricultural Region and Major agriculture development schemes, Irrigation, Major irrigation projects.

Unit 3

Minerals and power resources:

Iron ore, Bauxite, Manganese, Coal, Hydroelectricity industrial development in Chhattisgarh with special reference to iron and steel industries, Cement Industry, Textile Industry, agriculture based industries, Aluminium, Thermal power, Industrial belts of Chhattisgarh.

Unit 4

Population Structure: Growth and density of population, Caste structure, literacy, occupation, Tribes of Chhattisgarh Transport, Tourism Culture and regional development:

SUGGESTED READINGS :-

- 1 - Das, P. K. : The Monsoon, National Book Trust of India, New Delhi.
- 2 Government of India : The Gazetteer of India, Vol. 1 : The land and people, Publication Division, New Delhi.
- 3- Deshpande, C.D. : India A: Regional Interpretation, Northern Book Centre, New Delhi.
- 4- Mukherjee, A. B. & A. Ajazuddin, eds. :IndiaCulture, Society & Economy. Inter India, New Delhi.
- 5- Sharma, T. C. & O.Countinho : Economic and Commercial Geography of India, Vikash Publication , New Delhi.
- 6 Singh, Jagdish : India. Gyanodaya, Gorakhpur.
- 7 शिवार्थी के. एवं चन्द्राकरणी. : छत्तीसगढ़ एटलस. एस. शारदा पब्लिकेशन विलासपुर
- 8 शिवार्थी के. एवं चन्द्राकरणी. : छत्तीसगढ़ का भूगोल, एस. शारदा पब्लिकेशन विलासपुर
9. तिवारी विजय कुमार : छत्तीसगढ़ एवं भैंगोलिक अध्ययन

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M.A. GEOGRAPHY
SEMESTER-II

PRACTICAL

OBEJECTIVES:

To apprise the student with latest trends in the development of cartography as a tool in mapping thematic and quantitative data to facilitate spatial analysis and synthesis. To enhance the skill of the students in field of survey and to understand the basic

1. Principles of Map making & concept of Cartography
2. Topographical information: International Series, South East Asia Series, Indexing, Classification and interpretation of topographical sheets, profiles
3. Morphometric Analysis: Hypsometric curve, Altimetry cursive, Histogram, Clinograph, Slope Analysis, Wentworth's Method, smith method.
4. Graphs and diagrams: Triangular Diagram, Ergo graph. Rainfall dispersion diagram Proportional circle, Spheres and cubes diagram.
5. Map Projection construction of world map projection.

SUGGESTED READINGS-

- 1.. Monk house, F.J. & H.R. Wilkinson : Map and Diagrams, methuen, London.
2. Singh, L. R. : Practical Geography.
3. शर्मा, जे.पी., प्रायोगिक भूगोल
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल
5. थादव, हीरालाल,प्रायोगिक भूगोल
- 6.चंद्रकारपी. सर्वेक्षणविधि तंत्र. एस. शारदा पब्लिकेशन, विलासपुर
- 7.सरकारआशीष, प्रायोगिकभूगोल,

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

1. The M.A. Semester - II examination in Geography shall consist of 500 marks.
2. The theory papers shall be of three hours duration.
3. Candidates will be required to pass separately in theory and practical examination.
4. a) In the practical examination the following shall be allotment of time and marks.

| | |
|----------------------------------|-----------|
| i) Lab work (up to three hours) | 70% Marks |
| ii) Practical Record | 20% Marks |
| iii) Viva | 10%Marks |
- 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.

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-III
PAPER-I
RURAL SETTLEMENT GEOGRAPHY**

OBJECTIVES :

The objective of the course are to motivate the students :-

- To understand the growth and evolution of rural.
- To recognize and analyse the distributions, patterns, morphology and functions of rural settlements.
- To analyse and suggest rural settlement planning in India.
- To examine the prevailing social and environmental issues in rural areas of India.

COURSE CONTENTS

Unit 1

Nature, scope significance and development of settlement Geography. Relationship of settlement Geography with other social Science Concept of settlement Geography.

Unit 2

Meaning, origin, Evolution approaches of settlement. Types of Rural settlement.

Rural morphology:- Cultural landscape, elements of rural settlement in different Geographical Environments with special reference to India.

Unit 3

Rural House & their Types; field, patterns origin, evolution, size .social-spatial structure of Indian villages. Size and spacing of Rural settlements.

Unit 4

Size and spacing of Rural Settlement, Morphometry of Rural Settlement, Study of Rural Settlement with reference to C.G. Rural Service Centre and their Identification, Rural problems and planning.

SUGGESTED READINGS >

1. Rural settlements - A cultural Geographical analysis, inter India publication Delhi 1985..
2. Mitra, A. : Report on House Types and Village Settlement Patterns in India. Publication. New Delhi, 1985.
3. Rao, E.N.: Strategy for Integrated Rural Development B.R. Publication Cor., Delhi, 1986.

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

SEMESTER SYLLABUS
M.A. GEOGRAPHY

SEMESTER-III
PAPER-II
GEOGRAPHY OF RESOURCES

Course Contents:

UNIT I

Nature, scope and significance of Geography of Natural Resources. Definition and concept of natural resources as related to cultural, economic and technological development stages and perceptions.

UNIT II

Classification of natural resources according to renewability, increasability, availability and distribution conditions.

UNIT III

Characteristics and distribution pattern of major natural resources - soils, forests, minerals and water ; natural vegetation - biotic successions, major biotic regions of the world, Biomass,

UNIT IV

Resource region of the world and India & Chhattisgarh

Books Recommended

1. Ali, S.A. : Resources For Future Economic Growth, Vikas Publishing House Pvt. Ltd., New Delhi, 1979.
2. Duncan, G. : " Resource Utilization and the Conservation Concept" in Readings in Economic Geography, New York, 1967.
3. Singh, K.N. and Singh, J.: Arthik Bhaogol Ke Muktatva, Tara Press, Varanasi, 1982
4. Smith, G.H. (ed.): Conservation of Natural Resources, John Wiley and sons, New York, 1950.
5. Stringer, E. and Davies, J.S.: Geography of Resources, Carsell, London, 1966.
6. Zimmernian, E.W.: World Resources and Industries, Harper, New York.

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-III
PAPER-III
REGIONAL PLANNING AND DEVELOPMENT**

OBJECTIVES :

1. To Understand and evaluate the concept of Regional geography and its role in planning.
2. To identify the issues relating to the development of the region through the process of spatial Organization.
3. To identify the causes of regional disparities in development, perspectives and policy improvements,

COURSE CONTENTS :

UNIT-I

Regional Concept in Geography conceptual and Theoretical Framework, merits and Limitation for application to regional planning and development; Concept of space, Area and locational attributes. Types of Region-Formal and Functional; Uniform and nodal; Single purpose and composite; Region in the context of planning Regional Hierarchy. Regional Divisions according to variations in levels of socio-economic development and Resource Regions).

UNIT-II

Regional Development Theories : Theories of Myrdal and Hirschman, Franks theory of underdevelopment

Special purpose Region - River valley Regions Metropolitan Regions.

Problem Regions - Hill Regions, Tribals Regions of Drought and Floods.

UNIT-III

Planning Process - Sectoral, Temporal and Spatial dimension short term and long term perspective of planning. Planning for a region's development and multi regional planning. Indicators of development and their data sources measuring levels of regional development and disparities. Regional Plans of India.

UNIT-IV

1. Concepts of Multi level Planning : Decentralized planning process, Panchayati Raj system, Role and relationship of Panchayati Raj System (Village Panchayat Janpad Panchayat and Zila Panchayat) and administrative structure (Village, Block and Districts)
2. Regional development in India - Problems and prospects.

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SEMESTER SYLLABUS

M.A. GEOGRAPHY

SUGGESTED READING:

1. Alber, R. Et Al. Saptial Organisation. The Geographer's View of the World, Prentice Hall, Englewood Cliffs, NJ, 1971.
2. Bhat, L.S. Regional Planning in India statistical Publishing Society, Calcutta, 1973.
3. Bhat L.S. et al. : Micro-Level Planning A case Study of Kamal Area, Haryana, K.B. Publication, New Delhi 1976.
4. Chorley, R.J. and Haggett, P. : Models in Geography Methuen, London 1967.
5. Christaller, W. : Central Places in Southern Germany Translated By C.W. Baskin, Prentice Hall, Englewood, Cliffs, New Jersey 1966.
6. Friedmann, J and Alonso, W : Regional Development and Planning A reader M.I.T. Press Cambridge Mass. 1967.
7. Gosal, G.S. and Krishan G. : Regional Disparities in Level of Socio-Economic Development in Punjab, Vishal Publication, Kurukshetra, 1984.
8. Misra, R.P. : Regional Planning Concepts, Techniques and Policies, University of Mysore, Mysore, 1969.
9. Misra, R.P. and Others(ed) : Regional Development Planning in India a strategy institute of Development Studies Mysore 1974.
10. MitraA : Levels of Regional Development, Census of India, Vol. I Part I A(i) and (ii) New Delhi, 1956.
11. Myrdal,G. Economic Theory and Under development Regions Gerald Duckworth, London 1975.
12. Nanita Sudesh. Delhi Meropolitan Region, Raajesh Publication Delhi, 1976.
13. Sundaram K.V. (ed.) : Geography and Planning Essays in Honor of V.L.S. PrakasaRao, Concept Publishing Co. New Delhi, 1985.
14. Tarlok Singh India's Development Experience, Me Millan, New Delhi, India 1974.
15. Razamoonis (ed.) Regional Development Heritage Publishers Delhi, 1988.
16. Mishra R.P. et. A Multi - Level Planning heritage Publishers, Delhi, 1980.
17. Gupta H.S. Regional Development & Planning
18. ओडिशा राष्ट्रीय आदेशिक विकास एवं नियोजन
19. सिंह महान् बहादुर एवं दुर्द कलात कलात प्रादेशिक नियोजन सत्र सत्पुलित विकास

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-III
PAPER-IV
POPULATION GEOGRAPHY
(With special reference of world)**

UNIT-I

Nature and scope of Population Geography Development of Population Geography as field of specialization Its relation with the Demography. Sources of population data, their level of reliability and problems of mapping the population data.

UNIT-II

Population distribution and density; Growth of population theoretical issues, world pattern and determinants.

UNIT-III

Population Composition-Gender issues : age and Sex; literacy and education, rural and urban; urbanization, occupational structure, of world

UNIT-IV

Population Dynamic Measurement of fertility and Mortality; Migration-national and international. India's population dynamics. World patterns of fertility, mortality and internal migration. Population regions of the world .

UNIT-V

Population and Resources Development: Concept of optimum population, under population and overpopulation. Theories of transition.

SUGGESTED READINGS :

1. Boserup, E. The Conditions of Agricultural Growth. George. Allen & Unwin, London, 1965.
2. Barclay G.W. Techniques of Population Analysis, John Wiley, New York 1959.
3. Bogue, D.J. : Principles of Demography. John Wiley, New York, 1969
4. Bose, Ashis et.al.: Population in India's Development. Vikas Publishing House, New Delhi. Census of India. 2001.
5. Chanana R.C. : Geography of Population, Concept, Determinants and Patterns Kalyani.
6. Clark, J.I. Population Geography. Pergamon Press Oxford, 1973.
7. Crooch, Nigel :Principles of Population and Development. Pergamon, New York, 1997.
8. Daugterly, H.G. Kenneth C.W. Kammeyir : An introduction of Population. The Guilford Press. New York, London, 1998.(Population Composition of India (India population distribution, density and growth profile?)
9. Gamier, B.J. : Geography of Population. Longman London, 1970.
10. Mitra, Ashok : India's Population, Aspects of Quality and Control. Vol. I & II Abhinav Publications, New Delhi, 1998. 1 1 .Srinivasan, K. and M. Vlassoff : Population Development Nexus in India Challenges For the New Millennium,

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

Tata McGraw Hill, New Delhi, 2001.

12. Shinivasan, K : Basic Demographic Techniques and Applications, Saga Publications, New Delhi, 1998.
13. Sundaram, K.V. and Sundesh Nagais (ed.) Population Geography Heritage Publications, New Delhi, 1986.
14. पण्डा, वी.पी. जनसंख्या भूगोल, म.प्र. हिन्दी ग्रन्थ अकादमी
15. चान्दना, आर.सी. जनसंख्या भूगोल

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**M.A. GEOGRAPHY
SEMESTER-III**

STATISTICAL TECHNIQUE AND FIELD SURVEY

1. Statist :Correlation, Probability, Hypothesis testing, chi test, f test meak center, Nearest neighbor Analysis
2. Project work - Micro region basis physical, socio-economic survey about project report in 50 pages
3. Excursion

SUGGESTED READINGS-

- 1.. Monk house, F.J. & H.R. Wilkinson : Map and Diagrams, methuen, London.
2. Singh, L. R. : Practical Geography.
3. शर्मा, जे.पी., प्रायोगिक भूगोल
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल
5. यादव, हीरलाल, प्रायोगिक भूगोल
6. घंटकारणी, सर्वेक्षणविधि तंत्र, एस. शारदा पब्लिकेशन, विलासपुर
7. सरकार आशीष, प्रायोगिक भूगोल,

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

1. The M.A. Semester - III examination in Geography shall consist of 500 marks.
2. The theory papers shall be of three hours duration.
3. Candidates will be required to pass separately in theory and practical examination.
4. a) In the practical examination the following shall be allotment of time and marks.

| | | |
|------|----------------------------|-----------------|
| i) | Lab work (up to two hours) | 30% Marks |
| ii) | Project Report | 40% + 10% Marks |
| iii) | Excursion | 10 % Marks |
| iv) | Viva on i and III | 10 % marks |
- 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.

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-IV
PAPER-I
POPULATION GEOGRAPHY
(With special reference of India)**

UNIT-I

Development of Population Geography in India Its relation with the Demography. Sources of population data, their level of reliability and problems of mapping the population data in India

UNIT-II

Population distribution and density; Growth of population theoretical issues, world pattern and determinants in India

UNIT-III

Population Composition-Gender issues : age and Sex; literacy and education, rural and urban; urbanization, occupational structure in India. Population Dynamic Measurement of fertility and Mortality; Migration-national Population reagions of the India.

UNIT-V

Population Composition of Tribes of India

SUGGESTED READINGS :

1. Boserup, E. The Conditions of Agricultural Growth. George. Allen &Unwin, London, 1965.
2. Barclay G.W. Techniques of Population Analysis, John Wiley, New York 1959.
3. Bogue, D.J. : Principles of Demography. John Wiley, New York, 1969
4. Bose, Ashis et.al.: Population in India's Development. Vikas Publishing House, New Delhi. Census of India. 2001.
5. Chahana R.C. : Geography of Population, Concept, Determinants and Patterns Kalyani.
6. Clark, J.I. Population Geography. Pergamon Press Oxford, 1973.
7. Crooch, Nigel :Principles of Population and Development. Pergamon, New York, 1997.
8. Daugsterly, H.G. Kenneth C.W. Kammeyir : An introduction of Population. The Guilford Press. New York, Lodon, 1998.
9. तिवारी विजय कुमार भारत का जनसंख्या भूगोल
10. चांदना आर.सी. जनसंख्या भूगोल
11. पन्डाबी.पी. जनसंख्या भूगोल

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-IV
PAPER - II
URBAN GEOGRAPHY**

OBJECTIVES:

- (i) To understand the process of urbanization, origin, growth and classification urban settlements with relevant theories and models,
- (ii) To examine changing economic base and structure of cities,
- (iii) To understand urbanization process and the evolution of urban system,
- (iv) To examine the contemporary urban issues and to suggest new urban planning and policy.

COURSE CONTENTS:

UNIT-I

- (i) Nature and scope of urban Geography Approaches and recent trends in Urban geography,
- (ii) Origin and growth of urban settlements ancient, medieval and modern period.
- (iii) Bases and process of urbanization.
- (iv) Classification of urban settlements on the basis of size and function, functional classification of Towns.

UNIT-II

- (v) Urban growth and theories, central place theory of Christaller and Losch.
Contribution of Indian scholars to the studies of urban settlement,
- (vi) Urban economic base ; Basic and non basic functions, Input output model. City and changing urban functions.

UNIT-III

- (vii) Organization of urban space; urban morphology and land use structure, city core, commercial, industrial and residential areas. Morphology of Indian urban settlements and its comparison with western cities.
- (viii) Urban expansion, umland periphery (Fringe).

UNIT-IV

- (ix) Contemporary urban issues : Urban sprawl, Urban slums, environmental pollution air, water, noise solid waste, issue of environmental health.
- (x) Urban Policy and planning : City Planning, contemporary issues in urban planning, globalization and urban planning in the Third world. Urban land use planning. Green belts & smart city concept.

READING :

1. Alam, S.M. Hyderabad - Secunderabad Twin Cities Asia Publishing House, Bombay, 1964.
2. Berry, B.J.L. and Horton F.F. Geographic perspectives on urban Systems. Prentice

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

- Hall, Englewood, Cliffs, New Jersey 1970.
3. Carter : The study of Urban Geography Edward Arnold Publishers London 1972.
4. Chrolcy, R.J.O. Haggert P. (ed.) Models in Geography, Methuen, London 1966.
5. Dickinson R.E. : City and Region Routledge, London, 1964.
6. Dayer D.J. (ed) The city as a centre of change in Asia University of Hong Kong Press, Hongkong 1971.
7. Gibbs J.P. : Urban Research methods D. Van Nostrand Co. Inc. Princeton, New Jersey 1961.
8. Hall P. Urban and Regional Planning, Routledge London 1992.
9. Hauser, Philips M and seniore Leo F. (Ed.) The study of urbanization, Wiley, New York, 1965.
10. James, P.E. and Jones C.F. (eds), American Geography, Inventory and Prospect, Syracuse University Press, Syracuse, 1954.
11. Kundu A; Urban Development and Urban Geography, University of Chicago Press. Chicago, 1955.
12. Mumford, L : Culture of Cities, Macmillan & Co. London 1958.
13. Mumford, L. Culture of Cities of Mcmillan&Co. London 1958.
14. Nangia, Sudesh Delhi Metropolitan Region : A study in settlement geography, Rajesh Publication 1976.
15. वंसलआर.के. नंपरीय भूगोल

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-IV
PAPER - III
AGRICULTURAL GEOGRAPHY**

OBJECTIVES :

- (i) To familiarize the Student with the concept, origin and development of agriculture,
- (ii) To examine the role agricultural determinates towards changing cropping patterns, intensity, productivity diversification and specialization, (iii) To Discuss environmental, Technological and social issues in agricultural sector with special reference to India.

COURSE CONTENTS :

UNIT-I Nature, Scope and Development of agricultural Geography. Approaches to the study of agricultural Geography, Commodity, systematic Regional and System, Origin and dispersal of agriculture. Sources of agricultural data. Determinates of agricultural land use : Physical economic, Social and technological, land use policy and planning, Land use survey and land capability.

UNIT-II Selected agricultural concepts and their measurements : Cropping pattern, crop concentration, Intensity of cropping, degree of commercialization, efficiency and productivity, Crop combination-regions.

UNIT-III Theories of Agricultural Location Von thuen's theory of agricultural location and its recent modification, Theories of diffusion and adoption of innovations, Agricultural Typology Kostrovickie's method, Agricultural Region concept and method, whittlesey's classification of agricultural regions.

UNIT-IV Agricultural in India, Regional pattern of productivity in India, Green Revolution, white& blue revolution. Specific problems of Indian agriculture, Agriculture policy in India. Main Fertilizer & Pestiside, Agriculture tools & Market food processing center, soil testing centers. Bio compost, E Marketing, Slandered seeds, Crop policy, Agricultural awards, Kisan credit card (KCC), Narva, Garva, Gharvai, Bari Yojana

SUGGESTED READING /

1. Byliss Smith, T.P. : The Ecology of Agricultural Systems, Cambridge University press, London 1987.
2. Berry, B.J. L. et. Al : The Geography of Economic Systems, Prentice Hall New York 1976.
3. Brown, L.R. : The Changing world food prospects - The Nineties and Beyond. World Watch Institute Washington D.C. 1990.

M.A. GEOGRAPHY SYLLABUS

4. Dyson, T. : Population and Food-Global Trends and Future Prospects routledge London, 1996.
5. Gregor, H.P. : Geography of Agriculture prentice Hall, New York 1970.
6. Grigg D.B. : The Agricultural Systems of the World, Cambridge University press.

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

- New York 1974.
- 7. Harshorn, T.N. and Alexander, J.W.: Economic Geography Prentice Hall, New Delhi, 1988.
 - 8. Mannion A.M.: Agriculture and Environment Change, John Wiley, London 1995.
 - 9. Morgan W.B. and Norton, R.J.C. Agricultural Geography Methuen, London 1971.
 - 10. Morgan, W.B. : Agriculture in the Third World - A spatial Analysis Westview press, Boulder, 1978.
 - 11. Sauer, C.O.: Agricultural Origins and Despersals, M.I.T. Press, Mass U.S.A. 1969.
 - 12. Singh J. and Dhillon, S.S. : Agricultural Geography, Tata-Mcgraw Hill Pub, New Delhi 1988.

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**SEMESTER-IV
PAPER - IV
RESOURCE CONSERVATION & MANAGEMENT**

OBJECTIVES :

Student will develop an understanding and appreciation for Missouri's natural resource system and conservation management. Students will analyze and comprehend forest management practices, stream & water management, grassland conservation, hunter education and fisheries and wildlife management.

UNIT I

Nature scope and Definition of Resource conservation & Management & Techniques Conservation and management of natural resources - concepts, methods and measures of conservation with reference to major natural resources. India's national policy on natural resources, resource potential and future technology.

UNIT II

Definition of natural resource Water and soil resource conservation & Management & Police, water and soil testing process

UNIT III

Vegetation, wild life conservation & management & Police, Human resource management

UNIT IV

Mineral, Power, Food, fisheries & other Natural Resource Conservation & Management & Police

SUGGESTED READINGS :

1. Boserup, E. The Conditions of Agricultural Growth. George. Allen & Unwin, London, 1965.
2. Barclay G.W. Techniques of Population Analysis, John Wiley, New York 1959.
3. Bogue, D.J. : Principles of Demography. John Wiley, New York, 1969
4. Bose, Ashis et al.: Population in India's Development. Vikas Publishing House, New Delhi. Census of India. 2001.
5. Chanana R.C. : Geography of Population, Concept, Determinants and Patterns Kalyani.
6. Clark, J.I. Population Geography. Pergamon Press Oxford, 1973.
7. Crooch, Nigel :Principles of Population and Development. Pergamon, New York, 1997.
8. Daugherty, H.G. Kenneth C.W. Kammeir : An introduction of Population. The Guilford Press. New York, London, 1998.
9. कौशिक, एस.डी. संसाधनभूगोल

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**SEMESTER SYLLABUS
M.A. GEOGRAPHY**

**M.A. GEOGRAPHY
SEMESTER - IV**

ADVANCE CARTOGRAPHY

1. **Thematic maps :**
Choropleth, Isopleth, Dot method, flow map-
2. **Geological Maps:**
Basic definition, Interpretation Conformable series and unconformable series
3. **Remote sensing:**
Fundamental of Remote sensing, Components of Image Interpretation
4. **GIS :**
An overview of GIS Software, Elements of GIS
5. **Computer Cartography :**
Advantages of computer cartography, Creation of Graphs and Maps.

SUGGESTED READING :

- 1- American Society of Photogrammetry : Manual of Remote Sensing, ASP, Falls Church V.A., 1983.
- 2- Barett E.G. and L.F. Curits : Fundamentals of Remote sensing and AIR photo Interpretation on, Memilan, New York, 1992.
- 3- Compbell J. : Introduction of Remote Sensing, Guilford, New York, 1989.
- 4- Curran, Paul J. : Principles of Remote Sensing, Longman, London 1985.
- 5- Burrough P.A. Principles of Geographic Information systems of Land Reson Assessment Oxford University Press, New York 1986.
- 6- चैनियाल, देवीदत्त रु सुदूरसंवेदन एवं मौयोलिक सूचना प्रणाली

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

1. The M.A. Semester - IV examination in Geography shall consist of 500 marks.
2. The theory papers shall be of three hours duration.
3. Candidates will be required to pass separately in theory and practical examination.
4. a) In the practical examination the following shall be allotment of time and marks.

| | |
|---------------------------------|-----------|
| i) Lab work (up to three hours) | 70% Marks |
| (Lab work 25% and viva 5%) | |
| ii) Practical Record | 20% Marks |
| iii) Viva | 10% Marks |
- 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.

शहीद नंदकुमार पटेल विश्वविद्यालय, गढ़ उमरिया, ओडिशा रोड, रायगढ़

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