

FACULTY OF ARTS

SYLLABUS

MASTER OF ARTS

(GEOGRAPHY)



JODHPUR NATIONAL UNIVERSITY

JODHPUR

MA Geography

PREVIOUS

- Paper I Philosophy of Geography**
- Paper II Geomorphology**
- Paper III Climatology**
- Paper IV Population and Settlement Geography**

FINAL

- Paper I Political Geography and Geography of Development**
- Paper II Research Methodology**
- Paper III Remote sensing and GIS**
- Paper IV Geography of India**
- Paper V Industry Based Environmental Studies**

Philosophy of Geography

Unit I

The field of geography; its place in the classification of sciences; geography as a social science; and natural science selected concepts in the philosophy of geography, distribution; relationships, interaction, area differential and spatial organization.

Unit II

Dualism in geography; systematic and regional geography; physical and human geography. Systematic geography and its relation with systematic science and with regional geography. The myth and reality about dualisms. Regional geography; Concept of region, regionalizing method.

Unit III

Scientific explanation; routes to scientific explanation (Inductive, Deductive) types of explanations; cognitive descriptions cause and effect temporal functional/ecological systems.

Suggested Readings:

1. Abler, Ronald : Adams, Hohn S. Gould, Peter: Spatial Organization. The Geographer's view of the world, Prentice Hall .J. 1971.
2. Ali S.M. : The geography of puranas, People Publishing House, Delhi 1966.
3. Dikshit, R.D. (ed): The Art & Science of Geography integrated Readings, Prentice Hall of India, New Delhi, 1994.
4. Hartshorn, R.: Perspective on Nature of Geography, Rand McNally & co. 1959.

Geomorphology

Unit-1

Meaning nature and scope of geomorphology, Development of geomorphic thought, a brief review of fundamental concepts of geomorphology: Principle of Uniformitarianism, Contribution of Hutton, Gilbert, Dutton, and Davis.

Unit-2

Evolution of Continents and ocean basins: Continental drift theory of Taylor, Continental Drift theory of Wegener, Theory of Plate Tectonics.

Unit-3

Factors controlling landform development: Endogenetic and Exogenetic forces, Denudational processes, Weathering, Erosion and Mass wasting.

Unit-4

Mountain building activities, Geosynclinal theory of Kober, Holms Convectonal current theory, Theory of Isostasy.

References

- 1.Allaby, Michael (2008): Oxford Dictionary of Earth Science, Oxford University Press, New York.
- 2.Bloom, A.L. (1991): Geomorphology, 2nd Ed Englewood Cliffs, M.J. Prentice Hall.
- 3.Chorley, R.J. Schumm,S.A. & Sugden, D.E. (1985): Geomorphology, Methuen & Co. Ltd., London, New York.
- 4.Brierley, G.J. & Fryirs, K.A. (2005): Geomorphology and River Management, Blackwell Publishing, Oxford UK.
- 5.Briggs, K. (1985): Physical Geography Process and System, Hodder and Stoughton, London.

Climatology

Unit-1

Introduction to Climatology: Nature and Scope, Basis of Modern Climatology, Composition and Structure of Atmosphere, Insolation and terrestrial heat balance, Daily Temperature change, Distribution of Temperature –Vertical & Horizontal.

Unit-2

Moisture in the Atmosphere: Changes of state, Humidity, Humidity measurements, Stability and Instability of atmosphere, Condensation, Major and minor forms of condensation, Precipitation - types and forms.

Unit-3

Motion in the Atmosphere: Air Pressure, Factors influencing Air motion, Pressure belts & Planetary winds, Mechanism of Monsoon, Local and variable winds.

Unit-4

Air Masses and Atmospheric Disturbances: Characteristics and Types of Air Masses, Polar front Theory, Fronts and Frontogenesis, Tropical Cyclones,

Anticyclones, Thunderstorms, Tornadoes, Hurricanes, Water spouts; Weather Forecasting, Satellites in weather forecasting

References

1. Byers R.H. : "General Meteorology" McGraw Hill BKCo New York 1974
2. Pettersons : Introduction to Meteorology.
3. Miller A., et, al. 1983; "Elements of Meteorology", Merrill, Columbus.
4. Sellers W.D : "Physical Climatology" University of Chicago Press. 1965
5. Trewartha G.T: An Introduction to climate "McGraw Hill BK Co. New York. 1968.

Population and Settlement Geography

Unit - I

Definition and scope of Population Geography. Theory and Biological Population Geography - Malthusian, Neo- malthusian and Optimum Population. Theory and Biological Population Census with special reference to the Indian Census. Growth, Density and Distribution of Population in the world with special reference to India.

Unit - II

Age and Sex Composition, Economic and religious Composition of Population with special reference to India, Rural and Urban Population and Urbanization, Internal and International Migration, Behavioral Migration Studies. The Population Policy of Govt. of India.

Unit - III

Definition, Scope and Development of Settlement Geography. Theories of Settlement Geography. Causes of Origin of Settlement Types.

Unit - IV

Site and situation of Rural and Urban settlements, Settlement pattern, Size and spacing of Rural and Urban settlements, Morphological characteristics of Rural and Urban settlements with special reference to India Sector.

Unit - V

Concentric zone and multiple Nuclie Models of Urban growth. Problems of Urban housing and emergence of status.

Books Recommended

1. Clarks : Population Geography
2. Jones : A Population Geography
3. Trewartha : A Geography of Population
4. Woods : Population Analysis in Geography
5. Woods : Theoretical Population in Geography

Year 2

Political Geography and Geography of Development

Unit-1

Definition, Nature, Scope and Significance, Approaches to Political Geography, Elements of Political Geography—Location: absolute, vicinal, maritime, size and shape, Natural resources- Food, Minerals and Power resources, Population—Race, religion and language.

Unit-2

Concept of State, Nation and Nation-State. Federalism, Frontiers and boundaries, Classification of boundaries, Core and periphery relations.

Unit-3

Concepts of Ecopolitics, Geopolitics, Geo-strategic Views: Heartland and Rimland. Mahan theory.

Unit-4

Political pattern of Asia, Geopolitical Conflicts –Indo- Pakistan and Indo –China, Reorganisation on Indian state, Interstate conflicts in India, Internal security Threats

UNIT-5

Concepts and Issues in Human Development ,Food production systems (regions of deficit and surplus); Food security, Health and Malnutrition ,Poverty and Poverty alleviation Schemes in India with special reference to NREGA IRDP and SGSY Development and Gender; Women Empowerment and Gender Development Index

References:

1. Adhikari S., 1997: Political Geography, Rawat Pub. Jaipur.

2. Blij De H.J., 1972: Systematic Political Geography . Wiley, New York.
3. Cohen S.B., 1973: Geography and Politics in a divided world. Oxford, New York.
4. Cox K. (): Political geography: Territory, State and Society, Blackwell Publishers ltd, 108, Cowely Road, Oxford, UK.
5. Dixit R. D., 1982: Political Geography. Tata McGraw Hill New Delhi.

Research Methodology

UNIT-I

Meaning and Purpose of Research, Types of Research; Social Science Research and Nature of Geographical Research; Identification of Research Question and Literature Surveying; Methods and Methodology in Human Geography.

Unit-II

Scientific Method in Human Geography; Analytical Steps of the Scientific Method; The Routes of Scientific Explanation :Deductive and Inductive forms of reference; Explanation in Geography; Some Problems.

Unit-III

From Quantitative to Qualitative Geography; Qualitative Data Production: Interviews (Process of Interviewing. Structure interviews and informal surveys; Depth Interviewing and Working with Groups); Observation (Participant Observation and Ethnography); Phenomenology.

Unit-IV

Field work in Geographical Studies; Data Creation : Census Method and Sampling Method (Random, Systematic, Stratified, Multi-Stage, Accidental and Purposive); Process of Research Report Writing

Remote sensing and GIS

Unit - I

Historical development of Remote sensing as a technology. Relevance of remote sensing in Geography, Concepts and basics: Energy source, energy and radiation, principles, energy interactions in the atmosphere and earth surface features. Remote sensing systems : platforms, sensors and radiation records. Air photos and photogrammetry : Elements of photographic system : type, Scales and ground coverage, resolution, radiometric characteristics, films, filters, aerial cameras, film exposures, geometric fundamentals of photo grammetry : elements of vertical photographs, relief displacement, image parallax,

stereoscopic, orthophotos air photo interpretation: shape, size, pattern, tone, texture, shadows, site advantage and limitation & remote sensing & its comparison with map.

Unit - II

Satellite Remote Sensing : History and development of various types of satellite and space programme. Image, processing : types of imagery, techniques of visual interpretation, ground verification, transfer of interpreted thematic information of base maps; Digital processing : rectification and resolution, Image enhancement-contrast manipulation, classification supervised and unsupervised, post classification analysis.

Unit - III

Applications: Air photo and image interpretations and mapping forest and wild life, mines & geology, geomorphology. Land use and land cover soil, land evaluation; weather studies water resources; hazard management and environmental management. GIS Introduction, definition & scope, its application in various fields & planning.

Geography of India

Unit - I

India in the context of south-east and south Asia; a land of diversities; unity within diversities. Physiographic regions, geological structure, drainage systems, soils, vegetation, origin and mechanism of Indian monsoon, climatic classifications, identification of drought and flood prone areas. Population - distribution, density, growth, population problems and policies, tribal areas and their problems, Gender discrimination and empowerment of women.

Unit - II

Resources - conservation and utilization of land, mineral, water, biotic and marine resources, Agriculture land use pattern, green revolution and its impact on Indian Agriculture. Agriculture infrastructure - irrigation fertilizers and seeds. Dry zone, Agriculture - Industry - factors of localization, classification, detailed study of the following :- iron & steel, cement, fertilizer paper and pulp and sugar industries, study of the network of roadways, railways, airways and

waterways. Regional disparities in development in India. Basis of regional planning divisions of India - macro and meso regions of India and their comparative analysis, Regional planning of rural and urban regions.

Unit - III

Study of Rajasthan under the following heads - Relief, climate, vegetation, soils, agricultural development, irrigation, mineral and power resources, industrial development. Detailed study of the following regions with these heads - Physical, social & cultural environment and economic development: (1) Marusthali (2) Aravalli (3) Bangar (4) Hadoti Plateau. Status of women in Rajasthan - changing aspects of demographic, social, economic, health and nutrition. Regional disparities in development in Rajasthan and suggestions.

Books Recommended :

1. Govt. of India : Five Year Plans of India.
2. Sharma & Coutino : Economic and Commercial Geography of India, Vikas, Delhi.
3. Singh, R.L. : India – A Regional Geography, N.G.S.I., Varanasi, 1971.
4. Galyna and Sen Gupta: Economic Regions and Regionalisation in India, 1968.
5. Choudhary, M.R. : Indian Industries Development and Location.

Industry Based Environmental Studies

UNIT – 1

Environment – Definition – Scope – Structure and function of eco system's procedures, consumers and decomposers – energy flow in the ecosystem – ecological succession – food chain, food web and ecological pyramids - concepts of sustainable development.

UNIT – 2

Natural resources: Renewable – air, water, soil, land and wildlife resources. Non-renewable – mineral, coal, oil and gas. Environmental problems related to the extraction and use of natural resources.

UNIT – 3

Biodiversity – Definition – values – consumption use, productive social, ethical, aesthetic and option values threats to biodiversity – Hotspots of bio diversity – conservation of bio-diversity: In-situ Ex-situ. Bio-wealth – national and global level.

UNIT – 4

Environmental pollution : Definition – causes, effects and mitigation measures – Air pollution, Water pollution, Soil pollution, Noise pollution, Thermal pollution – Nuclear hazards – solid wastes acid rain – climate change and global warming environmental laws and regulations in India – Earth summit.

UNIT – 5

Population and environment – Population explosion – Environment and human health – HIV / AIDS – Women and child welfare – Resettlement and Rehabilitation of people, role of information technology in environmental health – Environmental awareness.