

Folder 047

बिलासपुर विश्वविद्यालय

बिलासपुर (छत्तीसगढ़)



पाठ्यक्रम

समाज विज्ञान संकाय

निम्न स्तर पाठ्यक्रम

सं. सं. (अंतिम) यूजेल

परीक्षा : 2014

:: प्रकाशक ::

कुलसचिव बिलासपुर विश्वविद्यालय

बिलासपुर (छत्तीसगढ़)

:: मुद्रक ::



गीता पब्लिकेशन

महामाईपारा, रायपुर (छत्तीसगढ़)

मूल्य : 25/-

ordinance No.6 relating to Examination(General)

Provided that in the subject where field work or practical work is Prescribed only such candidates will be permitted to appear as non collegiate candidates who have obtained permission of the Head of the University Teaching Department or principal of the College teaching such subjects.

Provided that non collegiate candidate shall be permitted to offer only such subject/papers as are taught to the regular students at any of the University Teaching Department or College.

5. The subjects of the Examination shall be one of the Following.
 - (i) English
 - (ii) Hindi
 - (iii) Economics
 - (iv) Political Science
 - (v) History
 - (vi) Sanskrit
 - (vii) Mathematics
 - (viii) Geography
 - (ix) Sociology
 - (x) Psychology.

6. A candidate who has passed the M.A. Examination of the University in any subject shall be allowed to present himself for the M.A Examination in any one or more of the optional papers in that subject not taken by him at the said examination and if successful will be given a certificate to that effect.

No candidate shall be allowed to offer more than two additional papers in any one year.

7. From the session 1986 - 87 for the Previous Examination candidate must obtain for a pass atleast 20% in each theory paper and Practical

- 36% of the aggregate marks in the Theory and practical separately in each Examination the above provision of 20% in each paper shall be applicable for final Examination from the academic session of 1987- 1988 .
8. No division will be assigned on the result of the Previous Examination the division in which a candidate is placed shall be determined on the basis of aggregate of marks obtained in both the M.A. Previous and M.A Final Examination,
 9. Successful candidates who obtain 60% or more of the aggregate marks shall be placed in the First Division , those obtaining less than 60% but not less 48% in the Second Division and all other successful candidate obtaining less than 48% in the third Division.
 10. Candidates who have passed the M.A Examination of the University in any subject in Third or Second Division and desire to appear at the M.A Examination in the same subject for improving division without attending a regular course of study in a college affiliated to the University or in a Teaching Department of the University shall be allowed to appear at the aforesaid examination as an non-collegiate student on the following conditions.
 - (i) There shall be only two Division for such candidates the First Division and Second Division ,The Marks required for obtaining these division shall be the same as prescribed in the ordinance i.e. examinees who are successful in Final of the Examination.and have obtained 60% or more aggregate of the marks in Previous and Final Examination taken together shall be placed in the First Division and Examinees who are successful in Final Examination and have obtained less than 60% but not less than 48% of aggregate marks in previous and Final examination taken together shall be placed in the Second Division.
 - (ii) The result of the candidates obtaining less than 48% of the aggregate marks in Previous and Final Examination taken together shall not be declared .
 - (iii) Candidates shall have the option to appear at both the previous

and final examination in one and the same year and for being successful at the examination, the candidates shall obtain 48% of the aggregate marks.

Provided that such candidates who want to appear in previous and final examination separately shall have to obtain minimum aggregate required for the previous examination but he will have to obtain atleast 48% in the aggregate of previous and final examination taken together or else his result will be cancelled.

(iv) The Syllabus for the examination shall be same as prescribed for the year in which the examination is held.

(v) Not more than two attempt shall be allowed to such a candidate, failure of appearance at the examination after per permission has been accorded by the University shall be counted as an attempt.

Provided however such candidates who want to appear at the previous and final examination separately will be allowed only one attempt of the previous examination and two attempts at the final examination.

(vi) Candidates who wish to avail the opportunity given in fore going paras will have to apply for permission as required in the Ordinance No. 6 relating to admission of non- collegiate students to the University examination along with registration fee.

(vii) In case, a student Improves his division under provision of this para. The fresh Degree will be issued after cancelling his first Degree.

एम.ए. (अंतिम) भूगोल M.A. FINAL GEOGRAPHY

एम.ए (अंतिम) भूगोल प्रथम प्रश्न पत्र Climatology and Oceanography एवं प्रायोगिक प्रश्न पत्र अनिवार्य होंगे। शेष वैकल्पिक (ऐच्छिक ग्रुप - II, III, IV) समूह में से किन्ही एक एक प्रश्न पत्र का चयन करना अनिवार्य होगा।

एम.ए.पूर्व (भूगोल) के ऐसे छात्र/छात्रा जिनके प्रासॉक 60% है वे तृतीय ऐच्छिक प्रश्न पत्र के स्थान पर लघु शोध प्रबंध लिखने की पात्रता रखते हैं।

Compulsory I	Climatology and Oceanography.
Optional Paper II	1. Population Geography. 2. Regional Planning and Development. 3. Bio-Geography.
Optional Paper III	1. Settlement Geography 2. Urban Geography 3. Remote Sensing & G.I.S OR Dissertation
Optional Paper IV	1. Agricultural Geography 2. Geography of Environmental Management 3. Geography of Tourism.

M.A. FINAL GEOGRAPHY (COMPULSORY) PAPER I CLIMATOLOGY AND OCEANOGRAPHY

Objective:

The main objectives of the course is to provide.

1. Understanding of weather phenomena and generation of climatic phenomena and Dynamics of global climate.
2. Understanding the main facts of ocean such as evolution of the ocean, Physical and chemical properties of sea water Oceanographic circulation and marine life.

Course Contents. :

(A) Climatology :

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AL-6546
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~~AM-1513~~

UNIT - I

- (i) Nature and scope of climatology and its relationship with meteorology.
- (ii) Composition and structure of atmosphere.
- (iii) Insolation and heat balance of the earth green house effect.
- (iv) Vertical and horizontal distribution of temperature.

UNIT - II

- (v) Atmospheric motion - Local winds & jet stream.
- (vi) Atmospheric moisture -Humidity, evaporation, condensation
Precipitation, world pattern of precipitation, acid rain,

UNIT - III

- (vii) Concept of Air masses and atmospheric disturbances.
- (viii) Ocean atmospheric interaction EL Nino, Southern
Oscillation(ENSO) and La Nino.
- (ix) Monsoon winds, Norwesters and cyclones, climate of India
and its controls.

(B) OCEANOGRAPHY ;**UNIT - IV**

- (i) Nature and scope of oceanography ,History of Oceanography.
- (ii) Distribution of Land and water major features of ocean basins,
continental margins (Continental Shelf and Continental slope
and deep ocean basin.)
- (iii) Physical and chemical properties of sea water.
- (iv) Interlink between atmospheric circulation and circulation pattern
in the ocean. Surface currents waves and Tides.

UNIT - V

- (v) Marine biological environment - Bio zones of the ocean, Types
of organisms, plankton, Nekton and Benthos, Food and
mineral resources of the sea.
- (vi) Marine deposits and formation of coral - reefs.

SUGGESTED READINGS:

1. Barry .R.G. and Chorley P.J.: Atmosphere, Weather and Climate.
routledge. London and New York 1998.
2. Critchfield JH: General Climatology.Prentice Hall, India, New
Delhi.1987.

3. Das P.K. Monsoons National Book Trust. New Delhi.1987.
4. Fein,J.S. and Stephens,P.N. Monsoons Wiley interscience.
5. India Met. Deptt. Climatological Tables of Observatories in India,
Govt of India 1968.
6. Lal , D.S. Climatology. Chaitanya Publication Allahabad 1986.
7. Lydolph. P.E.: The Climate of the Earth Rowman, 1985.
8. Menon P.A. Our Weather N.B.T. New Delhi.1989.
9. Peterson,S. : introduction to Meteorology McGraw Hill Book, London
1969.
10. Robinson. P.J. and Henderson S.: Contemporary climatology,
henlow.1999.
11. Thomson.R.D. and Perry.A (ed) :Applied Climatology, principles and
practice Routledge, London 1997.

SUGGESTED READINGS:

1. Davis.Richard J.A. :Oceanography - An Introduction to the marine
Environment Wm. C. Brown Iowa 1986.
2. Duxbury, C.A. and Duxbury B. An Introduction to the world's Oceans
- C Brown ,Iowa 2nd ed. 1996.
3. Garrison T:Oceanography - An Introduction to Marine Science,
Books/Cole, Pacific Grove, USA, 2001
4. Gross, M.Grant Oceanography for Geographers 1962.
5. Sharma, R.C. 'The Oceans' Rajesh N. Delhi 1985.
6. Ummerkuty, A.N.P. Science of the Oceans and Human life ,NBT,
New Delhi. 1985.

M.A. FINAL (GEOGRAPHY) (Optional) PAPER II (i)
POPULATION GEOGRAPHY A-1457

- ~~8496 AM 1514 AL = 6547 4476~~ M.M.100
- UNIT I** Nature and scope of Population Geography. Development of
Population Geography as field of specialization. Its relation with
the Demography. Sources of population data, their level of
reliability and problems of mapping the population data.
- UNIT II** Population distribution and density; Growth of population-
theoretical issues, world pattern and determinants. India -
population distribution, density and growth profile.
- UNIT III** Population Composition-Gender issues : age and Sex; literacy
and education, rural and urban; urbanization, occupational str-
uctur. Population Composition of India.

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

UNIT V Population and Resources Development: Concept of optimum population, under population and over population. Theories of Population: Malthus, Boserup, limits to growth; demographic transition; Population policies in developed and developing countries (Sweden, France, Australia, China and India). Population-Resource regions of the World.

Suggested Readings

- Boserup, E. **The Conditions of Agricultural Growth**. George. Allen & unwin, London, 1965.
- Barclay, G.W. **Techniques of Population Analysis**. John Wiley, New York, 1959.
- Bogue, D.J.: **Principles of Demography**. John Wiley, New York, 1969
- Bose, Ashis et.al.: **Population in India's Development**. Vikas Publishing House, New Delhi. Census of India, 2001.
- Chanana R.C. : **Geography of Population**. Concept, Determinants and Patterns Kalyani.
- Clark, J.I. Population Geography. Pergamon Press Oxford, 1973
- Crooch, Nigel : Principles of Population and Development. Pergamon, New York, 1997.
- Daugherty, H.G., Kenneth C.W.Kammeyir : An Introduction to Population. The Guilford Press, New York, London, 1998.
- Garnier, B,J, : Geography of Population. Longman London, 1970.
- Mitra, Ashok : India's Population: Aspects of Quality and Control. Vol. I & II Abhinav Publications, New Delhi, 1978.
- Srinivasan, K. and M. Vlassoff : Population Development Nexus in India Challenges For the New Millennium _Tata.McGraw Hill, New Delhi, 2001
- Srinivasan, K.: Basic Demographic Techniques and Applications, Saga Publications, New Delhi, 1998.
- Sundaram, K.V. and Sundesh Nagia (ed.) : Population Geography. Heritage Publications, New delhi, 1986.
- चांदना आर.सी. जनसंख्या भूगोल, कल्याणी पब्लिसर्स नई दिल्ली
- विजय तिवारी, जनसंख्या भूगोल, हिमालय पब्लिसर्स, नई दिल्ली
- पंडा बी.पी, जनसंख्या भूगोल, म.प्र. हि.संघ अकादमी भोपाल
- विजय तिवारी भारत या जनसंख्या भूगोल भाग 1 - 2 हिमा. प. नई दिल्ली

M.A. FINAL (GEOGRAPHY) (Optional) PAPER II (ii) REGIONAL PLANNING AND DEVELOPMENT

OBJECTIVES:

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

COURSE CONTENTS:

UNIT - I

- (i) Regional Concept in Geography conceptual and Theoretical Framework, merits and Limitation for application to regional planning and development, Concept of space, area and locational attributes.

UNIT - II

- (ii) **Types of Region**-Formal and Functional, Uniform and nodal, Single purpose and composite, Region in the context of planning Regional Hierarchy.
- (iii) Regional Divisions according to variations in levels of socio-aeconomic development, Physical Region and Resource Region.

UNIT - III

- (iv) **Special purpose Region** - River valley Regions Metropolitan Regions.
- (v) **Problem Regions** - Hill Regions, Tribals Regions, Regions of Drought and Floods.

UNIT - IV

- (vi) **Planning Process** - Sectrol, Temporal and Spatial dimension. short term and long term perspectives of planning. Planning for a region's development and multi regional planning.
- (vii) Indicators of development and their data sources. measuring levels or regional development and disparities. Regional Plans of India.

UNIT - V

- (viii) **Concepts of Multi level Planning**- Decentralised planning process, Panchayati Raj system, Role and relationship of Panchayati Raj System (Village Panchayat janpad Panchayat And Zila

Panchayat) and administrative structure (Village, Block and District)

(ix) **Regional development in India** - problems and prospects.

SUGGESTED READING:

1. Abler, R. et al. Spatial Organisation. The Geographer's View of the World. Prentice Hall, Englewood Cliffs, N.J. 1971.
2. Bhat. L.S. Regional Planning in India. Statistical Publishing Society, Calcutta, 1973
3. Bhat L.S. et al.: Micro -Level Planning :A case Study of Karnal Area, Haryana, K.B. Publication, New Delhi 1976.
4. Chorley, R.J. and Haggett .P.: Models in Geography Methuen, London. 1967.
5. Christaller, W.: Central Places in Southern Germany Translated. By C.W. Baskin, Prentice Hall, Englewood, Cliffs, New Jersey 1966.
6. Friedmann, J and Alonso, W: Regional Development and Planning A reader M.I.T. Press Cambridge Mass. 1967.
7. Glikson, Arthur: Regional Planning and Development Netherland Universities foundation for international co-operation London 1955.
8. Gosal, G.S. and Krishan G.: Regional Disparities in Levels of Socio - Economic Development in Punjab, Vishal Publication, Kurukshetra, 1984.
9. Government of India, Planning Commission Third Five Year Plan, chapter on Regional Imbalances in Development, New Delhi. 1961.
10. Indian Council of Social Science Research: Survey of Research in Geography popular prakashan Bombay 1972.
11. Johnson E.A.J. :The Organisation of Space in Developing Countries, Harvard University Press, Cambridge 1970.
12. Kuklinski, A.R. (ed), Growth poles and Growth centres in Regional planning Mouton The Hague. 1972.
13. Kundu. A. and Raza.Moonis: Indian Economy The Regional Dimension Spectrum Publishers, New Delhi. 1982.
14. Losch A: The Economics of Location, University Press, Yale, New Haven 1954.
15. Misra, R.P.:Regional Planning Concepts, Techniques and Policies, University of Mysore, Mysore, 1969.
16. Misra, R.P. and Others(ed) :Regional Development Planning in India A strategy institute of Development Studies Mysore 1974.

17. Mitra A: Levels of Regional Development, Census of India, Vol. I Part I A (i) and (ii) New Delhi. 1965.
18. Myrdal, G: Economic Theory and Under Development Regions Gerald Duckworth, London 1975.
19. Nangia Sudesh, Delhi Metropolitan Region, Rajesh Publication Delhi. 1976.
20. Richardson, H.W.: Regional Economics Weidenfeld and Nicolson, London, 1969.
21. Sundaram K.V. (ed.) : Geography and Planning Essays in "Honor of V.L.S. Prakasa Rao, Concept Publishing Co. New Delhi. 1985.
22. Tarlok Singh India's Development Experience, Mc Millan New Delhi, India 1974.
23. Raza Moonis (ed). Regional Development Heritage Publishers Delhi. 1988.
24. Mishra R.P. et. a Multi - Level Planning heritage Publishers, Delhi. 1980.

M.A. FINAL (GEOGRAPHY) (OPTIONAL)

~~8498~~ **PAPER II (iii) BIO - GEOGRAPHY** ~~4478~~

M.M.100

OBJECTIVE: To introduce the student the concept of biogeography and its interpretation. Information and their application, interaction between living organisms with climate and physical environment with special reference to India.

COURSE CONTENTS:

UNIT - I

- (i) Scope and Development of Bio - Geography.
- (ii) Environment, Habitat and plant - animal association adaptation, Biome Types.

UNIT - II

- (iii) Elements of Plant Geography, Distribution of Forest and major plant communities plant succession in newly formed land forms, Examples from Flood plains and Glacial fore fields.

UNIT - III

- (iv) Dispersal and migration of plant communities.
- (v) Zoogeography and its environmental Relationship.

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UNIT - IV

- (vi) Distribution of animals. Zoogeographical Regions.
 (vii) Migration of animals.

UNIT - V

- (viii) Palaeobotanical and palaeoclimatological records of environmental changes in India.
 (ix) National Forest Policy, of India, Conservation of Biotic Resources.

SUGGESTED READING:

1. Agrawal D.P.: Man and Environment in India Through Ages, Book & Books. 1992.
2. Bradshw.M.J.: Earth and Living Planet, ELBS. London. 1979.
3. Cox, C.D. and Moore, P.D.: Biogeography: An Ecological and Evolutionary Approach 5th edn. Blackwell. 1993.
4. Gaul. R.: Environment and Ecology of Early Man in Northern India R.B. Publication Corporation 1987.
5. Hoyt. J.B.: man and the Earth, Prentice Hall U.S.A. 1992.
6. Hugget.R.J.: Fundamentals of biogeography Routledge U.S.A. 1998.
7. Illies J. Introduction to Zoogeography, Mcmillan, London 1974.
8. Khoshoo, T.N. and Sharma, M. (eds) Indian Geosphere - Biosphere Haranand Publication, Delhi. 1991.
9. Lapedes, D.N. (ed) Encyclopedia of Environmental Science, Mcgraw Hill, 1974.
10. Mathur H.S.: Essentials of Biogeography Anuj printer Jaipur 1998.
11. Pears N: Basic Biogeography 2nd edn. Longman, London 1985.
12. Simmon I.G.: Biogeography natural and Cultural, Longman London, 1974.
13. Tivy J: Biogeography : A study of Plants in Ecosphere 3rd Edn. oliver an Boyd. U.S.A. 1992.

M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER III (i)**~~AI-6550~~ SETTLEMENT GEOGRAPHY**

- Unit I**
1. Meaning, Objectives and Scope of Settlement Geography
 2. Evolution, Distribution, Types and Patterns of Rural Settlements.
 3. Rural House Types ~~AM-1517~~
 4. Rural Service Centres ~~4479~~

- Unit II**
1. Evolution and growth of urban settlements.
 2. The Geographical setting of Urban Centres : Site, Situation and Location.
 3. Rank - size - relationship
- Unit III**
1. Cities as Central Places, Central Place Theory, Growth Centre Theory.
 2. City- Country Relationship : Umland Rural-Urban Fringe.
 3. General Nature of City Structure : (i, ii)
- Unit IV**
1. The Central Business District (CBD)
 2. Centrifugal and Centripetal forces in Urban Geography.
 3. Economic Base of Towns : Basic/non-basic concept.
- Unit V**
1. Urban Functions
 2. Functional Classification of Towns.
 3. Urban Planning (i) Types and Elements (ii) Urban Problems, Blight and renewal.
 4. Urban Planning in India.

SUGGESTED READINGS :

1. Abercrombee; Sir P. : Town and Country Planning 1961.
2. Alam, Shah Manzoor : Hyderabad Secundrabad (Twin Cities) A study in urban geography
3. Alam, S.M. & V.V. : Urbanization in developing countries Pokshisheveshky
4. Berry Brain J.L. : Geographic Prospectives Pokshisheveshky
5. Bresse C. & D.F. : An approach to Urban Planning Whiterman
6. Dickinson, R.E. : City, religion and Regionalism
7. Gallion and Fisher : The Urban Pattern
8. Griffith, J.P. : A study of Urban construction in India
9. Gibbs : Urban Research Methods
10. Mayor, H.M. & C.F. Kohn: Reading in Urban Geography
11. Morgan, F.W. : Ports and Harbours
12. Mumford L. : Culture of cities
13. Robson, W.A. : Great cities of world

14. Robson, B.T. : Urban Growth : An approach, methuen, London
15. Carter, Harold : Study of Urban Geography, London, Edward Arnold, 1976.
16. Sing R.L. & K.N. Singh : Readings in Rural Settlement Geography, NCSI Varanasi 1975.
17. सिंहण उजागिर : नगरीय भूगोल
18. करन, एम.पी. : नगरीय भूगोल
19. बंसल, सुरेश चन्द्र : नगरीय भूगोल
20. सिंह, ओमप्रकाश : नगरीय भूगोल
21. तिवारी आर. सी. : आधिवास भूगोल, प्रयाग पुस्तक भवन, इलाहाबाद, 1997
22. करण एवं यादव : आधिवास भूगोल

M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER III (ii)

~~4480~~ URBAN GEOGRAPHY 1460

~~655/AM/1578~~ M.M.100

OBJECTIVE :

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

COURSE CONTENTS:

UNIT - I

- Nature and scope of urban Geography. Approaches and recent trends in Urban geography.
- Origine and growth of urban settlements ancient, medieval and modern period.

UNIT - II

- Bases and process of urbanisation.
- Classification of urban settlements on the basis of size and function, functional classification of Towns.

UNIT - III

- Urban growth and theories, central place theory of christaller

- and losch. Contribution of India scholars to the studies of urban settlement.
- Urban economic base; Basic and non basic functions, Input output model. City and changing urban functions.

UNIT - IV

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

UNIT - V

- Contemporary urban issues** : Urban sprawl; Urban slums, environmental pollution air, water, noise solid waste, Issue of environmental health.
- Urban Policy and planning.** City Planning ; contemporary issues in urban planning, globalisation and urban planning in the Third world. Urban land use planning. Green belts.

READING:

- Alam, S.M. Hyderabad - secunderabad Twin Cities Asia Publishing House. Bombay. 1964.
- Berry, B.J.L. and Horton F.F. Geographic perspectives on urban Systems. Prentice Hall, Englewood, Cliffs, New jersey 1970.
- Carter: The study of Urban Geography Edward Arnold Publishers London 1972.
- Chroley, R.J.O. Haggest. P.(ed.) Models in Geography, methuen, London. 1966.
- Dickinson R.E.: City and Region .Routledge. London. 1964.
- Dayer. D.j. (ed) The city as a centre of Change in Asia. University of Hong Kong Press, Hongkong. 1971.
- Gibbs J.P.: Urban Research methods D.Van Nostrand Co. Inc. Princeton, New Jersey 1961.
- Hall P: Urban and Regional Planning, Routledge London 1992.
- Hauser, Philips M. and schnore Leo. F.(ed) The study of urbanisation, Wiley, New York, 1965.
- James. P.E. and Jones C.F.(eds). American Geography, Inventroy and Prospect, syracuse University APress, Syracuse, 1954.
- Kundu A: Urban Development and Urban Geography, University of chicago Press. Chicago. 1955.
- Mumford, L: Culture of Cities, Mcmillan & Co. London 1958.
- Mumford, L. Culture of Cities of Mcmillan & Co. London 1958.
- Nangia, sudesh Delhi Metropolitan Region :A study in settlement geography . Rajesh Publication 1976.

15. Rao V.L.S.P. urbanisation in India: Spaial Dimensions. Concept Publishing Co. New Delhi Concept, New Delhi.
16. Rao. V.L.S.P The Structure of an Indian Metropolis: A study of Bangalore Allied Publishers Bangalore .1979.
17. Singh K and Steinberg. (eds;): Urban India in Crisis, New Age Interns. New Delhi.1998.
18. Smailes A.e. The Geography of Towns, hutchinnson ,London. 1953.
19. Tewari, Vinod Jay A. Weinstein, VLS Prakasa Rao (editors) Indian Cities Ecological Perspectives Concept 1986.

M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER III (iii)

~~AL 6552~~ REMOTE SENSING & G.I.S. ~~AM 1519~~

~~4481~~ **Unit I Remote sensing** - An overview of Remote Sensing : Meaning and scope, place and relevance in geographical studies; Specific characteristics, potentials and limitations of remote Sensing; Development in the world and in India.

~~5577~~ Physical basis of Remote Sensing - radiation concepts and laws, prgmatic division of EMR spectrum for Remote Sensing; Atmospheric intervention in EMR propagation; Interaction of earth features and materials with EMR; Resolution concept; Types of sensors and platforms; Principles of Remote Sensing.

Unit II Aerial Photography - type etc. Features of aerial camera; Marginal and ancillary informatuion on aerial photographs. Simple geometry of vertical aerial photographs - scale and tilt effects. Map, photograph and imagery - a comparative perspective. Stereoscopy and its application to three dimensional perception and conceptual).

Visual image processing - basic concepts; Identificatory elements of images; Interpretation keys. Use of multispectral data as colour composites; Ground truthing and verification. Transfer of details to base to base map.

Unit III Principal satellite systems - general classification, and detailed characteristics of sensors, orbiting pattern and data products of LANDSAT and IRS satellite systems; Indexing and heade information on IRS data products. Computer processing and other transforms (only conceptual).

Unit IV Geo-information System - Definition, scope, of GIS; Relation with collateral disciollines like Cartography, Remote Sensing, Computer Science, and Geography, as well as with various application fields. Development of GIS in the world and in India;

Basic concepts and Essential elements of GIS; Data types used in GIS; Methods of inputting spatial data in GIS; Special computer H/W and S/W components of GIS;

Unit V Global Positioning System (GPS) - concepts and application; Fundamenal operations and spatial analysis and socio-economic. Mobile mapping systems. Sapatial data infrastructure- concepts, issues and strategy.

NOTE : Students shall compulsorily participate in a technical excursion to an institution where digital image processing & G.I.S. facilities are properly available

Suggested Readings

Remote Sensing

Avery T.E. & Berlin G.L. 'Introduction Remote Sensing', and Airphoto Interpretation', Macmillan, V ED., 1992

Barret E.C. & Curtis L.F., 'Introduction to Enviromental Remote Sensing', Chapman & Hall, III E.D., 1992.

Curran P.J., 'Principal of Remote Sensing', Longman/ELBS, 1985/ 87.

Goutam N.C. & et. ai. (Eds.), 'Space Technology and Geography', NRSA, 1994.

Goverdhan V., 'Remote Sensing for Wastershed Management', IBD, 1987.

Deptt. of Sc.& tech., Govt. of India, National Spatial Data Infrastructure (NSDI); Strategy and Action Plan' Dec. 2002.; <http://www.nsdiiindia.org> ISRO/NRSA, 'IRS 1-D Data Users Handbook'; NRSA, 1997.

Jensen, J.R. 'Remote Sensing of the Environment', Prentice Hall/ Pearson Education Asia, 2002.

Jensen, J.R., 'Introduction to Digital Image Processing: A Remote Sensing Perspective'; Prentice Hall, II E.D., 1995.

Joseph George, 'Fundamentals of Remote Sensing', University Press, 2003.

Khan R., 'Remote Sensing in Geography'; Manak Pubs., 1993.

Lillesand T.M. & Keifer R.W. 'Remote Sensing and Image Interpretation', Wiley, IV ED., 2000.

Pandey S.N., 'Principal and Application of Photogeology', Wiley Eastern, 1987.

Sabins, F.F., 'Remote Sensing: Principal and Interpretation';

Freeman, III ED., 1996.

GEOGRAPHICAL INFORMATION SYSTEMS

Agarwal N.K., 'Essentials of GPS' Spatial Network, 2004.

Burrough p.a. & McDonnell R.A., 'Principal of GIS for Land Resource Assessment', OUP, II ED., 1998.

Chrisman N., 'Exploring Geographic Information System', Wiley, 1997.

Heywood i., Cornelius i. & Carver S., 'An introduction to GIS', Longman/Pearson Education Asia, 1998/2000.

Goutam, N.C., 'Fundamentals of GIS', Pink Pubs., 1993.

Geodetic Survey Division, 'GPS Positioning Guide' Govt. of Canada, 1995.

George Korte, P.E. 'The GIS Book' Onwards Press, V ED. 2000.

Karak M.J. & Ormeling F., 'Cartography : cisulization of Geospatial Data', Pearson Education Asia, II Ed., 2004.

M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER IV (i)

1461 AGRICULTURAL GEOGRAPHY

Objective: ~~8553 AL-6553 AM-1500~~ M.M.100
4482

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

COURSE CONTANTS

UNIT-I Nature, Scope and Development of agricultural Geography. Approches to the study of agricultural Geography, Commodity, Systematic Regional and System, Origin and dispersal of agriculture. Sources of agricultural data.

UNIT-II Determinates of agricultural land use : Physical economic. Social and technological, land use policy and planning, Land use survey and land capability.

UNIT - III Selected agricultural concepts and their measurements : Cropping pattern, crop concentration, Intensity of cropping, degree of commercialisation, efficiency and productivity,

Crop combination regions.

UNIT - IV

Theories of Agricultural Location. Von Thuen's Theory of agricultural location and its recent modification, Theories of diffusion and adoption of innovations, Agricultural Typology Kostrovickie's method, 'Agricultural Region Concept and method. Whittlesey's classification of agricultural regions.

UNIT - V

Agriculture in India, Land use and shifting cropping pattern, Regional pattern of productivity in India, Green Revolution, White revolution, food deficit and food surplus regions nutrition and hunger, Drought and Food Security, Food aid Programmes. Environmental degradation, role of irrigation, fertilizers, insecticide and pesticides Technical Knowledge.

SUGGESTED READING:

- Byliss Smith, T.P.: The Ecology of Agricultural Systems, Cambridge University press, London 1987.
- Berry, B.J.L. et. al: The Geography of Economic Systems. Prentice Hall New York 1976.
- Brown, L.R.: The Changing world food prospects - The Nineties and Beyond. World Watch Institute Washington D.C. 1990.
- Dyson, T.: Population and Food- Global Trends and Future Prospects routledge London. 1996.
- Gregor, H.P.: Geography of Agriculture. Prentice Hall, New York 1970.
- Grigg, D.B.: The Agricultural Systems of the World, Cambridge University press. New York 1974.
- Hartshorn, T.N. and Alexander, J.W.: Economic Geography Prentice Hall, New Delhi. 1988.
- Mannion A.M.: Agriculture and Environment Change. John Wiley, Londo 1995.
- Morgan W.B. and Norton, R.J.C. Agricultural Geography Mathuen, London 1971.
- Morgan, W.B.: Agriculture in the Third World - A Spatial Analysis Westview press. Boulder: 1978.
- Sauer, C.O: Agricultural Origins and Dispersals. M.I.T. press. Mass U.S.A. 1969.
- Singh J. and Dhillon, S.S.: Agricultural Geography, Tata Mcgraw Hill Pub, New Delhi 1988.

10

13. Tarrant J.R.: Agricultural Geography .Wiley New York 1974.
14. कुमार प्रमिला एवं श्री कमल शर्मा कृषि भूगोल मध्यप्रदेश हिन्दी ग्रंथ अकादमी भोपाल, पाँचवा संस्करण।
15. जे.एन.पाण्डेय एवं डॉ. एस. आर. कमलेश, कृषि भूगोल, वसुन्धरा प्रकाशन गोरखपुर (उ.प्र.)

M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER IV (ii)
GEOGRAPHY OF ENVIRONMENTAL MANAGEMENT

~~8503~~
~~ATF~~
~~1521~~
~~4483~~
 1462
Unit I Environment : Meaning, definition, concepts and theories related to environment. ~~AL 6554~~

Environment and its components : Classification, Characteristics and their interdependent relationship. Development of the environmental studies and their approaches; Development of the environmental studies and their approaches; Development of Environmentalism in Geography.

Unit II Environment and Development. Ecological concepts: Geography as human ecology; Ecosystem : meaning definition, concept and components. Main terrestrial ecosystems of the world-forests and agriculture.

Unit III Environmental hazards- natural and human made. Environmental pollution : meaning, definition, nature and types - air, water, noise and others. Ecological impacts of pollution. Resource use and ecological imbalance with special reference to soil, forests and water resources.

Unit IV Environmental Degradation : meaning, definition, nature, causes and consequences. Man-induced activities : Agriculture, mining, industrialization, population growth & distribution, urbanization causing environmental changes and environmental degradation, Emerging problems of environmental degradation in developing countries with special reference to India.

Unit V Environmental Management : meaning, importance and approaches. Need for environmental policy and laws. Preservation and Conservation of environment through resource management (Green revolution, Chipko movement, National Parks). Environmental Actions : concept, need and importance- Stockholm Conference, Earth Summit. E.I.A : definition and methods and need for EM. Environmental education and People's participation.

Suggested Readings

Agrawal, Anil and Sunita Narain. Dying Wisdom : The Fourth citizen

- Report. Centre for Science and Environment, New Delhi, 1998.
- Burton, I.; R.W. Kates & G.F. Whaley. The Environment as Hazards. O. U. P. New York, 1978. Cartledge, Bryen. Population and the Environment., O. U. P., New York, 1995.
- Chandna, R.C. : Environmental Awareness. Kalyani Publishers, New Delhi, 1998.
- Dawson, J. and J.C. Doornkamp, eds.: Evaluating the Human Environment. Edward Arnold, London, 1975.
- Detwyler, J.R.: Man,s Impact on Environment. Pelican, 1970.
- Edington, J.M. & M.A. Edington : Ecology and Environmental Planning. Chapman & Hall, London 1977.
- Goudie, Andrew. The Human Impact on the Natural Environment. Blackwell Oxford, U.K.. 1994.
- Jain, R.K., L.V. Urban and G.S. Stacy. Environmental Impact Analysis- A New Dimension in Decision-Making. Van Norstrand Reinhold Co. New York, 1977.
- Khoshoo, T.N.Environmental Concepts and Strategies. Ashish Publishing House, New Delhi.
- Mohan, M. Ecology and Development, Rawat Publications, Jaipur, 2000.
- Munn, R.E. Environmental Impact Assessment : Principles and Procedures. John Wiley & Sons, New York, 1979.
- Narain Sunita. New York, 1979.
- Narain, Sunita. The Citizen Fifth Report. Centre for Science and Environment, New Delhi, 2003. Mukherji, A. and V.K. Agnihoyri. Environment and Development. Concept Pu. Co., New delhi, 1993.
- Rudig, Wolfgang. Environmental Policy. Edward Elger Publishing Ltd, Uk. 1998.
- Saxena, H.M. Environmental Geography. Rawat Publications. Jaipur, 1999.
- Saxena H.M. Environmental Management. Rawat Publications. Jaipur, 2000.
- Sharma, B.L. & Puar P : Global Environmental Challenges. Rohini Books, Publishers & Distributors, Jaipur, 2004.
- Singh, K.N. and D.N. Singh. Population Growth, Environment and Development : Issues, Impacts and Responses. Environment & Development Study Centre Varnasi, 1991.
- Singh, R.B. and S. Mishra. Environmental Law in India : Issues and Responses. Concept Pub. Co. New Delhi, 1966.
- Singh, S. Environmental Geography. Prayag Pustak Sadan, Allahabad, 2000.

Smith, R.L. Man and his Environment : An Ecosystem Approach. Harper & Row, London, 1992.

U.N.E.P. : Global Environmental Outlook. U.N. Pub. New York.

अवस्थी एन. एम एवं आर पी तिवारी पर्यावरण भूगोल मध्यप्रदेश हिन्दी ग्रन्थ अकादमी भोपाल,

नेगी, पी एस परिस्थितिकीय विकास एवं पर्यावरण भूगोल रस्तोगी एन्ड कम्पनी, मेरठ 1995

रघुवंशी अरूण और चन्द्रलेखा रघुवंशी पर्यावरण तथा प्रदूषण मध्यप्रदेश हिन्दी ग्रन्थ अकादमी, भोपाल, 1989।

सविन्द्र सिंह, पर्यावरण भूगोल प्रयाग पुस्तक सदन इलाहाबाद 1993

शर्मा, बी एल पर्यावरण साहित्य भवन आगरा, 1992.

तिवारी विजय कुमार पर्यावरण और परिस्थितिकी, हिमालय पब्लिशिंग हाउस दिल्ली 1998.

विजय कुमार तिवारी, पर्यावरण अध्ययन, हिमालय पब्लिशिंग हाउस दिल्ली 1998.

**M.A. FINAL (GEOGRAPHY) (OPTIONAL) PAPER IV (iii)
GEOGRAPHY OF TOURISM**

AM-1522 AL-6555 4484 M.M.100

Unit I Basics of tourism; Definition of tourism; factors affecting tourism : historical, natural, socio-cultural and economic, motivating factors for pilgrimages : leisure, recreation, elements of tourism, tourism as an industry.

Unit II Geography of tourism-its spatial affinity; areal and locational dimensions comprising physical, cultural, historical and economic; Tourism types; cultural, eco-ethno-coastal and adventure tourism, national and international tourism; globalization and tourism.

Unit III India tourism : regional dimensions of tourist attraction; evolution of tourism, promotion of tourism.

Unit IV infrastructure and support system -accommodation and supplementary accommodation; other facilities and amenities; Tourism circuits- short and longer detraction- Agencies and intermediaries - indian hotel industry.

Unit V Impact of tourism: physical, economic and social and perceptual positive and negative impacts; Environmental laws and tourism_ current trends, spatial pattern and recent changes; role of foreign capital.

Suggested Readings

Bhatia, A.K. Tourism Development: Principles and Practices. New

Delhi: Sterling publishers, 1996.

Bhatia, A.K. International Tourism: Fundamentals and Practices. New Delhi: Sterling Publishers, 1991.

Hunter C and Green H., Tourism and the Environment: A Sustainable Relationship. London: Routledge, 1995.

Inskip, E. Tourism Planning: An Integrated and Sustainable Development Approach. New York: Van Nostrand and Reinhold.

Kaul, R.K. Dynamics of Tourism and Recreation. New Delhi: Inter-india, 1985.

Kaur, J. Himalayan Pilgrimages and New tourism. New Delhi: Himalayan Books, 1985.

Lea, J. Tourism and Development in the Third World. London: Routledge, 1988.

Milton, D. Geography of World Tourism. New York; Prentice Hall, 1993.

Pearce, D.G. Tourism Today: A Geographical Analysis. Harlow: Longman, 1987.

**M.A. FINAL (GEOGRAPHY) 2008-09
PRACTICAL**

Quantitative Technique, Geographical Information System and Field Survey Report Make 100

Unit I Quantitative Technique Marks 15
Product Moment and Rank Correlation, co-efficients, Linear Regression, Hypothesis Testing : Chi - Square and "t" tests
Analysis of variance and test, Normal distribution Curve, Probability.

Unit II Elements of GIS Marks 15
Data capture verification and preprocessing data storage and maintenance of data based data storage and maintenance of data based database Management system : Types and database Merits and demerits - data manipulation, analysis integrated analysis of spatial and attribute data, overlay analysis, neighbourhood operation and connectivity function and spatial modelling output format and generation.

Unit III G.I.S. Technology Marks 15
Co-ordinate system basic Principles of cartography and computer assisted cartography for GIS remote sensing data as a data source for GIS and integration GIS and remote sensing

- GPS and GIS : Technology, data Generation and limitation
visualization in GIS - Digital Elevation Models (DEM and TINS).

Unit IV GIS Applications

Marks 15

GIS as a Decision support system expert system for GIS basic
flowchart for GIS application - GIS standard, legal system and
national GIS Policy application of GIS land information System,
Urban Management, Environment Management and
emergence Response system.

Unit V Field Survey Report

Marks 10

Physical and Socio -economic report of micro region based
field survey in about - 25, 30 pages

Practical Record -

Marked 20

Viva on the above

Marked 10

SUGGESTED READING:

1. David Unwin, Productory Spatial Analysis Mehuen, London, 1981.
2. Gregory,S. Statistical Mehtods and the Geographer Longman, London 1978.
3. Hammond R. and P.S. McCullagh Quantitative Geography, ohn Wiley, London 1968.
4. John P.Cole and Cuchiaine A.M. King Quantitat. e.Geography, John Wiley.London.1968.
5. Jonston R.J. Multivariate Statistical Analysis in Geography, Longman London 1973.
6. Koutsoyiannis, Theory of Econometrics. Mcmillan London 1973.
7. Mourice Yeats, An Introduction to Quantitative Analysis in Human Geography Mc graw Hill, New York 1974.
8. Peter Hggett, Andrew D. Cliff & Allan Frey, Location Method Vol.I and II Edward Arnold London 1977.

PEDAGOGY.

- * Student may be asked to compare the means of measurements of any one variable from a section of toposheet by varying the sampling frame and sample size.
- * Student may be asked to delineate regions quantitatively using district level or state level census or agricultural data and adopting a simple regionalization procedure.
- * Student may be asked to work out a diffusin model, using some hypothetical data or data gathered from the fellow students in the class or college or university.