

CHAITANYA SCIENCE AND ARTS COLLEGE

(AUTONOMOUS)

PAMGARH, JANJGIR-CHAMPA (C.G.)



ACCREDITED "A" GRADE BY NAAC

DEPARTMENT OF GEOGRAPHY

COURSE CURRICULUM & MARKING SCHEME

POSTGRADUATE PROGRAMME

M. A. GEOGRAPHY

PROGRAM CODE: CCMA05

FIRST & SECOND SEMESTER

Approved By	Board of Studies	Academic Council
Date	30/08/2025	04 SEP 2025

ACADEMIC YEAR 2025-26

SYLLABUS FRAMED ACCORDING TO THE NEP-2020

UNDER THE SCHEME OF CBCS (CHOICE BASED CREDIT SYSTEM)

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Syllabus and Marking Scheme for M.A. GEOGRAPHY (First semester)
Session 2024-25

Paper No.	Course Code	Title of Paper	Marks Allotted in Theory	Marks Allotted in Internal assessment	Credits	Min. Passing Marks
I.	MGET101	GEOMORPHOLOGY	70	30	4	40
II.	MGET102	CLIMATOLOGY	70	30	4	40
III.	MGET103	HISTORY OF GEOGRAPHICAL THOUGHT	70	30	4	40
IV.	MGET104	GEOGRAPHY OF INDIA	70	30	4	40
V.	MGET105	PRACTICAL:- INSTRUMENTAL SURVEY	100		4	40
		Total	380	120	20	

04 Theory Paper:-	280
04 Internal Assessment :-	120
01 Practical:-	100
[A] Lab Work :-	70
[B] Record & Viva	30
Total Mark :-	500

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SEMESTER - I
PAPER- I GEOMORPHOLOGY

M.M. 70

OBJECTIVE

- It 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

15hr.

Nature and scope of geomorphology

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

UNIT- II

15hr.

Interior of the earth

Origin of the continents and ocean Basin (Wegner Theory and Plate Tectonic theory)

Earth movement

Epeirogenic, Orogenic and Cymatogenic earth movements.

Forces of Crustal Instability : Faults & Folds

UNIT-III

15hr.

Isostasy, vulcanicity, earth quack

UNIT- IV

15hr.

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. Chodey. R.J. Spatial Analysis in Geomorphology, Methucn, London 1972.
2. Dury. G,H. The Face to the Earth, penguin Harmocdsworth 1959,
3. Fairbridge. R. W. Encyclopedia of Geomorphology. Reanholdis New York. 1968.
4. Garner, H.F. The Origin of landscape A Synthcsis of Geomorphology, Oxford University Press,
5. सिंह, सविन्द्र के. भू - आकृति विज्ञान शारदा पुस्तक भवन, इलाहाबाद
6. यादव तथा रामसुरेश- भू आकृति विज्ञान ग्रन्थ कानपूर
7. गायत्री प्रसाद - भू आकृति विज्ञान

SEMESTER - I
PAPER- II CLIMATOLOGY

M.M. 70

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 I

15hr.

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 II

15hr.

Applied Climatology : Principles and application of satellites and remotely sensed data in weather predictions: Insat, Meteosat and Radar. Now-casting and very short-range forecasting; Synoptic weather forecasting; Prediction, Climate and agriculture: Agro-climatology – Water budget and Crop Calendar, Climate and settlements: Urban climatology – Urban Heat Island and Architecture, Climate and health: Bio-climatology – Human Comfort and morbidity

Unit III

15hr.

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

Unit IV

15hr.

Classification of climates: - koppen, & Thorntwaite, General classification of world climate(temperate, desert, and Tropical)

Climate change geological and historical times, evidences, possible causes. and global warming,

SUGGESTED READINGS :-

- 1 . Barry, RG. 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. La! D.S. : Climatology, Chaitanya publication, Allahabad. I 986.
7. Lydoiph. P.E. : The Climate ofthe Earth. Rowman. 1985.
8. Menon P.A. : Our Weather, N.B.T. New Delhi, 1989.
9. Peterson, S. : Introduction to Meteorology Mc Graw Hill Book. London. 1969.
- 1 0. Robinson. : P.J. and Henderson 8: Contemporary Climatology. Henlow. 1999.

SEMESTER - I
EVOLUTION OF GEOMORPHICAL THOUGHTS
PAPER – III

M.M. 70

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

15hr.

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

Unit -II

15hr.

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

Unit - III

15hr.

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

Unit-IV

15hr.

Contribution of the modern geographers :-

- (i) German school of geographic thought Hornboldt Retter, Rich thofen & Ratzal.
- (ii) French School of geographic thought - Blache, Brunhes.
- (iii) American geographic thought - Davis, Sampson.
- (iv) British geographic thought - Mackinder, Hartshorn, 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. Amcdeco, 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 Mc Nally & Co. 199.
5. Hertschorn, R. : Perspectives on Nature of Geography Rand Mc Nally & Co. 1959.
6. Husain, M. : Evolution of Geographic Thought, Rawat Pub. Jaipur, 1984.
7. Johnston, R. 3. : 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 बिरले : भौगोलिक चिंतन का विकास एवं विधितंत्रण
13. कौशिक एस.डी.: भौगोलिक विचार धाराओं का इतिहास एवं विधि तंत्र
14. हुसैन माजिद: भौगोलिक चिंतन
15. पंडा बी.पी. एवं वर्मा एल. एन.: भौगोलिक चिंतन का विकास एवं विधि तंत्र







SEMESTER - I
PAPER- IV GEOGRAPHY OF INDIA

M.M. 70

OBJECTIVES:

The objective of Geography of India is to provide a comprehensive understanding of the country's physical features, climate, natural resources, and biodiversity while analyzing their interrelationship with the socio-economic development and cultural diversity of the nation.

UNIT- I

15hr.

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

15hr.

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

15hr.

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

15hr.

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 Centre, New Delhi.
- 4- Mukherjee, A. B. & A. Aijaz Uddin, eds. India-Culture, Society & Economy. Inter india, New Delhi.
- 5- Sharma, T. C. & O. Coutinho Economic and Commercial Geography of India, Vikash Publication , New Delhi.
- 6- Singh, Jagdish India. Gyanada, 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- तिवारी विजय कुमार : भारत का वृहद् भूगोल, हिमालय पब्लिकेशन , मुंबई, 2000
- 10- तिवारी आर.सी. : भारत का वृहद् भूगोल

**M.A. I SEMESTER
PAPER-V
PRACTICAL
INSTRUMENTAL SURVEY**

M.M. 100

I. 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.. 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, हीरालाल, प्रायोगिक भूगोल

6. चंद्रकारपी. सर्वेक्षण विधि तंत्र, एस. शारदा पब्लिकेशन, बिलासपुर

7. Sarkar Aashish Practical Geography

**Syllabus and Marking Scheme for M.A. GEOGRAPHY (Second semester)
Session 2024-25**

Paper No.	Course Code	Title of Paper	Marks Allotted in Theory	Marks Allotted in Internal assessment	Credits	Min. Passing Marks
I.	MGET201	APPLIED GEOMORPHOLOGY	70	30	4	40
II.	MGET202	OCEANOGRAPHY	70	30	4	40
III.	MGET203	GEOGRAPHICAL METHODOLOGY	70	30	4	40
IV.	MGET204	GEOGRAPHY OF CHHATTISGARH	70	30	4	40
V.	MGET205	PRACTICAL:- CARTOGRAPHY	100		4	40
		Total	380	120	20	

04 Theory paper:-	280
04 Internal Assessment: -	120
01 Practical: -	100
[A] Lab Work: -	70
[B] Record & Viva	30
Total Mark:-	500

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SEMESTER II
APPLIED GEOMORPHOLOGY
PAPER-I

M.M. 70

OBJECTIVES:

The objective of Applied Geomorphology is to study landforms and surface processes to solve practical problems related to land use, natural hazards, and environmental management. It aims to apply geomorphological knowledge in planning, construction, and resource management. This helps in minimizing risks and promoting sustainable development.

COURSE CONTENTS: -

Unit-I

15hr.

Applied Geomorphology: -

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

Unit-II

15hr.

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

Unit-III

15hr.

Geomorphic Process:

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

Unit-IV

15hr.

Geomorphic Application: - .

Application of geomorphology in feasibility assessment of engineering and industrials projects. Geomorphic approach to hazard studies. Factors, vulnerability, consequences, and management of earthquakes, tsunamis and landslides. Factors, vulnerability, consequences, and management of riverbank erosion, storm surges and floods. Principles of integrated coastal management. Planetary geomorphology with special reference to Moon and Mars.

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. Geophysic 13,350-61.
4. King C.A.M. 1966. Techniques in geomorphology. London: Edward Arnold.
5. Morsi Sawa, M (ed) 1981. Quantitative geomorphology, London, george Allen &Unwin. .
- 6 .Ricc , R . J . 1977. Fundamental of geomorphology. London Lorman.
7. Seti,,. S. A. 1972 River morphology. Stroudsburg pa Dowden. Hutchinson & Rose.
8. Sparks. B. V. 1972. B.W. 1972.G geomorphology 2 and Edmondson Lorman.
9. Strahier, A. M. 1954. Statistical analysis in dimorphic research 3. Geol. 62.1.25.
10. Singh savindra;2007:- Geomorphology: - Vasundra, Prakashan, Allahabad.

**SEMESTER-II
OCEANOGRAPHY
PAPER II**

M.M. 70

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

15hr.

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 II

15hr.

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 III

15hr.

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

Unit IV

15hr.

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

Suggested Reading :-

- 1 Davis. Richard J. A. Oceanography. An introduction to the Manne Environment. Wm C. Brown Iowa 1986.
2. Gross, M. Grant Oceanography for Geographers 1962.
3. Lal D. S. : Climatology and Oceanography. Sharda pustak Bhavan. Allahabad.
4. Sharma. R. C. "The Oceans" Rajesh N. Delhi 1985.
- 5 .Ummer Kutty. A.NIP. Science of the Oceans and Human Life. NBT New Delhi 19
6. Singh savindra: climatology

SEMESTER-II
GEOGRAPHICAL METHODOLOGY
PAPER – III

M.M. 70

OBJECTIVE

The objective of Geographical Methodology is to develop a systematic approach for studying geographical phenomena through appropriate tools, techniques, and research methods. It focuses on enhancing analytical and critical thinking skills for spatial analysis and interpretation. This enables accurate data collection, effective analysis, and meaningful geographical conclusions.

COURSE CONTENTS :-

Unit-I

15hr.

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

15hr.

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

15hr.

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

Unit-IV

15hr.

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

SUGGESTED READINGS :-

1. Abler, Ronald; Adams, John S. Guld, Peler : Spatial Organization : The Geographers view of the world, Prentice Hall, N. 3. 1 97 1 .
2. Au S. M. : The Geography of Puranas, Peoples Publishing House, Delhi. 1966.
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 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. : The Future of Geography, Methuen, London, 1988.
9. Minshull, R. : The Changing Nature of Geography, Hutchinson University Library, London, 1970.



SEMESTER-II
GEOGRAPHY OF CHHATTISGARH
PAPER IV

M.M. 70

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

15hr.

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

Unit -2

15hr.

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

15hr.

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, Aluminum, Thermal power, Industrial belts of Chhattisgarh.

Unit 4

15hr.

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. Aijazuddin, 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 त्रिपाठी के. एवंचन्द्राकरपी. : छत्तीसगढ़ एटलस, एस. शारदा पब्लिकेशन बिलासपुर
- 8 त्रिपाठी के. एवंचन्द्राकरपी. : छत्तीसगढ़ का भूगोल, एस. शारदा पब्लिकेशन बिलासपुर
9. तिवारी विजय कुमार : छत्तीसगढ़ एक भौगोलिक अध्ययन

**M.A. GEOGRAPHY
SEMESTER-II
PAPER-V PRACTICAL**

M.M. 100

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, methouen, London.
2. Singh, L. R. : Practical Geography.
3. शर्मा, जे.पी., : प्रायोगिक भूगोल
4. चौहान, पी.आर. : प्रयोगात्मक भूगोल
5. यादव, हीरालाल, प्रायोगिक भूगोल
6. चंद्रकारपी. सर्वेक्षणविधि तंत्र, एस. शारदा पब्लिकेशन, बिलासपुर
7. सरकार आशीष, प्रायोगिकभूगोल,

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