

I. Semester M.A./M.Sc. Geography

Paper - I - Geomorphology -	100	Marks -
Paper - II - Geographical Thought	100	"
Paper - III - Economic Geography	100	"
Paper - IV - Geography of India -	100	"
Paper - V - Practical (50+50) Cartography + Praet.	100	"
<u>Total</u>		500 "

II. Semester

Paper - I - Climatology	100	Marks
Paper - II - Bio-geography	100	"
Paper - III - Population Geography	100	"
Paper - IV - Urban Geography	100	"
Paper - V - Practical - Stat + Tour (50+50)	100	"
<u>Total</u>		500 marks

III. Semester -

Paper - I - Oceanography -	100	Marks
Paper - II - Social and Cultural Geog.	100	"
Paper - III - Agricultural Geography	100	"
Paper - IV - Political Geography	100	"
Paper - V - Practical (50+50)	100	"
<u>Total</u>		500 "

II Semester -

Paper - I - Research Methodology	100
Paper - II - Environmental Geography	100
Paper - III - Regional Planning	100
Paper - IV - Disaster Management	100
Paper - V - Practical (50+50) (GIS, Remote Sensing)	100

30.5.17

30.5.17

R. Prasad
30.05.17

Prithvi
30.05.2017

M.A. Geography 2017-18 Onwards

Scheme Of Examination And Course Structure

M.A. Geography shall be of two years duration spread over four semesters. Each semester shall consist of four theory papers and one practical paper of 100 marks each. The duration of examination for theory and practical papers shall be three and four hours respectively. Practical examination shall be conducted by two examiners appointed by the Vice-Chancellor on the recommendation of the P.G. Board of Studies in Geography.

The outline of course structure shall be as under:

Paper	Nomenclature	Max. Marks	End Semester Exam.	Duration of Exam.
Semester-I				
Paper-I	Geomorphology	100	100	3 Hours
Paper-II	Geographical Thought	100	100	3 Hours
Paper-III	Economic Geography	100	100	3 Hours
Paper-IV	Geography of India	100	100	3 Hours
Paper-V	Practical: Interpretation of Topographical Sheet and Computer Aided Statistical Diagrams.	100	100 Distribution of marks Lab Work Test-60 Record-20 Viva-20	4 Hours
Semester-II				
Paper-VI	Climatology	100	100	3 Hours
Paper-VII	Bio-Geography	100	100	3 Hours
Paper-VIII	Population Geography	100	100	3 Hours
Paper-IX	Urban Geography	100	100	3 Hours
Paper-X	Practical: Field work and Report Writing	100	100	4 Hours



Paper	Nomenclature	Max. Marks	End Semester Exam.	Duration of Exam.
Semester-III				
Paper-XI	Oceanography	100	100	3 Hours
Paper-XII	Social and Cultural Geography	100	100	3 Hours
Paper-XIII	Agriculture Geography	100	100	3 Hours
Paper-XIV	Political Geography	100	100	3 Hours
Paper-XV	Practical:	100	100	4 Hours
Semester-IV				
Paper-XVI	Research Methodology	100	100	3 Hours
Paper-XVII	Environmental Geography	100	100	3 Hours
Paper-XVIII	Regional Planning	100	100	3 Hours
Paper-XIX	Disaster Management	100	100	3 Hours
Paper-XX	Practical: GIS and Remote Sensing	100	100	4 Hours

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M.A. Geography : Semester – I

Paper- I Geomorphology

Unit-I

Geomorphology- Meaning, Scope and Fundamental concepts of Geomorphology. Evolution of Geomorphic ideas during Medieval and Modern Period. Concepts of Plate Tectonics: Mass movement of rock waste and resultant land forms.

Unit-II

Endogenetic processes- Faulting, folding and their geographic expressions. Earthquake concept, causes, classification, intensity and magnitude. Geographical distribution. Volcanism- concept, mechanism and causes, Volcanoes- classification, volcanic materials.

Unit-III

Exogenetic: Weathering and mass wasting- meaning and concept, controlling factors, classification and significance, Dynamics of fluvial, aeolian, glacial and kras processes and resulting landforms.

Unit-IV

Applied Geomorphology- meaning, Applications of geomorphology in Regional planning, engineering projects, mineral exploration and hydrology. Regional Geomorphology of Gangatic regions of India.

Recommended Readings:

1. Bloom, A.L. (1992). **Geomorphology**, Second Edition. Prentice Hall of India, New Delhi.
2. Dayal, P. (1990). **A text Book of Geomorphology**. Shukla book Depot, Patna
3. Husain Majid (2002), **Fundamentals of Physical Geography**, Second Edition, Rawat Publications, Jaipur and New Delhi.
4. Singh Savindra (1993), **Physical Geography**, Prayag Pustak Bhawan, Allahabad.
5. Singh S. (2017), **Geomorphology**, Pravalika Publishing House, Allahabad.
6. Strahler, A.N. and Strahler, A.H. (1996), **Introducing Physical Geomorphology**, John Willey and Sons, New York.
7. Strahler, A.N. (1988), **Earth Science**, Harper and Row Publisher, N.D.
8. Thornbury, W.D. (1991), **Principles of Geomorphology**, John wiley, New Delhi (Indian print)
9. Wooldridge, S.W and Morgan, R.S.(1991). **An Outline of Geomorphology**, Orient Longmans, Calcutta.



M.A. Geography: Semester – I

Paper- II Geographical Thought

Unit-I

Geography- its place in the classification of science; Basic concepts in the philosophy of geography- distributions, relationships, areal differentiation and spatial organisation;

Unit-II

Concepts of paradigm; Paradigm shift; Positivism and Logical positivism, Quantitative Revolution, Models, System analysis in geography. Scientific Exploration: Inductive and deductive approaches.

Unit-III

A general survey of development in geography up to World War-II - Contribution of Humboldt, Ritter, Ratzel, Richthofen, Hettner, Blache, Schluter, Mckinder, Sauer.

Unit-IV

Modern developments. Applied geography and relevance Debate, Spatial inequality and Regional Imbalances. Geographers and policy, Regional planning. Feminist Geography. Future of geography.

Recommended Readings:

1. Abler, Ronald; Adams, John S. Gould, Peter, (1971), **Spatial Organization: The Geographer's**
2. Agnew, John et.al.(ed.) (1996), **Human Geography**, Blackwell Publishers London. 3 Dikshit.
3. Aitken Stuart & Gill Valentine ed. (2006) **Approaches to Human Geography**, Sage London.
4. Bonnet, Alastair (2008) **What is Geography?** Sage, New Delhi
5. Cloke, Paul and Johnston, Ron (2005) **Spaces of Geographical Thought**, Sage, London
6. Dickinson, R.E. (1969), **The Makers of Modern Geography**, London
7. Dikshit, R.D. (1999), **Geographical Thought- A Contextual History of Ideas**, Prentice Hall of India, New Delhi.
8. Hartshorne, R. (1959), **Perspective on Nature of Geography**, Rand Mc Nally & Co
9. Harvey, David (1969), **Explanation in Geography**, Edward Arnold, London
10. Harvey, David (1990), **The Condition of Postmodernity**, Blackwell, London
11. Harvey, Milton E and Brian P. Holly (1981), **Themes in Geographic Thought**, Croom Helm, London



M.A. Geography : Semester – I
Paper- III Economic Geography

Unit-I

Meaning and scope of Economic Geography, Approaches to study of Economic Geography, Recent Trends in Economic Geography.

Unit-II

Evolution of world economic systems, Concepts and Models of development, Agricultural Location Models- Vanthunen and Haggerstand.

Unit-III

Theories of Industrial Location – Weber, Hoover, Losch Isard Smith, Christaller's Central Place Theory. Agricultural and Industrial regions of the world.

Unit-IV

Economic development: Globalization or Internationalization, Pattern of International Trade. A brief introduction to world trade Organization; WTO and developing countries.

Recommended Readings:

1. Daniels, Peter. et. al. (2003), **Human Geography**, New Delhi : Pearson
2. Dick. P. (2003), **Global Shift : Reshaping the Global Economic Map in the 21st. Century**, New Delhi : Sage Publication.
3. Gwynne, Robert, et. al. (2003). **Alternatives Capitalism**, London : Arnold.
4. Hervey, David (1982), **The Limits to Capital**, Oxford : Blackwell.
5. Hervey, David (1985), **The Urbanisation of Capital**, Oxford : Blackwell.
6. Hervey, David (2005), **New Imperialism**, Oxford University Press.
7. Hervey, David (2008). **A Brief History of Neoliberalism**, Oxford University Press
8. Hudson Ray (2005), **Economic Geographies**, New Delhi : Sage Publication.
9. Johnston, R. J. et. al. (eds.) (2003), **Geographies of Global Change**, Oxford : Blackwell.
10. Knox. Paul et. al. (2003), **The Geography of the World Economy**, London : Arnold.
11. Taylor, P.J. and Collin Flint (2000), **Political Geography: World Economy, Nation-State and Loyalty**, New York: Prentice Hall.
12. World Bank (2002), **Globalization, Growth and Poverty: Building an Inclusive World Economy**, New York: Oxford University Press.



M.A. Geography : Semester – I

Paper- IV Geography of India

UNIT - I

Physiographical and structural regions of India; Indian Monsoon - origin, pattern. Floristic regions, Forest products; Classification of Indian soil, Problems – soil erosion and conservation, National Forest and Soil policy.

UNIT - II

Indian agriculture: crop production and pattern, new trends, dry land farming, Green-White Revolution, Eco-Farming, Agro-Climate and Agro-Ecological Regions; Conventional and Non-Conventional Energy-Production and Distribution. Distribution and Production of mineral resources, location factors of India Industries, Industrial regions.

UNIT - III

Urban-Rural settlements – types and pattern; Urbanisation in India; Primate city, Functional classification urban Morphology. Problems of rural-urban settlements, National Policies and Programs, Origin and Dispersal of Races in India, Cultural, health's and regions, Major tribes-Distribution and Classification.

UNIT - IV

Five year planning in India, Achievements and Failures, Multi-level planning: Planning at National, State, District, Block and Panchyat level; Planning Regions-Bases of delimitation and classification

Recommended Readings:

1. Spate & Learmonth, **India and Pakistan**, London
2. Singh, R.L.(ed.), **India: A Regional Geography**, Varanasi
3. Tiwari, R. C., **Geography of India**, Allahabad
4. Singh, J., K.N. Singh & R.B. Patel, **Bharat**, Gorakhpur
5. Dubey, R.N., **Bharat ka Arthik Bhoogol**, Kitab Mahal, Allahabad
6. MAmoria, C.B., **Bharat ka Ghoogol**, Sahitya Bhawan, Agra, 1988
7. Bansal, S.C., **Bharat ka Bhoogol**, Meenakshi Prakashan, Meerut, 1985.



M.A. Geography: Semester – I

Paper- V- Practical

Unit-I

Topographical maps and its methodology numbering of topographical sheets. Quarter inch. or degree sheet, Half inch or half degree sheet. One inch or quarter degree sheet, conventional signs. The method of studying a topographical sheet- mountain region. Plateau region and Plain region.

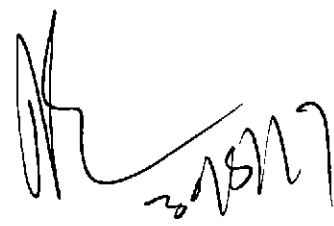
Unit II

Components of computer(Hardware & Software) The process of writing data disks, use of computer in Geography Introduction to MS Excel, opening of file, data entry in the spread sheet, Saving and naming, data sheet, transfers of data to a new file. Drawing of line graph. Bar diagram, Pie Diagram. and Scatter diagram.

Recommended Readings:

1. Topik, Enhance, D.N. (1972). **Fundamentals of Statistics**. Kitab Mahal. Allahabad
2. Elidon, D. (1983) **Statistics in Geography- A Practical Approach**, Blackwell. London.
3. Gupta, C.B. (1971): **An Introduction to statistical Methods**, Prasad and sons. Agra
4. Sharma, J.P. (2015) **Prayogik Bhugol**. Rastogi Publication Meerut.
5. Tiwari, R.C. (2015) **Abhinav Prayogtmak Bhoogol**, Pravalika Publication Allahabad.

Ch. 10
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Recommended
1. ...
2. ...
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M.A. Geography : Semester – II

Paper- VI Climatology

Unit-I

Nature and Scope of Climatology, Development of Modern Climatology, Elements of Climate – Atmosphere, Temperature, Pressure, Moisture, General atmospheric circulations, Jet Stream.

Unit-II

Weather system and disturbance – Air mass, Fronts, Cyclones, Tornadoes; Ocean atmospheric interaction + El Nino, Monsoon winds

Unit-III


Global climatic system – Approaches to climatic classification: Classification of Koppen, Miller and Thornthwaite, World climatic regions.

Unit-IV

Climatic changes – Evidences, possible causes, Global Warming, Acid Rain and problems of acid rain.

Recommended Readings:

1. Aggarwal, S.K. (1972), **Fundamentals of Ecology**, Ashish Publishers, New Delhi.
2. Barry, R.G. and Chorely, R.J., **Atmosphere, Weather and Climate**, ELBS, Methuen and Co Ltd. London.
3. Bhutani Smita. (2000), **Our Atmosphere**, Kalyanai Publishers, New Delhi.
4. Critchfield, H.J. (1987), **Climatology**, Prentice Hall of India, New Delhi
5. Griffith, J.F. and Driscoll, D.M. (1982), **Survey of Climatology**, Charles Merrill.
6. Lal, D.S. (1993), **Climatology**, Chaitanya publishing House, Allahabad.
7. Riehl, H. (1968), **Introduction to atmosphere**, McGraw Hill, New York.
8. Robinson, P.J. and Henderson Sellers (1986), **Contemporary Climatology**, Longman, London.
9. Singh, Savindra (2017), **Climatology**, Pravalika Publication House, Allahabad.
10. Trewartha, G.T. (Latest edition) **Introduction to Climate**, McGraw Hill, New York.



M.A. Geography : Semester – II

Paper- VII Bio-Geography

Unit-I

Bio-Geography – Development, Fields, Functions and Problems: Biosphere – definition, nature and composition.

Unit-II

Plant community and biotic succession – Plant community, classification of plants, biotic succession, climax vegetation, mono-climax theory, and poly climax theory.

Unit-III

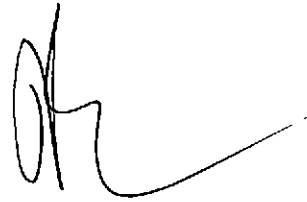
Animal Community – meaning and concept, classification of animals, origin and evolution of animals, dispersal of animals, Extinction of species and world distribution of animals.

Unit-IV

Biomass – meaning and type, Bio-geographical realms : Zoogeography and Zoogeographical realms, Bio-diversity Hot spots.

Recommended Readings:

1. Aggarwal, S.K. (1992), **Fundamentals of Ecology**, Ashish Publishers, New Delhi.
2. Bradshaw, M.J. (1979), **Earth and Living Planet**, ELBS, London.
3. Cox, C.D. and Moore, P.D. (1993), **Biogeography : An Ecology and Evolution Approaches** (Fifth Edition), Blackwell.
3. Huggett, R.J. (1998), **Fundamentals of Biogeography**, Routledge, U.S.A.
4. Hickey, J. (1974), **Introduction to Zoography**, McMillian, London.
5. Lapedes, D.N. (ed.) (1974), **Encyclopaedia of Environmental Science**, McGraw Hill.
6. Mathur, H.S. (1998), **Essentials of Biogeography**, Anuj Printers, Jaipur.



M.A. Geography : Semester – II
Paper- VIII Population Geography

Unit-I

Population Geography : Definition, nature, Scope and Importance; Demography and Population studies; source of data with particular reference to India – census, vital or civil registration system, Sample Registration System, Sample surveys with particular reference to NSSG and NFHS; Problems of their reliability and comparability.

Unit-II

Population Distribution and Growth – Factors affecting Population Distribution: Population Growth – trends and determinants; spatial dimension of population growth in India; Theories of Population growth – Pre – Malthusian View, Malthus's Theories, vies of socialist writers, optimum population theories, demographic transition model.

Unit-III

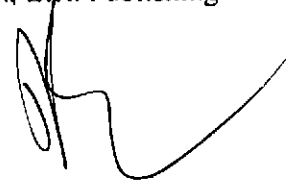
Components of Population change – trends and pattern in fertility and mortality levels; Theories of fertility; Migration : major international migrations; features of international migration in India; theories of migration; population composition and characteristics – age and sex composition, literacy, marital status and economic characteristic of population.

Unit-IV

Population and Development – Population growth and economic development; Population growth and environmental quality; population control movement : population policies and its types; India's Population Policy : Post independence development – Reproductive and Child Health Program.

Recommended Readings:

1. Beaujeu – Garnier, j. (1966), Geography of Population, Longman, London.
2. Bhende Asha A and Kanitkar (2002) Principals of Population Studies, 14th Edition, Himalaya Publishing House, Mumbai.
3. Chandaha, R.C. (2002), Geography of Population : Concepts, determination and patterns, Kalyani Publishers, New Delhi.
4. Clarke, J, I (1992), Population Geography, Second Edition, Pergamon Press Oxford, England.
5. Hassan, M.K. (2005), Population Geography, Rawat Publication, Jaipur.
6. Premi, M.K. (1991), India's Population Heading Towards a Billion, B.R. Publishing Corporation, New Delhi.



M.A. Geography : Semester – II

Paper- IX Urban Geography

Unit-I

Definition, nature and scope of urban geography; different approaches and recent trend in urban geography; Origin and evolution of urban places in Ancient, Medieval, Modern and Post-Modern periods-factors, stages, evolution and Characteristics.

Unit-II

Aspects of urban places : Location, site and situation – definition, nature and significance; urban ecological processes; Theories of city structure – concentric zone theory, sector theory, multiple nuclei theory and social area analysis.

Unit-III

Settlement system : the rank – size distribution of cities, primate city distribution, central place theory of Christaller and Losch; the rural-urban fringe – definition, delimitation and structure; city-region relationship, concept of smart city in India.

Unit-IV

Urbanization: definition and measures of urbanization, Factors affecting urbanization; Regional aspects of world urbanization; Patterns and trends of urbanization in India; Problems and prospects of slum in India, urban development policies and programs in India.

Recommended Readings:

1. Bala, Raj (1986), **Urbanization in India**, Rawat publisher, Jaipur.
2. Bansal, S.C. (2008) **Urban Geography**, (Hindi Edition), Meenakshi Prakashan, Meerut.
3. Bansal, S.C. (2010) **Urban Geography**, Meenakshi Prakashan, Meerut.
4. Cadwallader, Martin (1986), **Urban Geography**, Prentice Hall, New Jersey.
5. Carter, Harold (1995), **The Study of Urban Geography**, (4th Edition), Arnold, London.
6. Dickinson, R.E. (1964) **City and Region**, Routledge, London.
7. Kundu, A. (1992), **Urban Development and Urban Research in India**, Khanna Publication, New Delhi.
8. Mayer, H.M. and Kohn, C.F. (eds.) (1958), **Reading in Urban Geography**, University of Chicago Press, Chicago.
9. Padille, Michael (2001), **Urban Geography-A Global Perspective**, Routledge, London.
10. Ranichandran, R. (1989) **Urbanization and Urban System in India**, Oxford, New Delhi.
11. Rao, B.P. and Sharma, N. (2000-01), **Urban Geography** (Hindi edition), Vasundhra Prakashan, Gorkhpur.
12. Singh, K. and Steinberg, F. (eds.) (1987), **Urban India in Crisis**, New Age International, New Delhi.
13. Smailes, A.E. (1953), **The Geography of Towns**, Hutchinson, London



M.A. Geography: Semester – II

Paper- X Practical

Unit-I

Sources of Data – primary and secondary: Collection of primary data : methods of primary data collection – observation method, interview method, thought questionnaire, through schedule and other methods, questionnaire and scheduled; Processing and analysis of data.

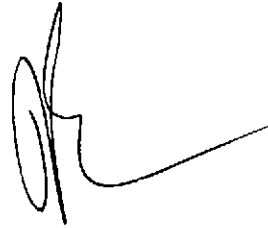
Unit-II

Field work and report writing; identification of research problem; preparing research design; data collection through field visit; report writing based on study tour of different geographical regions of India.

Note: The student shall conduct physical/socio-economic survey in different parts of the country as decided by the department, under the supervision of a member of the faculty of the department. The teacher in charge shall be paid TA/DA by the colleges as per University rule.

Recommended Studies:

1. Ethance, D.N. (1972), **Fundamentals of Statistics**. Kitab Mahal, Allahabad
2. Elidon. D. (1983) **Statistics in Geography- A Practical Approach**, Blackwell, London.
3. Gupta, C.B. (1971): **An Introduction to statistical Methods**, Prasad and sons. Agra
4. Sharma., J.P. (2015) **Prayogik Bhugol**. Rastogi Publication Meerut.
5. Tiwari, R.C. (2015) **Abhinav Prayogtmak Bhoogol**, Pravalika Publication Allahabad.



M.A. Geography : Semester – III

Paper- XI Oceanography

Unit-I

Definition and scope of Oceanography, Oceanography and other sciences: Distribution Pattern of land and sea, origin of ocean basins : Wegner's drift hypothesis and sea floor spreading and Plate tectonics.

Unit-II

Depth of ocean : ocean floor profile-continental shelf, slope, ridge and deeps, abyssal plains, submarine canyons; coral reefs-origin and distribution; ocean deposits; configuration of ocean floors of Indian ocean and Atlantic ocean.

Unit-III

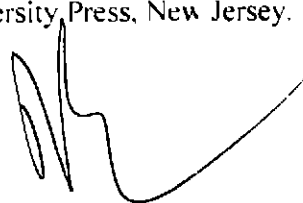
Temperature of oceans : salinity in oceans; density of ocean: dynamics of ocean currents; currents of Atlantic, Pacific and Indian Ocean; tides and origin; Tsunami.

Unit-IV

Ocean currents and their impact on climate and economy; ocean as source of food, minerals mechanism and impact.

Recommended Readings:

1. Sharma, R.C. and V. Vatal, (1986), Oceanography for Geographers, Chatanaya Publishing, Allahabad.
2. Denny, M. (2008), How the Ocean Works : An Introduction to Oceanography, Princeton University Press, New Jersey.
3. T. Garrison, (2006), Oceanography : An Invitation to Marine Science, Thomson, Books / Cole, et al.
4. S. Kershaw, (2004), Oceanography : An Earth Science Perspective, Routledge, U.K.
5. Garrison, T. (1995), Essentials of Oceanography, Wardsworth Pub. Co., London.
6. Kennel, J.P. (1982), Marine Geology, Prentice Hall, Englewood Cliff, New Jersey.
7. Shepard, F. (1969), The Earth Beneath the Sea, Athneum, Rev. ed. New York.
8. Sieboldt, E. and W.H. Berger (1994), The Sea Floor, 2nd ed., Freeman, New York.
9. Von Arx, W S. (1962), An Introduction To Physical Oceanography, Addison Wesley, New York,
10. Stommel, H. (1987), A View of the Sea, Princeton University Press, New Jersey.



M.A. Geography : Semester – III

Paper- XII Social and Cultural Geography

Unit-I

The Nature Meaning & scope of Social Geography; Philosophical bases of Social Geography: Positivism, Radicalism, Humanism, Empiricism, Feminism. Social Cultural regions of India. Social transformation and change in India.

Unit-II

Concepts of Social well being, Human development India, Factors of social change social disorganization. Gender issues of Social well being.

Unit-III

The nature, meaning & scope of Cultural Geography. The Evolutionary approach in Cultural Geography. The Contribution of Otto Schluter & Carl Sauer and others; Role of Environment in th Development of Folk culture and its diversity, Revival of folk culture, culture adaptation and environment Perception.

Unit-IV

Studies of the Socio-Cultural characteristics of contemporary societies within their manifested Habitual economy and society of Tribal groups. Tribes of India(Bhil, Gond, Toda, Nagar) Tribes of World (Eskimo, Pigmy, Bushman).

Recommended Readings:

1. Ahmed, Aijazuddin (1999) **Social Geography**, Rawat: New Delhi.
2. Dreze, Jean and Amartya Sen(1996) **Economic Development and Social Oppurtuntiy**, Oxford University, Press NewDelhi.
3. Dubey, S.C.(1991), **Indian Society**, National Book Trust, New Delhi
4. Haq, Mahbul. **Reflection on human Development**. Oxford University Press, New Delh.



M.A. Geography : Semester – III
Paper- XIII Agricultural Geography

Unit-I

Definition, nature, scope and significance of agricultural geography; approaches to study of agriculture in geography-commodity, deterministic, systematic and regional.

Unit-II

Factors influencing agricultural pattern – Physical factors: terrain, climatic, soil and water resources; demographic, land holdings, farm family structure, cast, religion, peasant way of life, infrastructural services; technological factors, irrigation, mechanical inputs

Unit-III

Agricultural system of world; World's agricultural regions, crop combination region and its techniques, land capability, crop efficiency, crop combination, crop productivity.

Unit-IV

Nature, significance and classification of agricultural model: economic and descriptive models; food security, sustainable agriculture: Land use pattern, Agricultural Locational Theories; WTO and Agriculture.

Recommended Readings:

1. Andrae, B.(1981) **Farming Development and Scope: A World Agricultural Geography**, Walter D Grytar, New York.
2. Grigg, D. **Agricultural Geography**, Longman Ontario.
3. Hussain M. (1997) **Systematic Agricultural Geography**, Rawat Publications, Jaipur.
4. Singh, J. and S.S. Dhillon (1984) **Agricultural Geography**, Tata McGraw Hills, New Delhi.
5. Planning Commission, **Government of India** : Report on Development of Tribal Areas. 1981
6. Rao M.S.A. **Urban Sociology in India**, Orient Longman, 1970.
7. Schwartzberg Joseph : **An Historical Atlas of South Asia**, University of Chicago Press, Chicago, 1978.
8. Sen, Amartya and Dreze Jean, **Indian Development Selected Regional Perspective**, Oxford University Press, 1996.
9. Smith, David : **Geography : A Welfare Approach**, Edward Arnold, London, 1977.
10. Sopher, David : **An Exploration of India**, Cornell University Press, 1980.
11. Subba Rao, **Personality of India : Pre and Proto Historic Foundation of India and Pakistan**, M.S. University, Baroda, Vadodara, 1958.



M.A. Geography : Semester – III

Paper- XIV Political Geography

Unit-I

Nature and Scope of Political Geography; Schools of thought: Political Economy, World Systems, Place and Globalisation.

Unit-II

Concept of Nation, State, Nation-State, Nationalism and Nation-Building: Emergence and growth of Territorial state; Globalisation and the Crisis of the Territorial state; Globalisation and the Crisis of the Territorial State; Forms of Governance: Unitary and Federal.

Unit-III

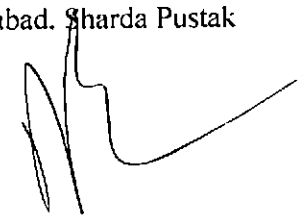
Rise and Demise of German Geopolitics; Geo-Strategic theories of Mackinder and Spykman; Geopolitics in the post Cold War World- S.B. Cohen's Model of Geopolitics.

Unit-IV

India as a regional Power in South Asia; India as a Democratic State; National and Regional Political Parties, Women as Marginalized section in India Politics. International water disputes.

Recommended Readings:

1. Agnew, J.A. (1987) *Place and Politics*, Boston: Allen and Unwin
2. Blacksell, Mark (2003), *Political Geography*, London Routledge.
3. Cox, Kevin R. (2008). *The Sage Handbook of Political Geography*, New Delhi Sage.
4. Dicken, Peter (2003), *Global Shift*, New Delhi. Sage.
5. Dikshit, R.D. (2000) *Political Geography: The Spatiality of Politics*, Tata Mc Graw Hill, New Delhi.
6. Jones, Martin Rhys Jones and Michael Woods (2003), *An Introduction to Political Geography*, London, Routledge.
7. Knox, Martin. (2001). *Rethinking in Globalization*, London, Zed Books.
8. Painter, J. (1995), *Politics, Geography and Political Geography*, London, Arnold
9. Taylor, P.J. and Colin Flint (2001), *Political Geography*, New Delhi : Person.
10. Taylor, P.J. and R.J. Johnston (1979), *Geography of Elections*, Hammond worth : Penguin.
11. Adhikari, Sudepto (2008), *Political Geography of India*. Allahabad. Sharda Pustak Bhandar.



M.A. Geography : Semester – III

Paper- XV Practical : Morphometric Analysis

Unit-I

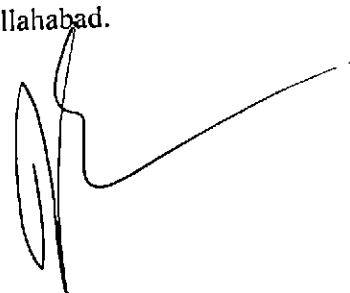
Morphometric Analysis of Drainage Basin – its geographical significance, basin morphometry of fluviially originated drainage basin, **Linear Aspects** : Stream ordering based on Horton and Strahler, Bifurcation ratio. **Areal Aspects** : Geometry of basin Shape. Basin Perimeter, Length and Area, Stream Frequency and Drainage density.

Unit-II

Relief Aspects : Hypsometric analysis – Hypsometric curve and Integral Hypsometric curve. Climographic analysis, Altimetric analysis. **Slope Analysis**- Average slope (Wentworth's method), Relative Relief (Smith's method). Dissection Index. **Profile Analysis** - Longitudinal profile.

Recommended Readings:

1. Monkhouse, F.J. and H.R. Wilkinson (1980), **Maps and Diagrams**, B.I. Publications, Bombay.
2. Singh, R.L. (1979), **Elements of Practical Geography**, Kalyani Publishers, New Delhi.
3. Singh, S. (1997), **Geomorphology**, Prayag Pustak Bhawan, Allahabad.



M.A. Geography : Semester – IV
Paper- XVI Research Methodology

Unit-I

Research Methodology – Meaning and Objectives of research. Types and approaches, research process, problems encountered by researchers in India, defining research problems, research design, sampling design.

Unit-II

Processing and Analysis of data – methods of measuring concentration and dispersion of human and economic activities, hierarchy of central place and neighbour analysis, chi-square test, Binomial test, applications of remote sensing techniques.

Unit-III

From Quantitative to Qualitative Geography – Quantitative data production : Interviews (process of interviewing, structure interviews and informal surveys, depth interviewing and working with groups); observation.

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.

Recommended Readings:

1. Dey, Ian (1993), Quantitative Data Analysis, London : Routledge.
2. Byles, John and David M. Smith (1988), Qualitative Methods of Human Geography, Oxford : Polity Press.
3. Harvey, David (1969), Explanation in Geography, London, Edward Arnold.
4. Hubbard, Keith et. al. (2002), Thinking Geographically, London, Continuum.
5. Hubbard, Keith et. al. (2002), Researching Human Geography, London, Arnold.
6. Johnston, R.J. and J.D. Sidaway (2004), Geography and Geographers, London, Arnold
7. Kitchin, Rob and Nicholas J. Tate (2002), Conducting Research in Human Geography, London, Prentice Hall.
8. Limb, Melanie and Clair Dwyer (2001), Qualitative Methodologies for Geographers, London, Arnold.
9. Robinson, Guy M.(1998), Methods and Techniques in Human Geography, New York, John Wiley.
10. Seale, Clive (ed.) (2008), Social Research Methods, London : Routledge.(Indian Edition).
11. Somerkh, Bridget and Cathy Lewin (eds.) (2005), Research Methods in the Social Science.



M.A. Geography : Semester – IV

Paper- XVII Environmental Geography

Unit-I

Environmental Geography : Nature and Scope of environmental geography, fundamental concepts of environmental geography; Approaches and methods in environmental geography. Environment and Ecology : meaning, structure and types of environments; Ecology – meaning, scope and concepts, sub- division of ecology.

Unit-II

Ecosystem : meaning and concept of ecosystem, classification and components of ecosystem. trophic structure, ecological pyramid, energy flow and biogeochemical cycle; ecological regions of India.

Unit-III

Environmental Degradation – nature, process, types and causes of environmental degradation; types of pollution, sources and effect of environmental pollution : air, water and land. Green house effect, Global warming, Environmental hazards.

Unit-IV

Environmental Management and Conservation in India : Environmental management – concept, methods approaches. Emerging environmental issues in India, Environmental conservation and management in India; Environmental awareness and movements in India. Eco-development programs and policies in India.

Recommended Readings:

1. Anderson, J.M. (1981), **Ecology for Environmental Science** : Biosphere, Ecosystems and man. Arnold, London.
2. Awasthi, N.M. and Tiwari, R.P.L. (1995) **Paryavaran Bhugool**, (Environmental Geography). Madhya Pradesh Hindi Granth Academy, Bhopal.
3. Goudie, Andrew (1984), **The Nature of Environment**, Oxford Katerpring Co. Ltd.
4. Noble and Wright (1996), **Environmental Science**, Prentice Hall, New York.
5. Odum, E.P. (1971), **Fundamentals of Ecology**, W.B. Sanders, Philadelphia.
6. Saxena, H.M. (1994), **Paryavaran Paristhitiki Bhugool**, (Geography of Environment and Ecology), Rajasthan Hindi Granth Academy, Jaipur.
7. Singh, Savinder (1991), **Environmental Geography**, Prayag Pustak Bhawan, Allahabad.
8. Strahler, A.N. and Strahler, A.H. (1973), **Environmental Geosciences** : Interaction between nature system and Man, John Wiley and Sons, New York.
9. Strahler, A.N. and Strahler, A.H. (1977), **Geography and Maus Environment**, John Wiley, New York.
10. William, M.M. and John, G. (1996), **Environmental Geography**, - Science, Land use and Earth System, John Wiley and Sons, New York.



M.A. Geography : Semester – IV

Paper- XVIII Regional Planning

Unit-I

Concept of regional planning : Types of regional planning; City as Unit of regional planning, Approaches to regional planning; Historical development of regional planning – Developed and Developing world.

Unit-II

Methodology and Techniques of regional planning; Analytical techniques and procedural techniques; Principal of rationalization, Indicators of development and their data sources; Measures of regional development and regional disparities; Planning processes – Sectoral and Spatial planning; short-term and long-term perspective planning; Multi regional and Multilevel planning.

Unit-III


Regional development strategies: Export base theory, convergence theory, growth poles and growth centres in regional development; Industrial dispersal and backward area development; Identification of planning regions: Regional planning strategies for backward areas-drought prone area, hill area, tribal area and rural area.

Unit-IV

Regional Planning in India : Regional Imbalance / Disparities – causes and consequences; Measurement of Regional disparities; Planning Policies for Regional Development; National Capital Region.

Recommended Readings:

1. Bhatt, L.S. (1972), **Regional Planning in India**, Statistical Publishing Society, Calcutta.
2. Bhatt, L.S. et. al. (eds) (1982), **Regional Inequalities in India**, Society for the study Regional Disparities, New Delhi.
3. Blunder, J. et. al. (1973), **Regional Analysis and Development**, Harper and Row, London
4. Chand, M and V.K. Puri (1985), **Regional Planning in India**, Allied Pub. Pvt. Ltd., New Delhi
5. Coates, B.R. and R.J. Johnston (1977), **Geography and Inequality**, Oxford University Press Oxford.
6. Friedmann, J. and William Alonso (1967), **Regional Development and Planning : a Reader**, MIT Press, Cambridge Massachusetts.
7. Kuklinski, A.R. (ed.) (1972), **Growth Poles and Growth Centres in Regional Planning**, Monton, The Hague.
8. Misra R.P. et. al. (eds.) (1974). **Regional Development Planning in India**, Vikas, New Delhi.
9. Raza, Moonis (1988) **Regional Development**, Heritage, New Delhi.
10. Suhdram, K.V. (1977), **Urban and Regional Planning in India**, Vikas Publishing House Pvt. Ltd., New Delhi.



M.A. Geography : Semester – IV
Paper- XIX Disaster Management

Unit-I

Concepts of Hazard, Risk, Vulnerability and Disaster.

Types of Hazards: Natural (Tectonic Hazards- Earthquakes and Volcanoes; Hydrological Hazards- Floods and Droughts).

Unit-II

Regional Dimension of Natural Hazards: Occurrence and Trends. Tectonic Hazards- Earthquakes and Volcanoes; Hydrological Hazards- Floods and Droughts

Unit-III

Disaster Losses and Impact-Displacements; Livelihood.

Economy and Infrastructure; and Health.

Unit-IV

Mitigation and Management: Plans and Policies. Role of Remote Sensing, GIS and GPS in Disaster Management

Recommended Readings:

1. Allan, S., Adam, B. and Carter C., (eds.), (2000): **Environmental Risks and the Media**, Routledge, London
2. Ambala-Bertrand, J M., (1993): **Political Economy of Large Natural Disasters: With Special Reference to Developing Countries**, Clarendon Press, Oxford.



M.A. Geography : Semester – IV

Paper- XX Practicals

Unit-I

Introduction to Aerial Photographs; air photos and there types, Process of Aerial photographs, Air photo film and its characteristics, filters, photogrammetry history and importance, fundamentals of photogrammetry, elements and scale; Types if imagiries, digital image, image processing, techniques of photography, image transformation and classification of images, Satelite images and Interpretation. Importance of satellite images and its application.

Unit-II

Processes and uses of thematic mapping, contents of thematic mapping Introduction of Thematic mapping, history and development of thematic mapping. applicatios of thematic mapping in GIS with special reference to Land Management, disaster management, resource management and sustainable development.

Recommended Readings:

1. Verma, S.S. & Sharma V.N., (2016) **Fundamentals of Remote sensing and Geographical Information System**. Vasundhara Prakashan, Gorakhpur.
2. Chaunial, D.D.
3. Greenhood, D. (1951). **Mapping**, Newyork
4. Drury, S.A., (1992), **Remote Sensing: Interpretation images of the Earth**. New York
5. Hart. C.A. (1963), **Air Photography: Applied to Surveying**, London.
6. Walker, F.(1956), **Geography From the Air**, London
7. Friendly, M. (2008). **Milestones in History of thematic Cartography, Stastical Graphics and Data Visualization**.

