

KISAN POST GRADUATE COLLEGE, BAHRAICH (UP) 271801
(An Autonomous College)

Proposed Structure of syllabus for the
PROGRAM: Master of Art
SUBJECT: GEOGRAPHY

Syllabus developed/proposed by

S. No.	Name	Designation	Department	College/University
1	Dr. Pankaj Singh	Assistant professor	Geography	Kisan Post Graduate College, Bahraich
2	Dr. D.K. Gupta (Retd.)	University Nominee	Geography	L.B.S. P.G. College, Gonda
3	Prof. S. N. Singh	Subject Expert	Geography	M.L.K. P.G. College, Balrampur
4	Dr. Rajdev Singh (Retd.)	Subject Expert	Geography	Bajrang P.G. College, Kunda, Pratapgarh
5	Ms. Krishna Kumar	Member	Geography	Kisan P.G. College, Bahraich
6	Dr. Shivendra Pratap Singh	Member	Geography	Kisan P.G. College, Bahraich
7	Dr. P.L. Tripathi	Assistant Professor	Geography	Kisan Post Graduate College, Bahraich
8	Dr. Dharmendra Kumar Tripathi	Member	Geography	Kisan P.G. College, Bahraich
9	Prof. P.K. Singh	Invited Member	Geography	National P.G. College, Lucknow

Course Code		Course Title	Credits	T/P	Evaluation	
A	B	C	D	E	CIE	ETE
F	G					
SEMESTER I (YEAR I)						
A110701T	CORE	Advance Geomorphology	5	T	25	75
A110702T	CORE	History of Geographical Thought	5	T	25	75
A110703T	CORE	Urban Geography and Planning	5	T	25	75
A110704T	FIRSTELECTIVE (Select anyone)	Human Geography	5	T	25	75
A110705T		Social and Cultural Geography	5	T	25	75
A110706P	SECOND ELECTIVE (Select anyone)	Cartography	5	P	50	50
A110707P		Field Study Report	5	P	50	50
SEMESTER II (YEAR I)						
A110801T	CORE	Regional Geography of India	5	T	25	75
A110802T	CORE	Advance Climatology	5	T	25	75
A110803T	CORE	Geography of Rural Settlement and Rural Development	5	T	25	75
A110804T	THIRDELECTIVE (Select anyone)	Regional Geography World -1(Asia, North America, Europe)	5	T	25	75
A110805T		Regional Geography World -2(South America, Africa and Australia)	5	T	25	75
A110806P	FOURTH ELECTIVE (Select anyone)	Advance Quantitative Techniques	5	P	50	50
A110807P		Remote Sensing	5	P	50	50
SEMESTER III (YEAR II)						
A110901T	CORE	Advance Oceanography	5	T	25	75
A110902T	CORE	Regional Development and Planning	5	T	25	75
A110903T	CORE	Geography of Resources	5	T	25	75
A110904T	FIFTHELECTIVE (Select anyone)	Population Geography and Demography	5	T	25	75
A110905T		Political Geography	5	T	25	75
A110906P	SIXTHELECTIVE (Select anyone)	Field Training	5	P	50	50
A110907P		Geographic Information System	5	P	50	50
SEMESTER IV (YEAR II)						
A111001T	CORE	Environmental Geography and Disaster Management	5	T	25	75
A111002T	CORE	Agriculture Geography with special reference to India	5	T	25	75
A111003P	SEVENTH ELECTIVE (Select anyone)	Field Study(Socio –Economic Survey)	5	P	50	50
A111004P		Advance Surveying	5	P	50	50
A111005P	RESEARCH PROJECT / DISSERTATION	Major Research Project	10	P	100	100

SUBJECT: GEOGRAPHY
M.A. Semester- I
Paper -Core, Paper Code: A110701T
TITLE-Advance Geomorphology

UNIT-I

Fundamental Concepts in Geomorphology: Geological structures and landforms Principles of uniformitarianism Cycle of Erosion - concepts of Davis and Penck.

UNIT-II

Earth Movements: Isostasy- Decline of Isostasy; Views of Airy and Pratt
Continental Drift Theory- concept of Wegener, Plate Tectonics- concept and related views.
Exogenic Processes: Mountain Building Theories-concepts of Kober, Daly and Holmes.

UNIT-III

Weathering and soil formation, Dynamics of fluvial process and resulting landforms, Dynamics of glacial process and resulting landforms. Dynamics of Aeolian process and resulting landforms.

UNIT-IV

Applied Geomorphology: Engineering projects Terrain classification and its application*
Oil exploitation Drainage network analysis-Stream order, Sinuosity index and Drainage density.

Book Recommended

1. Alam Clowes & Comfort. Processes and Landforms.
3. Cotton, Geomorphology.
2. Blooms, A.L., Geomorphology-A Systematic Analysis of late Cenozoic landforms.
4. Dowie, Isostasy.
5. Jolly., Surface History of the Earth.
6. Ollier, C.D., Weathering.
7. Sparks, B.W., Geomorphology.
8. Steers, J.A., Unstable Earth.
9. Strahler, A.H. & Strahler, A. H., Elements of Physical Geography.
10. Thornbury, W.D., Principles of Geomorphology.
11. Von Engel., Geomorphology.
12. Wooldridge, S.W., & Morgan, R.S., An Outline of Geomorphology.

SUBJECT: GEOGRAPHY
M.A. Semester- I
Paper: Core, Paper Code: A110702T
TITLE: History of Geographical Thought

UNIT-I

Origin and development of philosophy of geography; Scientific Character of Geography in the Classical Greek Period. Contributions of Thales, Anaximander, Hecataeus, Herodotus, Eratosthenes, Strabo and Ptolemy.

UNIT-II

Development of geographical thought during Dark Age; General characteristic of Contribution of Arabs in scientific geography; Al Khwarizmi, Al Masudi, Al Biruni and IbnKhalidun

UNIT-III

Concepts in geography; Environmental Determinism, Possibilism and Neodeterminism and their present relevance in geography. Development of Dualism in geography: Physical verses Human Geography and Regional verses Systematic Geography

UNIT-IV

Development of Modern Geography: Contributions of German School Humboldt, Ritter, Ratzel, Contribution of French School-Vedal-De-La Balche. Contribution of British School-Meckinder the relevance of "Heartland theory" in present day-Geo-political order

BOOK RECOMMENDED:

1. Ali, S.M., Arab Geography, AMU., Press, Aligarh.
2. Anuchin, V., Directions in Geography.
3. Bunge, W., Theoretical Geography.
4. Claval, P., Epistemology and History of Geographical Thought, in progress in Human Geography, Vol.4.
5. Dickinson, R.E., The Makers of Modern Geog., London, 1969.
6. Dickinson, R.E., The Making of Modern Geography.
7. Davis, V.K., Conceptual Revolution in Geography.
8. Freenman. T.A., A Hundred Years of Geography: Introduction to Behavioral Geography.
9. Amedas, Douglas, An Introduction to Scientific Reasoning in Geog, John Wiley, 1971.
10. Hartshorne, R., Perspectives on Nature of Geography, Rand MacNally, 1959.
11. Johnstone, R.J., The Future of Geography, Methuen, London, 1988.

SUBJECT: GEOGRAPHY

M.A. Semester- I

Paper -Core, Paper Code: A110703T

TITLE- Urban Geography and Planning

UNIT-I

Internal Structure of Cities:- Meaning, scope and significance of Urban Geography urban morphology and land use patterns, classical models of urban growth and evolution of functional zones - Burgess's Concentric Zone Theory ; Hoyt's Sectoral Model; Harris and Ullman's multiple Nuclei Model - formulation, salient features and critical evaluation of these models; CBD - meaning, internal structure, characteristic features and method of its delineation

UNIT-II

Surrounding Relations: The urban economic base- terminology, concepts, geographic qualities of the basic, non - basic concepts; the city's spheres of influence (Umland)- methods of its determination; rural-urban fringe conceptual explanation, internal structure, characteristic features.

UNIT-III

Settlement Theories and Concepts:- The study of Walter Christaller's Central Place Theory and August's Losh settlement theory in the following heads-Initial formulation of the model and later developments; Salient features of the model and its applicability; Losch's Theory of settlement- Rank-size Rule and Law of Primate City

UNIT-IV

Urbanization:- Urbanization as a process of transformation-demographic process, economic process and socio-cultural process. Spatial pattern and trends of urbanization in India, patterns of urban growth in India-decadal, regional, different size classes of towns (-VI).

BOOKS RECOMMENDED:

1. Alam, S.M., Hyderabad-secndarabad Twin Cities, Asia Publishing House, Bombay.
2. Barry, B.J.L. and Horton, F.F., Geographic perspectives on Urban Systems, Prentice Hall, Englewood Cliff, New Jersey, 1970.
3. BeaujeuGarnier, J., Chabot, G., Urban Geography, London, 1969.
4. Carter, Harold, The Study of Urban Geography, Edward Arnold Publishers, London.
5. Dickinson, R.E., 1964., City and Region, Routledge, London.
6. Gibbs, J.P., Urban Research Methods, New Jersey, 1961.
7. Hall, T., Urban Geography, London, 1988.

SUBJECT: GEOGRAPHY
M.A. Semester- I
Paper - First Elective, Paper Code: A110704T
Title- Human Geography

UNIT-I

Nature & Scope of Human Geography; Branches of Human Geography; Concept of Man Environment Relationship; Determinism, Possibilism & Neo- Determinism.

UNIT-II

Tribes: Eskimo, Bushman, Masai, Khirgij. Division of Mankind into Racial Groups: Characteristics & Distribution

UNIT-III

Growth of Population; Distribution of Population; World Distribution Pattern: Physical, Economic & Social Factors; Migration: Internal & International; Trends of Urbanization. Natural Hazards and Disaster Human development index, Human Health in India, Indicator of Health. Changes in Birth and Death Rate. Life Expectancy

UNIT-IV

Settlements: Types & Pattern; Rural and Urban Settlement in India & World; Rural Settlement & House Types in India; Cultural Regions of the world.

SUBJECT: GEOGRAPHY
M.A. Semester- I
Paper - First Elective, Paper Code: A110705T
Title- Social and Cultural Geography

UNIT-I

Social Geography: Nature, Meaning & Development; Philosophical Bases of Social Geography (Positivism, Structuralism); Social Structure & Social Processes; Concept of Social Space

UNIT-II

Elements of Social Geography: Ethnicity, Tribe, Dialect, Language, Caste & Religion; Socio-Cultural Regions of India; Linguistic Elements in India

UNIT-III

Cultural Geography: Nature, Meaning & Development; Culture: Definition, Elements & Components; Culture Areas & Cultural Realm.

UNIT-IV

Racial Elements in India's Population; Tribes of India (Jaunsar Babar, Bhil, Gond, Toda, Naga); Tribes of World (Eskimo, Pigmy, Bushman.)

UNIT-I

History, Development and Significance of Cartography. Representation of Relief and Climatic Data: Depiction of Relief: Drawing of Profiles-Serial, projected; superimposed, composite and

UNIT-II

Profiles and their usefulness in studying Gradient and Slope: Significance, calculation of gradient, scale of slopes Methods of slops analysis: Wentworth, Smith, Henry Raisz and Robinson

UNIT-III

Hypsographic, Climographic and Altimetric Frequency curves Representation of Statistical Data:

UNIT-IV

Representation of Climatic Data: Climograph, Hythergraph and Rainfall Dispersion Diagram. Thematic Mapping- Choropleth and Isopleth; Lorenz Curve

BOOKS RECOMMENDED

1. Campbell, J., Introductory Cartography, Prentice Hall, Inc., Englewood Cliff, New Jersey, 1984.
2. Cuff, D.J., & Mattson, M.T., Thematic Maps, their Design and Production, Mathuen, New York., 1982.
3. Robinson, A.H., & others., Elements of Cartography, John Willey and sons, New York (New edition).
4. Archer, J.E., & Dalton, T.H., Fieldwork in Geography, London.
5. National Atlas and Thematic Maps Organization (NATMO): National Atlas of India, Calcutta.
6. Monkhouse, F.J., Maps and Diagrams, Methuen & Co., London, 1967.

M.A. Semester- I

Paper-SECOND ELECTIVE

TITLE- FIELD STUDY REPORT

Field study Report will be prepared by the students under guidance of the teachers. The teacher will guide proper procedure for the Field Study Report on the basis of the following points

1. Selection of the problem.
2. Aims and objectives.
3. Hypotheses
4. Selection of the study area.
5. Methodology
6. Data interpretation and preparation of Field Study Report.

The students will select any village or a sector of urban centers such as slum, popular settlements etc. for Field Study Report. The Report should be prepared in about 50 pages.

**M.A. Semester-II
Paper Core
Geography
A110801T**

Title - Regional Geography of India

UNIT-I

Introduction: location, Shape & Size; Geology of India; Main Physiographic Regions; Drainage Systems; Climate and climatic region, Western disturbances, nor wester.

UNIT-II

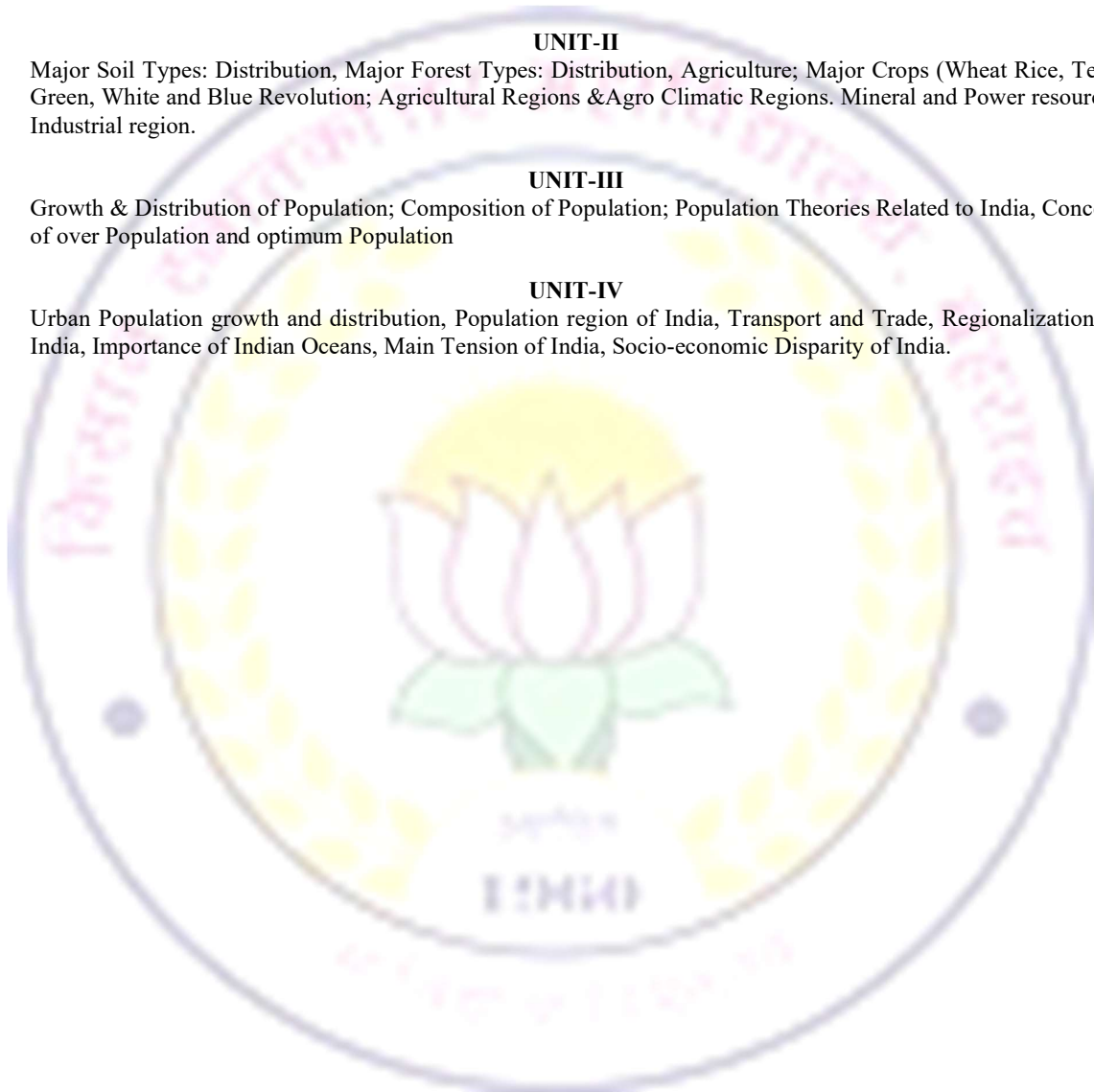
Major Soil Types: Distribution, Major Forest Types: Distribution, Agriculture; Major Crops (Wheat Rice, Tea); Green, White and Blue Revolution; Agricultural Regions & Agro Climatic Regions. Mineral and Power resources Industrial region.

UNIT-III

Growth & Distribution of Population; Composition of Population; Population Theories Related to India, Concept of over Population and optimum Population

UNIT-IV

Urban Population growth and distribution, Population region of India, Transport and Trade, Regionalization of India, Importance of Indian Oceans, Main Tension of India, Socio-economic Disparity of India.



M.A. Semester-II
Paper Core
Geography
A110802T
Title - Advance Climatology

UNIT-I

Nature and scope of climatology and its relationship with meteorology. The atmosphere: Structure and composition, insolation, heat-balance of the earth.

Distribution of temperature: Temporal, vertical and horizontal, Green House effect.

UNIT-II

Atmospheric Equilibrium: Stability and instability, evapo-transpiration. Distribution of atmospheric stability jet streams-their origin, types and distribution, monsoon winds.

UNIT-III

Climatic Phenomena: Air masses and fronts, origin, growth, classification. Frontogenesis, types and weather associated with fronts. Cyclones, and anticyclones, Global warming

UNIT-IV

Climatic Classification: Koppen's Thorn Thwaites- A critical appraisal of each classification, Climates of the World: Tropical, Temperate, Desert, Interpretation and generation of climatic information, soils, and agricultural activities

Book recommended

1. Barry & Perry., Synoptic Climatology.
2. Blair, T.A., Climatology-General and Regional.
3. Chorley, R.J. & Barry, R.G., Atmospheric Weather and climate.
4. Donn, W.L., Meteorology.
5. Jackson, I.J., Climate, Water and Agriculture in the Tropics, 1977.
6. Kendrew, W.G., Climates of the Continents.
7. Lal, D.S., Climatology.
8. Mather, J.R, Climatology: Fundamental and Application, 1974.
9. Patterson., Introduction to Meteorology.
10. Rama Sastery, A.A., Weather & Weather forecasting.
11. Rummey, G., Climatology and the world's climate.
12. Stringer., Foundation of Climatology.
13. Stringer., Techniques in Climatology.
14. Trewartha. G.T., An Introduction to Climate.

**M.A. Semester-II
Paper Core
Geography
A110803T**

Title- Geography of Rural Settlement and Rural Development

UNIT-I

Concept and scope of rural geography; different approaches to study rural Geography, concept and significance of rural development: Indicators of rural Development

UNIT-II

Rural Settlement: Definition and characteristics; Types and patterns of rural settlements and their distribution with special reference to spacing, rural house type, based on building materials, size and shape.

UNIT-III

Rural infrastructure facilities and amenities, New Agricultural technology; Rural transportation, rural education, rural industries and rural marketing

UNIT-IV

Critical review of rural development strategies in India; Integrated Rural Development Programme (I.R.D.P.), Community Development Programmes, Mahatma Gandhi National Rural Employment Guarantee Act (MNREGA), National Rural Health Mission (NRHM).

Books Recommended

1. Singh Kartar., Rural Development: Principal, Policies and Management.
 2. Maheshwari, R.S., Rural Development in India.
- Semester : First
3. Clout, S.D., Rural Geography.
 4. Hussain, Majid., Agricultural Geography, New Delhi.
 5. Bel, G.(Ed). Strategies for Human Settlements: Habitat and Environment.
 6. Chisholm, M., Rural Settlement and Land Use.
 7. Singh, R.L., et. al: Readings in Rural Settlement Geography.
 8. Singh, K.N.(Ed.) Rural Development in India: Problems, Strategies and Approaches.
 9. Wanmali, Sudhir., Service Centres in Rural India.
 10. Mishra, H.N.(Ed.) Rural Geography.
 11. Prasad, R. & Sarkar S., Rural India-Socio-Political development, Vol. I & II, Global Vision Pub. House, New Delhi.
 12. Khullar D.R. India- A Comprehensive Geography, Kalyani Pub. New Delhi.

**M.A. Semester-II
Third Elective
Geography
A110804T**

TITLE- Regional Geography World -1(Asia, North America, Europe)

UNIT-I

Asia: Physiographical region Climatic region Natural Vegetation Types, Agricultural regions,

UNIT-II

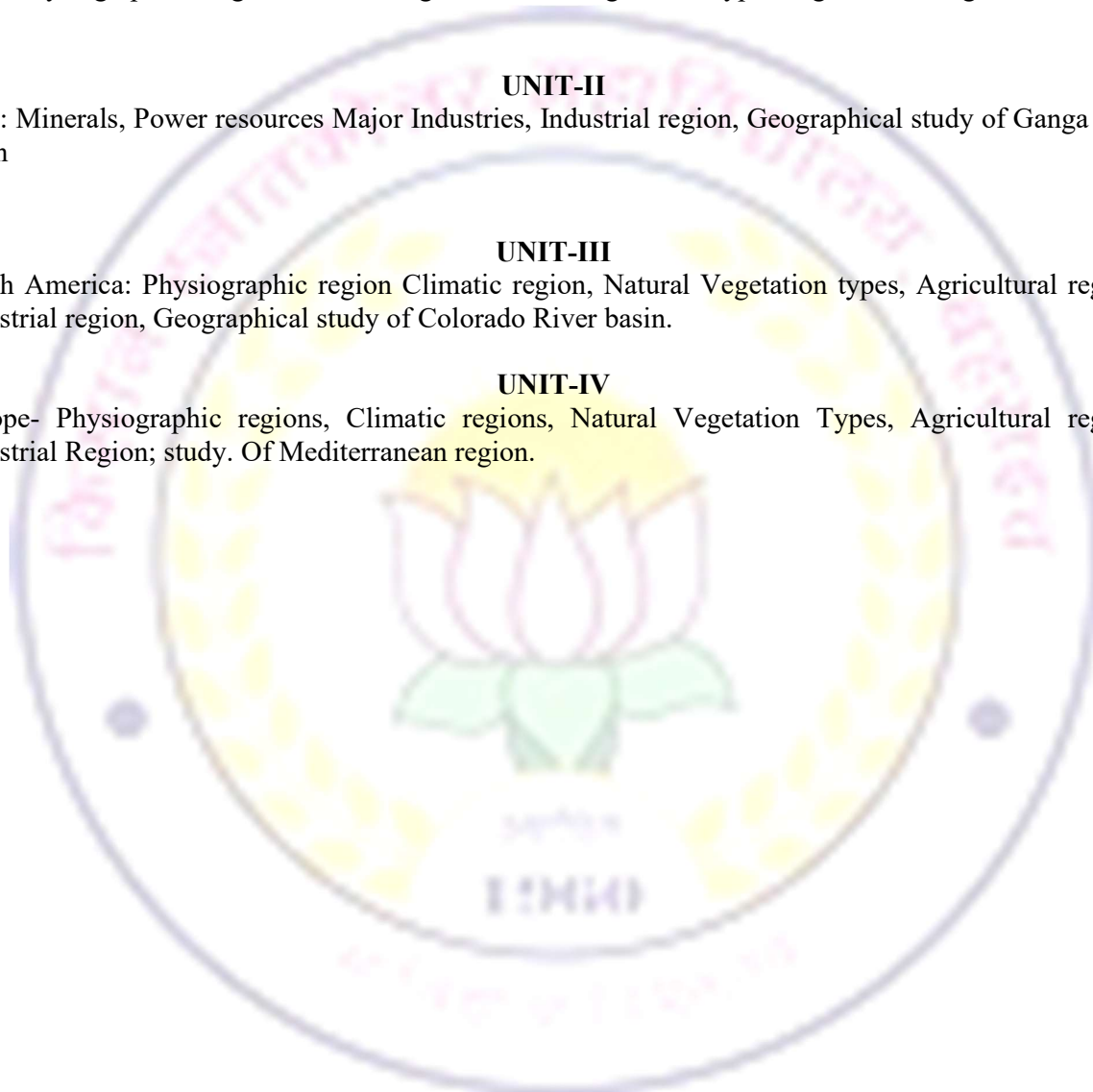
Asia: Minerals, Power resources Major Industries, Industrial region, Geographical study of Ganga River basin

UNIT-III

North America: Physiographic region Climatic region, Natural Vegetation types, Agricultural regions, Industrial region, Geographical study of Colorado River basin.

UNIT-IV

Europe- Physiographic regions, Climatic regions, Natural Vegetation Types, Agricultural regions, Industrial Region; study. Of Mediterranean region.



**M.A. Semester-II
Third Elective
Geography
A110804T**

TITLE- Regional Geography World -2(South America, Africa and Australia)

UNIT-I

South America: Physiographic regions climatic regions, types of natural vegetation, Agricultural regions

UNIT-II

South America : Mineral, Power resources, Major Industries, Industrial regions, Geographical study of Amazon basin.

UNIT-III

Africa: Physiographic regions, climatic regions, types of natural regetiation Industrial regions. Geographical study of Nile River basin.

UNIT-IV

Australia: Physiographic regions, climatic regions, types of natural vegetation , Industrial regions. Geographical study of Murray darling basin.



M.A. Semester-II

Paper -FOURTH ELECTIVE

Title-Advance Quantitative Techniques

- Correlation analysis: Karl Pearson's Product moment, Spearman's Rank Correlation, Coefficient and their limits: test of significance on correlation co-efficient, scatter diagram.
- Simple linear regression and multiple regression analysis: regression lines and residuals;
- Methods of constructing regression lines, properties of least square estimates, Coefficient of determination.
- Test of significance: Chi-square test, student 't' test, variance estimate test.
- Test for Distributions in Space; nearest neighbour analysis; spacing of settlement.

Books Recommended

1. Hammond/McCullah., Quantitative Techniques in Geog, Oxford, 1974.
 2. Gregory, S., Statistical Method for Geography, Longman, 1975.
- Semester: Second
3. Berry, B.J.L., & Marble, D.F., Spatial Analysis: A Reader in Statistical Geography, New Jersey, 1968.
 4. Cole, J.P., & King, C.A.M., Quantitative Methods in Geography, New York, 1968.
 5. King, LI, Statistical Analysis in Geography, New Jersey.
 6. Johnson, R.J., Multivariate Statistical Analysis in Geography, 1978.
 7. Elhance, D.N., Elementary statistics.
 8. Pal, S.K., Statistical Methods in Geography.
 9. Alvi, Zamiruddin., Statistical Geography

M.A. Semester-II

Paper Fourth Elective Title- Remote Sensing

- Stereoscopic Vision Test.
- Format and stereoscopic Orientation of Aerial Photographs.
- Course Title : REMOTE SENSING
- Determination of scale and Stereoscopic area.
- Line and Air Base.
- Determination of Principal Point and Conjugate Principal Points, Direction of Flight
- Calculation of Photographic coverage for a Planning Area.
- Mapping Land Use change Detection.
- Height Determination Methods
- Year: First
- Land use Measurement Methods Preparation of Landcover and Landuse Map
- Interpretation of Aerial Photographs.
- Books Recommended:
- Population Census with Aerial Photographs.

Book Recommended

1. American society of Photogrammetry: Manual of Photographic Interpretation, Banta Pub. Co., Wisconsin, 1960.
 2. Avery, T.E., Interpretation of Aerial Photographs, Minneapolis, 1962.
 3. Barrett, E.C., & Curtis, L.F., Introduction of Environ. Remote Sensing, 1976.
 4. Dury, G.M., Map Interpretation, Isaac Pitman, London, 1952.
- Semester : Second
5. Cunan, R.J., Principles of remote sensing, London, 1985.
 6. Hord, R.M., Remote sensing: Methods and Applications, N.Y., 1986.
 7. Lender, D.R., Aerial Photographic, McGraw Hill, N.Y., 1960.
 8. Lunder, D., Aerial Photography Interpretation: Principles and applications, McGraw Hill, N.Y., 1959.
 9. Lilles&Klefer, Remote sensing & Image interpretation.
 10. Reeves, R.G.(Ed.) Manual of Remote sensing (Vol.2) Virginia, 1975.
 11. Sabins, F.F., Remote Sensing: Principles & Interpretation. 1982.
 12. Smith, H.T.V., Aerial Photographs & their Application, N.Y., 1943.
 13. Spurr, S.H., Photogrammetry & Photo Interpretation, N.D., 1960.
 14. Stershew, A., Aerial Photography.
 15. Thomas, E.A., Interpretation of Aerial Photographs, Minnesota.
 16. Tomar, M.A., & Maslakar, A.R., Aerial Photographs in Land use & Forest Survey, Dehradun, 1974.
 17. Usill, G.W. (Revised by Hearn, G.S.G.) Pract. Surveying, London, 1960.
 18. White, L.P., Aerial Photography & Remote Sensing for soil survey.
 19. James, B. Campbell, Introduction to Remote Sensing-2nd Ed. Taylor & Francis,

M.A. SEMESTER-III
PAPER - CORE
A110901T
TITLE- ADVANCE OCEANOGRAPHY

UNIT-I

Oceanography-nature, scope and development, distribution of land and water, Ocean bottom topography, bottom relief of Pacific, Atlantic and Indian Ocean.

UNIT-II

Characteristics of Ocean water: temperature - distribution, salinity composition, source and distribution, density of sea level

UNIT-III

Movement of ocean water: currents causes and character, currents of Atlantic, Indian and Pacific Ocean, Waves, tides and theories of origin.

UNIT-IV

Ocean deposits and coral reefs: sources, Types and distribution of ocean deposits, coral reefs-formation, condition of growth, type of theories of origin

BOOK RECMENDED

1. Davis, R.J.A. 1986, Oceanography - An Introduction of the Marine Environment, Win C. Brown, Iowa.
2. King, C.A., Oceanography for Geographers, Edward Arnold Pub.
3. Murray, S.J., 1913, Ocean, A General account of the Science of the sea, ThortonButter Worth, London.
4. Siddartha, K. 1999, Oceanography, A Brief Intoduction, Kisalaya Pub, Pvt. Ltd., New Delhi.
5. Singh, S. 2002, Physical Geography, Prayag Pub, Allahabad.
6. Stahler, A. N. Stahler A. M., 1997, Geography and Man's Environment, John Wiley and Sons, New York.
7. Thurnman, H. V., 1978, Introduction to oceanography, Charles E. Merrill Pub Co., London.
8. Weyl, P. K. 1970, Oceanography an Introduction of the Marine Environment, John Wiley and Sons Ltd., London.

M.A. SEMESTER-III
PAPER -CORE, A110902T
TITLE- Regional Development And Planning

UNIT-I

Concept and nature of Regional Planning, Types of Planning, Principles and Objectives of Regional Planning; Approaches of Regional Planning

UNIT-II

Concept of Regions, Attributes of Region, types of regions, formal and functional regions, Methods and techniques used in the regionalization of formal and functional regions, Planning Regions in India

UNIT-III

Theories of Regional Development (Albert O. Hirschman, Gunnar Myrdal, John Friedman, W.W. Rostow, Dependency Theory of Environmental issues in Regional Planning

UNIT-IV

Global Economic Block, World Regional Disparities, Regional Imbalances/Disparities in India- Causes and consequences; Regional Development and Social movement in India.

BOOK RECOMENDED

1. Bhat, L.S., 1973, Regional Planning in India, Statistical Publishing Society, Calcutta.
2. Chandana, R.C., 2000, Regional Planning, Kalyani Publishers Ludhiana.
3. Chand, M., Puri, & V.K., 1983, Regional Planning in India, allied Publishers, New Delhi.
4. Friedman, J., & Alonso, W. 1967, Regional Development and Planning -A Reader, MIT Press, Cambridge Hars.
5. Glassom, 1980 Regional Planning, Hutchinson, London.
6. Glikson, A., 1955, Regional and Development, Netherlands, Foundation of International Corrop. London.
7. Mishra, R.P., 1969. Regional Planning Concepts, Techniques and Politics, University of Mysore, Mysore.
8. Mishra, R.P., et.a\., 1974. Regional Development and Planning in India. Institute of Development Studies, Mysore.
9. Rao, V.LB., 1960. Regional Planning, Asia Publishing House, New Delhi.
10. Kant Surya et. al (eds).: Reinventing Regional Development, Rawat Publication, Jaipur and New Delhi.

M.A. SEMESTER-III
PAPER - CORE, A110903T
TITLE- Geography of Resource

UNIT-I

Nature, Scope and significance of geography of resources. Definition and Concept of natural resources, Classification of resources Characteristics of natural resources: Resources conservation and management with reference to land and forest resource.

UNIT-II

. Water resources-Hydrologic Cycle, Fresh water resources, surface and underground water supplies, problems of water supplies. Marine resources, major fishing grounds of the world, fish distribution and exploitation. India's natural resource: water resource, conservation and management and its utilization.

UNIT-III

Manufacturing Activities: Significance and types, Factors of Industrial Location, Iron and steel Industry Cotton, textile Industry. Theories of Industrial Location; Weber's and Smith models.

UNIT-IV

Energy resources- Conventional energy resources-coal, petroleum, non-conventional energy resources – Solar energy, World energy Crises, International trade: Problem and Prospects, World trade Organization (WTO), Central Place Theories of Christaller and Losch.

BOOK RECMENDED

1. Alexander, J.W., Economic Geography, New Jersey, 1965.
2. Ali, S.A., Resouces for Future Economic Growth, New Delhi, 1979.
3. Dehends, William, W., the Dynamics of Natural Resource Utilization in D. Meadow (Ed.), Massachusetts, 1972.
4. Duncan, G., Resouce Utilization and Conservation, New York, 1975.
5. Earl, D.K., Forest Energy and Economic Development, Oxford, 1975.
6. Ranner, G.T., Conservation of Natural Resources, New York, 1942.

M.A. SEMESTER-III
PAPER FIFTH ELECTIVE, A110904T
TITLE - Population Geography and Demography

UNIT-I

Nature, Scope, significance, approaches to study Population Geography, recent trends, Sources of population data; The Census, Vital Registration and other Sources, Problems relating to compatibility of data, Population distribution and density in the world

UNIT-II

Population Dynamics: Growth, fertility and mortality measurement, Theories of Growth: Malthusian theory, Social Capillary and demographic transition theory. Migration: Types, determinant and consequences, pattern of international migration. Theories of Migration: Ravenstein and Lee's laws

UNIT-III

Population Composition/ Characteristics: Sex Composition determinants and distribution. Declining Sex Ratio, Age Composition: various systems of age groupings, determinants and distribution; Ageing of population, Occupational structure, determinants of work force, types of workers.

UNIT-IV

Population and resources: Over population, Under population, Optimum population, Ackerman's scheme of Population-Resource Regions, population problems with special reference to India: food, housing, unemployment and poverty, population policies, National Population Policy (NPP), 2000

BOOK RECOMMENDED

1. Bhende, A.A., & Kanitkar, (2014), Principles of Population Studies, Himalayan Pub. H., Mumbai.
2. Bogue, D.J., Principles of Demography, New York, 1969. Coontz, S.H. Population Theories and the Economic Interpretation.
3. Chandna, R.C., Geography of Population: Concepts Determinants and Pattern, Kalyan Pub. Ludhiana, 2014.
4. Garnier, B.J., Geography of Population, Longman Group Limited, London, 1966.
5. Jones, H.R., A Population Geography, London, 1981.
6. Siddiqui. F.A., Regional Analysis of Population Structure, New Delhi. 1984.
7. Smith, T., Fundamentals of Population Study, New York, 1960.
8. Trewartha, G.T., A. Geography of Population: World pattern, New York, 1969.
9. Wood, R. Population Analysis in Geography, Longman, London, 1979.
10. Zelinsky, W.A., Prolong to Population Geography, Prentice Hall, New Jersey, 1966.

M.A. SEMESTER- III
PAPER FIFTH ELECTIVE
TITLE-POLITICAL GEOGRAPHY

UNIT-I

Introduction to Political Geography: Definition and Historical Development Political Geography. Recent Development in Political Geography. Distinction between Geo-Politics and Political Geography. Approaches to the Study of Political Geography; Hirschhorn's Functional, Whittesey's Landscape and Joni's Unified Field theory

UNIT-II

Concept and State, Nation and Boundary: Definition and Components of State. Definition of Nation and Nation State. Nationalism/Nation Building. Geographical factors of state: Physical, spatial and human & Economic. Definition of Boundary and Frontier and their Classification.

UNIT-III

Global Strategies Models and Colonization: Meckinder's Geographical Pivot and Heartland Model, Spykman's Rim Land Model. Critical Assessment of Heartland and Rim Land Model and their Relevance to World" Geo politics. Concept of Colonization, Factors and Styles of Colonization. Neo Imperialism: Political, Economic and Cultural Mechanism.

UNIT-IV

Political Geography of India and Geography of Election: India Under Colonial Rules. India as a Federal country. India as a Unitary or Union of States. India's Relation with China and Pakistan. Concept and Definition of geography of Election or Electoral Geography. Approaches to Study of Election/ Electoral Geography

BOOK RECMENDED

1. Alexander, L.M. World Political Pattern, London, 1964.
2. De Blij, H.J. Systematic Political Geography, New York, 1967. Semester: Fourth
3. Dikshit, R.D., Political Geography, New Delhi, 2004.
4. Dikshit, R.D. Political Geography, A Century of Progress, New Delhi, 1999.
5. Dikshit, S.K. Electoral Geography of India, Varanasi, 1993.
6. Dwivedi, R.L. Fundamentals of Political Geography, Allahabad, 2010.
7. Jackson, W.A.D, Politics & Geographic Relationship, Printice Hall '71
8. Kasperson/Minghi. Structure of Political Geography, London '70
9. Pounds, N. Political Geography, London 1963.
10. Taylor, P. Political Geography, London, 1985.

**M.A. SEMESTER-III
PAPER SIX ELECTIVE
TITLE- FIELD TRAINING**

The student of MA./M.Sc. (Final) II Semester are required to study and submit their tour reports for evaluation and viva voce examination. The duration of the main fieldwork Will be up to two weeks. The fieldwork will cover the following region/regions of India assigned by the department during the academic year. The class room teaching would include preliminaries of socio-economic and environmental surveys to equip the students for the field work and tour report.

1. The Deccan Region.
2. The Konkan/Malabar Coast
3. The Sunder Barn Delta
4. The Mahanadi Delta
5. The Krishna Delta
6. The Cauvery Delta
7. The North Eastern States
8. The North/North Western States
9. The Central India

The T.A. and D.A. of the staff accompanying with students will be paid by the Institution

Books Recommended:

1. Singh, R.L, (Ed.) India -A Regional Study.
2. Spate, O.H.K., India -A Regional Geography.
3. Wadia, D.N., Geology of India.
4. M.S. Krishna, Geology of India.
5. Ray and Chaudhary, Soils of India.

Semester: Third

6. Ahmad, E., Coastal Geomorphology.
7. Ahmad, E., Some Aspects of Indian Geography.



**M.A. SEMESTER-III
PAPER -SIXTH ELECTIVE
TITLE-GEOGRAPHIC INFORMATION SYSTEM**

Introduction of GIS: Definition, Information. technology in geography, history and development in GIS, components of GIS, advantages of GIS over traditional techniques.

Application of GIS in geographical studies. Geographic data - human cognition of the spatial world, maps and other representation of

the world. Types of information in a digital map: scale projection and georeferencing. Spatial Data -Geographic data and information, spatial non-spatial data. GIS data formats,

raster and vector data, their merits and demerits.

Lab I: Introduction to Arc View's Modular Structure

Lab II: Projection and Cartography

Task Set II: Basic software and operating system concept, Task Set 2: Introduction to Arc View

Lab III: Vector Data Model:

Task Set : Basic Concepts of projection, Task Set 2: Concept of the theme in Arc View, Task set 3: Cartographic design concepts

Lab IV: Digitizing and Data Automation

Year: Second

Task Set : The vector data model: points. Task Set 2: The Vector data model: Lines and Polygons. Task Set 3: Joining tabular data to spatial data. Task Set 4: Creating Visualization

Task Set 1: Digitizing in Arc View

Task Set 2: Creating a map.

Task Set 3: Creating a table and entering data

Lab V: Geo-coding: Matching addresses with locations

Task Set 1: Geo-coding

Lab VI: Spatial Analysis

Semester: Third

Task Set 1: Classification

Task Set 2: Distance measure and Buffers

Books Recommended:

1. Cromley, R.G., Digital Cartography, Prentice Hall, N. Jersey, 1992
2. Fraser Taylor, D.R., "Geographical Information System", Pergmon Press, U.K., 1991.
3. Maquire, D.J, Good Child, M.F., and Rhind, D.W., "Geographical Information Systems: Principles and Application", Taylor and Francis Publication Washington, 1991.
4. Monmnier, M.S., Computer Assisted Cartography: Principles and Prospects, P. Hall, New Jersey, 1982.
5. Peuquet, D.J., and Markle, D.F., "Introductory Reading in Geographical Information System", Taylor and Francis Publication, Washington, 1990.
6. ShahabFazal, GIS Basics, New age nternational Publisher.

M.A. Semester-IV

Paper – CORE

Paper Code – A111001T

TITLE - Environmental Geography and Disaster Management

UNIT-I

Ecosystems, meaning, types and components of ecosystem, function of Ecosystem, trophic levels, food chain and food webs. Ecological pyramid and flow of energy. Bio-Geo-Chemical Cycles-Nitrogen cycle, Carbon cycle and Hydrological cycle.

UNIT-II

Environmental Degradation and Pollution: concept and types of Environmental Degradation, causes of Environmental Degradation, sources and types of Pollution, Air Pollution, Adverse effect of air pollution on weather and climate, ozone depletion, green house effects, effects on human health, water pollution; surface and ground water, adverse effects on human health

UNIT-III

Environmental Planning and Management: Environmental management-methods and approaches; Ecological basis of environmental management- Ecological principles; Survey, evaluation, preservation and conservation of resources. Environmental impact Assessment

UNIT-IV

Disaster- classification of disaster; Natural disaster earthquake, floods, drought and global warming; causes, consequences and mitigation. Disaster- man-made disaster, their type's technological and industrial disasters .Disaster management - relief and response; reconstruct in and rehabilitation. Disaster Strategies for survival, types of strategies. Importance of information in disaster management, significance of remote sensing and GIS

BOOK RECMENDED

1. Chandna, R.C., 1998 Environmental Awareness, Kalyarni Publishers, New Delhi. Jaipur.
2. Gaur, S., and Chandrashekhar, T., 2006, Global Environmental Crisis, Book Enclave, Semester: Second
3. Gupts, P.D., 2003, Environmental Issue for the 21" Century, Mittal Publication, New Delhi.
4. Morris, D., Freeland, J., Hinchliff, S., Smith, S. (ed.), 2003, Changing Environments, Pd. John Wiley and Sons Ltd., The Open University, U. K.
5. Park, C. C., 1980, Ecology and Environmental Management, Butterworths, London.
6. Md. Noor., Perspectives in Agricultural Geography, New Delhi.
7. Ali Mohammad. Food Production and Food Problem in India .

M.A. Semester-IV

Paper - CORE

Paper Code – A111002T

TITLE - Agriculture Geography with special reference to India

UNIT-I

Aims, objectives and scope of Agricultural Geography, Basic concepts, Historical Perspective and recent trends. Approaches to the study of agricultural geography-regional and systematic approach, Ecological and Commodity approach. Spread of agriculture in the world. Various agricultural techniques crop combination, crop diversification, agricultural efficiency etc.

UNIT-II

Influence of major factors on the performance of agriculture. Whittlessey's classification of agricultural systems of the world-problems and prospects of agriculture and its economic impact on regions of the world

UNIT-III

Concepts of Land use, Agricultural land use-land capability classification and land use planning for agricultural development. Agricultural Regionalization. Land Use Location Theory-Von Thonon and its applicability; Modern Theories of Agricultural Location: Optimum Physical and Economic Conditions and Limits.

UNIT-IV

Green Revolution in India, impact of green revolution in India, Green Revolution and regional imbalances. Problems of India Agriculture, Measures for Agricultural Development. Concept of second green revolution in India.

1. Duckhan, A.N. and Masfield, G.B., Farming Systems of the world, London, 1970.
2. Griggs, D.G., An Introduction to Agricultural Geography, 1964.
3. Husain, Majid., Agricultural Geopgraphy, New Delhi. Semester: Fourth
4. John, R, Tarrant, Agricultural Geography.
5. Mohammad, A., Food Production and Food Problem in India, New Delhi.
6. Mohammad, N., Perspectives in Agricultural Geography, New Delhi.
7. Morgan, W.B. and Munton, P.J.C. Agricultural Geography. London, 1971.
8. Shafi, M., Agricultural Geography of South Asia, Macmillon, New Delhi 2000
9. Shafi, M., Agricultural Geography, Doriling Kindersley, New Delhi, 2006
10. Singh, J. and Dhillon, S.S., Agricultural Geography, 1970
11. Symons, L., Agricultural Geography, London, 1967
12. Wrigley, G., Tropical Agriculture, 1979.

Paper- SEVENTH ELECTIVE

TITLE-Field Study (Socio –Economic Survey)

A. Field Training Study Methods

Objectives and scope of the field enquiry.

Methods of field work in different areas.

Scale-macro, me so and micro.

Preparation of questionnaire.

Sampling techniques for the collection of data.

Fieldwork will be carried out on the basis of a interview schedule/questionnaire prepared.

The data so collected with the analyzed by the candidate by preparing suitable tables, maps and diagrams. A report on the basis of survey conducted by the candidate shall be prepared. Collection, processing and presentation of data.

Students are required to undertake a field study of a distant area or region to study certain aspects of social, cultural landscape and on-spot observations under the supervision of teacher who will accompany the students.

A comprehensive report on the area/region shall be submitted by the students within two weeks on their return from the visited place.

The report duly certified by the teacher-in-charge shall be submitted.

BOOK RECOMMENDED

1. Archeer, J.E., & Dalton, T.H., Fieldwork in Geography, London, 1968.
2. Elhance, D.N., Fundamental of Statistics, Allahabad, 1972.
- Jones, P.A., Fieldwork in Geography, London, 1968.
- Glodard, R.H., Field Techniques and Research Methods in Geography, Dubuque 1982.
5. Whealso, K.S., & Harding, M., Geographical Fieldwork, London, 1965.
- Mahmood, A., Statistical Methods in Geographical Studied, Rejesh Publication, Delhi, 1977.
7. Geography, S., Statistical Methods and the Geographers, Longmans, London.
8. Monkhouse, F.J., Maps and Diagrams, Methuen & Co., 1952.
9. Berry, B.J.L., & Marble, F., Spatial Analysis: A Reader in Statistical Geography, New Jersey, 1968.

M.A. Semester-IV

Paper SEVENTH ELECTIVE

TITLE-Advance Surveying

Plane Table

Radiation Method with Telescopic Alidade

-Prismatic Compass Survey

Correction of bearing and plotting

Calculation of included angles and plotting of Error- Bowditch Method "Elimination

-Dumpy Level Survey Rise and Fall System Plotting of Longitudinal Sections.

-Theodolite Measurement of horizontal angles



TITLE - Major Research Project

. The students will prepare a dissertation on a specific topic suggested by the allotted teacher for guidance. The Dissertation should not be less than hundred pages.

The topic can be selected from various branches of geography such as Geomorphology, Climatology, Oceanography, Rural Geography, Urban Geography, Agricultural Geography, Political Geography, Electoral Geography, Regional Development & Planning, Geography of Tourism, Transport Geography, Remote Sensing and GIS, Industrial Geography, Geography of Health, Marketing and Commercial Geography and any other topic related to Geography.

The dissertation should be if possible, on spatial-temporal basis. The Study should be based on Inductive or deductive approach. The dissertation will include the problem, aim and objectives, hypothesis research methodology and approaches and also the outcome of the Report or dissertation which will be valuable in Geographical Research in future.