B.A. (HONOURS) GEOGRAPHY

(Three Year Full Time Programme)



COURSE CONTENTS

(Effective from the Academic Year 2011-2012 onwards)

DEPARTMENT OF GEOGRAPHY UNIVERSITY OF DELHI DELHI - 110007

Course: B.A. (Hons.) Geography

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	Paper 101: Geomorphology				
	Paper 102: Climatology				
Semester I	Paper 103: Cartographic Techniques				
	Paper 104: Geography of Population				
	Paper 105: Concurrent – Qualifying Language				
Semester II	Paper 201: Analytical Physical Geography				
	Paper 202: Oceanography				
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	Paper 204: Geography of Settlements				
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	Paper 302: Environmental Geography				
	Paper 303: Remote Sensing (Practical)				
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Semester IV	Paper 401: Geography of Natural Resources				
	Paper 402: Spatial Dimensions of Development				
	Paper 403: Statistical Methods in Geography				
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	Paper 504: Agricultural Geography* (Optional)				
	Paper 505: Bio Geography* (Optional)				
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	Paper 506: Political Geography* (Optional)					
	Paper 601: Disaster Management					
	Paper 602: Regional Planning: Case Studies					
Semester VI	Paper 603: Geographical Information System					
	Paper 604: Geography of Tourism* (Optional)					
	Paper 605: Contemporary Environmental Issues* (Optional)					
	Paper 606: Rural Development* (Optional)					
	Paper 607: Concurrent – Discipline Centered II					

SEMESTER BASED UNDER-GRADUATE HONOURS COURSES

Distribution of Marks & Teaching Hours

The Semester-wise distribution of papers for the B.A. (Honours), B.Com. (Honours), B. Com., B.Sc. (Honours) Statistics and B.Sc. (Honours) Computer Science will be as follows:

Type of Paper	Max.	Theory	I.A.	Teaching per week
	Marks	Exam.		
Main Papers	100	75	25	5 Lectures
				1 Tutorial
Concurrent	100	75	25	4 Lectures
Courses				1 Tutorial
Credit Courses	100	75	25	4 Lectures
for B.Sc.(Hons.) Mathematics				1 Tutorial

- Size of the Tutorial Group will be in accordance with the existing norms.
- The existing syllabi of all Concurrent/Credit Courses shall remain unchanged.
- ❖ The existing criteria for opting for the Concurrent /Credit Courses shall also remain unchanged.

SEMESTER 1

PAPER 101 GEOMORPHOLOGY

Course Outline

- 1. Geomorphology: Nature and Scope.
- 2. Earth: Interior Structure and Isostasy.
- 3. Earth Movements: Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes, Himalayan Orogeny.
- 4. Geomorphic Processes: Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck).
- 5. Evolution of Landforms: Fluvial (Waterfalls, Floodplains and Delta), Karst (Caverns and their Deposits), Aeolian (Blowouts and Sand-dunes), **Glacial** (Cirques and Moraines), and Coastal (Sea Cliffs and Beaches).

Reading List

- 1. Bloom A. L., 2003: Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of India, New Delhi.
- 2. Bridges E. M., 1990: *World Geomorphology*, Cambridge University Press, Cambridge.
- 3. Christopherson, Robert W., (2011), Geosystems: *An Introduction to Physical Geography*, 8 Ed., Macmillan Publishing Company
- 4. Kale V. S. and Gupta A., 2001: *Introduction to Geomorphology*, Orient Longman, Hyderabad.
- 5. Knighton A. D., 1984: *Fluvial Forms and Processes*, Edward Arnold Publishers, London.
- 6. Richards K. S., 1982: *Rivers: Form and Processes in Alluvial Channels*, Methuen, London.
- 7. Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP
- 8. Skinner, Brian J. and Stephen C. Porter (2000), *The Dynamic Earth: An Introduction to physical Geology,* 4th Edition, John Wiley and Sons
- 9. Thornbury W. D., 1968: Principles of Geomorphology, Wiley.
- 10. Wooldridge W. S. and Morgan R. S., 1959: An Outline of Geomorphology: The Physical Basis of Geography, Longmans.

- **1.** Gautam, A (2010): *Bhautik Bhugol*, Rastogi Punlications, Meerut
- **2.** Tikkaa, R N (1989): *Bhautik Bhugol ka Swaroop*, Kedarnath Ram Nath, Meerut
- **3.** Singh, S (2009):*Bhautik Bhugol ka Swaroop*, Prayag Pustak, Allahabad

- 1. Atmospheric Composition and Structure Variation with Altitude, Latitude and Season.
- 2. Insolation and Temperature Factors and Distribution, Heat Budget, Temperature Inversion.
- 3. Atmospheric Pressure and Winds Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams.
- 4. Atmospheric Moisture Evaporation, Humidity, Condensation, Fog and Clouds, Precipitation Types, Stability and Instability.
- Cyclones Tropical Cyclones, Extra Tropical Cyclones, Monsoon Origin and Mechanism.

Reading List

- 1. Anthes R. A., Panofsky H. A., Cahir J. J. and Rango A., 1978: *The Atmosphere*, Columbus.
- 2. Barry R. G. and Carleton A. M., 2001: *Synoptic and Dynamic Climatology*, Routledge, UK.
- 3. Barry R. G. and Corley R. J., 1998: *Atmosphere, Weather and Climate*, Routledge, New York.
- 4. Batten L. J., 1979: *Fundamentals of Meteorology*, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- 5. Boucher K., 1975: Global Climates, Halstead Press, New York.
- 6. Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi
- 7. Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: *The Atmosphere: An Introduction to Meteorology*, Prentice-Hall, Englewood Cliffs, New Jersey.
- 8. Oliver J. E. and Hidore J. J., 2002: *Climatology: An Atmospheric Science*, Pearson Education, New Delhi.
- 9. Thompson D. R. and Perry A. (eds.), 1997: *Applied Climatology: Principles and Practice*, Routledge, USA and Canada.
- 10. Trewartha G. T. and Horne L. H., 1980: An Introduction to Climate, McGraw-Hill.

- 1. Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi
- 2. Lal, DS (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad
- 3. Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad
- 4. Singh, S (2009): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad

PAPER 103 CARTOGRAPHIC TECHNIQUES (PRACTICAL)

Course Outline

- 1. Cartography Nature and Scope.
- 2. Scales Concept and application; Graphical Construction of Plain, Comparative and Diagonal Scales.
- 3. Map Projections Classification, Properties and Uses; Graphical Construction of Polar Zenithal Stereographic, Bonne's and Mercator's Projections, and reference to Universal Transverse Mercator (UTM) Projection.
- 4. Topographical Map Interpretation of a Mountain area with the help of Cross and Longitudinal Profiles.
- 5. Slope Analysis Wentworth's method.

Practical Record: A Project File in pencil, comprising one exercise *each*, on scale, map projection, interpretation of topographic sheet and slope analysis.

Reading List

- 1. Anson R. and Ormelling F. J., 1994: *International Cartographic Association: Basic Cartographic Vol.* Pregmen Press.
- 2. Gupta K.K. and Tyagi, V. C., 1992: Working with Map, Survey of India, DST, New Delhi.
- 3. Loxton J., 1980: Practical Map Production, John Wiley.
- 4. Mishra R.P. and Ramesh, A., 1989: *Fundamentals of Cartography*, Concept, New Delhi.
- 5. Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London.
- 6. Rhind D. W. and Taylor D. R. F., (eds.), 1989: *Cartography: Past, Present and Future*, Elsevier, International Cartographic Association.
- 7. Robinson A. H., 2009: *Elements of Cartography*, John Wiley and Sons, New York.
- 8. Sharma J. P., 2010: *Prayogic Bhugol*, Rastogi Publishers, Meerut.
- 9. Singh R. L. and Singh R. P. B., 1999: *Elements of Practical Geography*, Kalyani Publishers.
- 10. Steers J. A., 1965: An Introduction to the Study of Map Projections, London.

- 1 Singh R L & Rana P B Singh(1991) Prayogtmak Bhugol ke Mool Tatva, Kalyani Publishers, New Delhi
 - **2** Sharma, J P (2010): Prayogtmak Bhugol ki Rooprekha, Rastogi Publications, Meerut
 - 3 Singh, R L & Dutta, P K, PrayogatmakBhugol, Central Book Depot, Allahabad

- Defining the Field Nature and Scope; Sources of Data with special reference to India (Census, Vital Statistics and NSS).
- 2. Population Size, Distribution and Growth Determinants and Patterns; Theories of Growth Malthusian Theory and Demographic Transition Theory.
- 3. Population Dynamics: Fertility, Mortality and Migration Measures, Determinants and Implications.
- 4. Population Composition and Characteristics Age-Sex Composition; Rural and Urban Composition; Literacy.
- 5. Contemporary Issues Ageing of Population; Declining Sex Ratio; HIV/AIDS.

Reading List

- 1. Barrett H. R., 1995: *Population Geography*, Oliver and Boyd.
- 2. Bhende A. and Kanitkar T., 2000: *Principles of Population Studies*, Himalaya Publishing House.
- 3. Chandna R. C. and Sidhu M. S., 1980: *An Introduction to Population Geography*, Kalyani Publishers.
- 4. Clarke J. I., 1965: *Population Geography*, Pergamon Press, Oxford.
- 5. Jones H. R., 1990: Population Geography, Sage.
- 6. Jones, H. R., 2000: Population Geography, 3 ed. Paul Chapman, London.
- 7. Lutz W., Warren C. S. and Scherbov S., 2004: *The End of the World Population Growth in the 21*st Century, Earthscan
- 8. Newbold K. B., 2009: *Population Geography: Tools and Issues*, Rowman and Littlefield Publishers
- 9. Pacione M., 1986: Population Geography: Progress and Prospect, Taylor and Francis.
- 10. Peters G. L. and Larkin R. P., 1979: *Population Geography Problems, Concepts and Prospects*, Kendall Hunt Publication Co.
- 11. Wilson M. G. A., 1968: Population Geography, Nelson.

- 1. Panda B P (1988): Janasankya Bhugol, M P Hindi Granth Academy, Bhopal
- 2. Maurya S D, Jansankya Bhugol, Sharda Putak Bhawan, Allahabad
- 3. Chandna, R C (2006), Jansankhya Bhugol, Kalyani Publishers, Delhi

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CONCURRENT – QUALIFYING LANGUAGE

SEMESTER 2

PAPER 201 ANALYTICAL PHYSICAL GEOGRAPHY

Course Outline

- 1. Rock Characteristics and Classification.
- 2. Drainage Basin Morphometry Drainage Types and Patterns, Stream Orders, Bifurcation Ratio, Stream Frequency, Relief Ratio, Drainage Texture, Drainage Density, Overland Flow, and Runoff.
- 3. Slope Types and Analysis Hypsometric Curve and River Profiles.
- 4. Climatic Data Weather Chart Analysis, Climatic Classification (Koppen).
- 5. Soil Characteristics and Universal Soil Loss Equation.

Reading List

- 1. Chorley R. J. (ed.), 1972: Spatial Analysis in Geomorphology, Harper and Row.
- 2. Gerrarda A. J., 1988: Rocks and Landforms, Unwin-Hyman, UK.
- 3. Mayer L., 1990: *Introduction to Quantitative Geomorphology*, Prentice-Hall, New Jersey.
- 4. Monkhouse F. J., 1970: *Principles of Physical Geography*, American Elsevier.
- 5. Morisawa M., 1983: *Geomorphological Laboratory Manual*, John Wiley & Sons, New York.
- 6. Nkapp B. J., 1979: Elements of Geographical Hydrology, Unwin- Hyman, UK.
- 7. Pal S. K., 1998: Statistics for Geoscientists: Techniques and Application, Concept, New Delhi.
- 8. Strahler A. H., 2008: *Modern Physical Geography* (4th Edition), Wiley-India.
- 9. Upton W. B., 1970: Landforms and Topographic Maps, John Wiley & Sons, New York.
- 10. Zavoianu I., 1978: Morphometry of Drainage Basins, Elsevier, USA

- 1. Prasad, G (2008): Bhu-Akriti Vigyan Sidhant tatha Sathalroop, Sharda Pustak Bhawan, Allahabad
- 2. Tikka R N (1989): Bhautik Bhugol, Kedarnath Ram Nath, Meerut
- 3. Gautam A, (2010): Bhautik Bhugol, Rastogi Publications, Meerut
- 4. Singh R L & Rana P B Singh(1991) Prayogtmak Bhugol ke Mool Tatva, Kalyani Publishers, New Delhi

- 1. Ocean Floor Topography Indian, Atlantic and Pacific Oceans.
- 2. Ocean Salinity and Temperature Distribution and Determinants.
- 3. Oceanic Movements Waves, Currents and Tides.
- 4. Coral Reefs Types and Theories of Origin.
- 5. Marine Deposits and Ocean Resources Biotic, Mineral and Energy.

- 1. Anikouchine W. A. and Sternberg R. W., 1973: *The World Oceans: An Introduction to Oceanography*, Prentice-Hall.
- 2. Garrison T., 1998: Oceanography, Wordsworth Company, Belmont.
- 3. Gerald S., 1963: General Oceanography: An Introduction, John Willey & Sons, New York.
- 4. Kershaw S., 2000: Oceanography: An Earth Science Perspective, Stanley Thornes, UK.
- 5. King C. A. M., 1962: Oceanography for Geographers, Edward Arnold.
- 6. Pinet P. R., 2008: *Invitation to Oceanography* (Fifth Edition), Jones and Barlett Publishers, USA, UK and Canada.
- 7. Sharma R. C. and Vatal M., 1980: *Oceanography for Geographers*, Chaitanya Publishing House, Allahabad.
- 8. Stowe K., 1987: Essentials of Ocean Science, John Wiley &Sons, NewYork.
- 9. Sverdrup K. A. and Armbrust, E. V., 2008: *An Introduction to the World Ocean*, McGraw Hill, Boston.
- 10. Thurman H. V., 1996: *Essentials of Oceanography*, Prentice-Hall, New Jersey. Hindi Reading List:
 - 1. Lal D S (2007): Jalvayu aewam Samudra Vigyan, Sharda Pustak Bhawan, Allahbad
 - 2. Singh, S (2009): Bhatik Bhugol ka Swaroop, Prayak Pustak Bhawan, Allahabad
 - 3. Gautam A, (2010): Bhautik Bhugol, Rustogi Publications, Meerut

- 1. Maps Classification and Types; Principles of Map Design.
- 2. Diagrammatic Data Presentation Line, Bar and Circle.
- 3. Thematic Mapping Techniques Properties, Uses and Limitations; Areal Data -- Choropleth, Dot, Proportional Circles; Point Data Isopleths.
- 4. Cartographic Overlays Point, Line and Areal Data.
- 5. Thematic Maps Preparation and Interpretation.

Practical Record: A Thematic Atlas with ink should be prepared on a specific theme with five plates for at least ten districts of any state in India.

Reading List

- 1. Cuff J. D. and Mattson M. T., 1982: *Thematic Maps: Their Design and Production*, Methuen Young Books
- 2. Dent B. D., Torguson J. S., and Holder T. W., 2008: *Cartography: Thematic Map Design* (6th Edition), Mcgraw-Hill Higher Education
- 3. Gupta K. K. and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.
- 4. Kraak M.-J. and Ormeling F., 2003: *Cartography: Visualization of Geo-Spatial Data*, Prentice-Hall.
- 5. Mishra R. P. and Ramesh A., 1989: *Fundamentals of Cartography*, Concept, New Delhi.
- 6. Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London.
- 7. Sharma J. P., 2010: *Prayogic Bhugol*, Rastogi Publishers, Meerut.
- 8. Singh R. L. and Singh R. P. B., 1999: *Elements of Practical Geography*, Kalyani Publishers.
- 9. Slocum T. A., Mcmaster R. B. and Kessler F. C., 2008: *Thematic Cartography and Geovisualization* (3rd Edition), Prentice Hall.
- 10. Tyner J. A., 2010: *Principles of Map Design*, The Guilford Press.

- 1. Singh, L R & Singh R (1977): Manchitra or Pryaogatamek Bhugol , Central Book Depot, Allahabad
- 2. Maps and Diagrams (Hindi Translation), M P Hindi Directorate, Bhopal
- 3. Singh R L and Duttta P K: Prayogatama Bhugol, Central Book Depot, Allahabad

- 1. Introduction: Nature and Scope; Basic Concepts: Rural and Urban Settlements, Hamlet, Village, Town, City, Metropolis, Megalopolis, Conurbation, Rural-Urban Fringe.
- 2. Rural Settlements: Types and Patterns, Determinants.
- 3. Regional Settlement Hierarchy: Central Place Theory, Rank-Size Rule, Primate City.
- 4. Urban Land use: Models; Types Residential, Commercial, Industrial, Institutional, Recreational, Heritage, Public and Green Spaces, and Transport.
- 5. Planned Cities: A Case Study of Chandigarh Site and Situation, Layout and Landuse, Services and Infrastructure, Problems.

- 1. Chishlom M., 2007: Rural Settlement and Land Use, Transaction Publishers.
- 2. Daniel, P. 2002: Geography of Settlement, Rawat Publs., Jaipur & New Delhi.
- 3. Ghosh, Santwana 1999: A Geography of Settlements, Orient Longman, Kolkata.
- 4. Kalia Ravi, 1999: Chandigarh: The Making of Indian City, Oxford University Press.
- 5. Kaplan D. H., Wheeler J. O. and Holloway S. R., 2008: Urban Geography, John Wiley.
- 6. Krishan G., 1999: *Inner Spaces Outer Spaces of a Planned City: A Thematic Atlas of Chandigarh*, Celebrating Chandigarh.
- 7. Pacione M., 2009: Urban Geography: A Global Perspective, Taylor and Francis.
- 8. Ramachandran R., 1989: *Urbanisation and Urban Systems of India*, Oxford University Press.
- 9. Ramachandran, R., 1992: The Study of Urbanisation, Oxford University Press, Delhi
- 10. Singh R. Y., 1994: The Geography of Settlement. Rawat Publication, New Delhi,
- 11. Tiwari, R. C. 2000: Settlement Geography, (in Hindi), Prayag Publ., Allahabad.
- 12. Misra, R. P. & Misra, K. eds. 1998: *Million Cities of India,* Sustainable Development Foundation, New Delhi.

PAPER 205

CONCURRENT - CREDIT LANGUAGE

SEMESTER 3

PAPER 301 ECONOMIC GEOGRAPHY

Course Outline

- 1. Introduction: Concept and classification of economic activity
- 2. Factors Affecting location of Economic Activity with special reference to Agriculture, Industry and Services (Weber's theory*)
- 3. Primary Activities: Subsistence and Commercial agriculture, forestry, fishing and mining.
- 4. Secondary Activities: Manufacturing (Cotton Textile, Iron and Steel), Concept of Manufacturing Regions, Special Economic Zones and Technology Parks.
- 5. Tertiary Activities: Transport, Trade and Services.

- 1. Alexander J. W., 1963: *Economic Geography*, Prentice-Hall Inc., Englewood Cliffs, New Jersey.
- 2. Coe N. M., Kelly P. F. and Yeung H. W., 2007: *Economic Geography: A Contemporary Introduction*, Wiley-Blackwell.
- 3. Hodder B. W. and Lee Roger, 1974: *Economic Geography*, Taylor and Francis.
- 4. Combes P., Mayer T. and Thisse J. F., 2008: *Economic Geography: The Integration of Regions and Nations*, Princeton University Press.
- 5. Wheeler J. O., 1998: Economic Geography, Wiley.,
- 6. Durand L., 1961: *Economic Geography*, Crowell.
- 7. Bagchi-Sen S. and Smith H. L., 2006: *Economic Geography: Past, Present and Future*, Taylor and Francis.
- 8. Willington D. E., 2008: Economic Geography, Husband Press.
- 9. Clark, Gordon L.; Feldman, M.P. and Gertler, M.S., eds. 2000: The *Oxford Handbook of Economic Geography*, Oxford University Press, Oxford and New York.

^{* (}theories relating to agriculture and services have been dealt in other papers)

- Environmental Geography Concept and Scope
- 2. Human-Environment Relationships Historical Progression, Adaptation
- 3. Ecosystem Concept, Structure and Functions
- 4. Environmental Problems in Tropical, Temperate and Polar Ecosystems
- 5. Environmental Programmes and Policies Global, National and Local levels

Reading List

- 1. Chandna R. C., 2002: *Environmental Geography*, Kalyani, Ludhiana.
- 2. Cunninghum W. P. and Cunninghum M. A., 2004: *Principals of Environmental Science: Inquiry and Applications*, Tata Macgraw Hill, New Delhi.
- 3. Goudie A., 2001: *The Nature of the Environment*, Blackwell, Oxford.
- 4. Miller G. T., 2004: *Environmental Science: Working with the Earth,* Thomson Brooks Cole, Singapore.
- 5. MoEF, 2006: *National Environmental Policy-2006*, Ministry of Environment and Forests, Government of India.
- 6. Odum, E. P. et al, 2005: *Fundamentals of Ecology,* Ceneage Learning India.
- 7. Singh S., 1997: Environmental Geography, Prayag Pustak Bhawan. Allahabad.
- 8. UNEP, 2007: Global Environment Outlook: GEO4: Environment For Development, United Nations Environment Programme.

- 1 Singh, Savindra 2001. *Paryavaran Bhugol,* Prayag Pustak Bhawan, Allahabad. (in Hindi)
- 2 Singh, Shri Narayan 1993. Vatavaran Bhugol, Tara Book Agency. (in Hindi)

- 1. Remote Sensing: Definition, Development, Platforms and Types.
- 2. Aerial Photography: Principles, Types and Geometry.
- 3. Satellite Remote Sensing: Principles, EMR Interaction with Atmosphere and Earth Surface; Satellites (Landsat and IRS) and Sensors.
- 4. Image Processing (Digital and Manual): Pre-processing (Radiometric and Geometric Correction), Enhancement (Filtering); Classification (Supervised and Un-supervised)
- 5. Interpretation and Application of Remote Sensing: Land use/ Land Cover.

Practical Record: A project file consisting of five exercises will be done from aerial photos and satellite images (scale, orientation and interpretation)

- 1. Campbell J. B., 2007: Introduction to Remote Sensing, Guildford Press.
- 2. Jensen J. R., 2004: Introductory Digital Image Processing: A Remote Sensing Perspective, Prentice Hall.
- 3. Joseph, G. 2005: Fundamentals of Remote Sensing, United Press India.
- 4. Lillesand T. M., Kiefer R. W. and Chipman J. W., 2004: *Remote Sensing and Image Interpretation*, Wiley. (Wiley Student Edition).
- 5. Nag P. and Kudra, M., 1998: *Digital Remote Sensing*, Concept, New Delhi.
- 6. Rees W. G., 2001: *Physical Principles of Remote Sensing*, Cambridge University Press.
- 7. Singh R. B. and Murai S., 1998: *Space-informatics for Sustainable Development*, Oxford and IBH Pub.
- 8. Wolf P. R. and Dewitt B. A., 2000: *Elements of Photogrammetry: With Applications in GIS*, McGraw-Hill.

PAPER 304 URBAN GEOGRAPHY

Course Outline

- 1. Urban geography: Introduction, nature and scope; history of urbanisation
- 2. Patterns of Urbanisation in developed and developing countries
- 3. Functional classification of cities: Quantitative and Qualitative Methods
- 4. Urban Issues: problems of housing, slums, civic amenities (water and transport)
- 5. Case studies of Delhi, Mumbai, Kolkata and Chennai with reference to Urban Issues

- 1. Fyfe N. R. and Kenny J. T., 2005: The Urban Geography Reader, Routledge.
- 2. Graham S. and Marvin S., 2001: Splintering Urbanism: Networked Infrastructures, Technological Mobilities and the Urban Condition, Routledge.
- 3. Hall T., 2006: Urban Geography, Taylor and Francis.
- 4. Kaplan D. H., Wheeler J. O. and Holloway S. R., 2008: *Urban Geography*, John Wiley.
- 5. Knox P. L. and McCarthy L., 2005: *Urbanization: An Introduction to Urban Geography*, Pearson Prentice Hall New York.
- 6. Knox P. L. and Pinch S., 2006: *Urban Social Geography: An Introduction*, Prentice-Hall.
- 7. Pacione M., 2009: *Urban Geography: A Global Perspective*, Taylor and Francis.
- 8. Sassen S., 2001: *The Global City: New York, London and Tokyo*, Princeton University Press.
- 9. Ramachandran R (1989): Urbanisation and Urban Systems of India, Oxford University Press, New Delhi
- 10. Ramachandran, R., 1992: The Study of Urbanisation, Oxford University Press, Delhi

PAPER 305

CONCURRENT - INTERDISCIPLINARY

SEMESTER 4

PAPER 401 GEOGRAPHY OF NATURAL RESOURCES

Course Outline

- 1. Natural Resource: Concept, Classification and Techniques
- 2. Distribution, Utilisation, Problems and Management of:
 - (a) Land Resources and (b) Water Resources
 - (c) Forests and (d)Energy Resources
- 3. Appraisal and Conservation and Natural Resources

- 1. Cutter S. N., Renwich H. L. and Renwick W., 1991: *Exploitation, Conservation, Preservation: A Geographical Perspective on Natural Resources Use*, John Wiley and Sons, New York.
- 2. Gadgil M. and Guha R., 2005: The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity, Oxford University Press. USA.
- 3. Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: *Natural Resources: Ecology, Economics and Policy*. Prentice Hall. New Jersey.
- 4. Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.
- 5. Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.
- 6. Mather A. S. and Chapman K., 1995: *Environmental Resources*, John Wiley and Sons, New York.
- 7. Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.
- 8. Owen S. and Owen P. L., 1991: *Environment, Resources and Conservation*, Cambridge University Press, New York.
- 9. Rees J., 1990: *Natural Resources: Allocation, Economics and Policy*, Routledge. London.

PAPER 402 SPATIAL DIMENSIONS OF DEVELOPMENT

Course Outline

- Introduction: Changing Concept of Development, Efficiency-Equity Debate
- 2. Measuring development: Indicators (Economic, Social and Environmenta)
- 3. Theories of Development: Myrdal, Hirschman, Rostow and Friedmann, Concept of underdevelopment
- 4. Global Pattern of Development: inter-regional variations
- 5. Human development: International, interstate comparison of India.

- 1. Abler R., Adams J. S., and Gould P. R., 1971: *Spatial Organization: A Geographer's View of the World*, Englewood Cliffs, Prentice-Hall.
- 2. Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons.
- 3. Claval P.I, 1998: *An Introduction to Regional Geography*, Blackwell Publishers, Oxford and Massachusetts.
- 4. Friedmann J. and Alonso W. (1975): Regional Policy Readings in Theory and Applications, MIT Press, Massachusetts.
- 5. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London.
- 6. Gore C. G., Köhler G., Reich U-P. and Ziesemer T., 1996: Questioning Development: Essays on the Theory, Policies and Practice of Development Intervention, Metropolis-Verlag, Marburg.
- 7. Haynes J., 2008: Development Studies, Polity Short Introduction Series.
- 8. Johnson E. A. J., 1970: *The Organization of Space in Developing Countries*, MIT Press, Massachusetts.
- 9. Peet R., 1999: Theories of Development, The Guilford Press, New York.
- 10. UNDP 2001-04: Human Development Report, Oxford University Press.
- 11. World Bank 2001-05: *World Development Report,* Oxford University Press, New York.

- 1. Use of Data in Geography: Geographical Data Matrix, Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio).
- 2. Tabulation and Descriptive Statistics: Frequencies (Deciles, Quartiles), Cross Tabulation, Central Tendency (Mean, Median and Mode, Centro-graphic Techniques, Dispersion (Standard Deviation, Variance and Coefficient of Variation).
- 3. Sampling: Purposive, Random, Systematic and Stratified.
- 4. Theoretical Distribution: Probability and Normal Distribution.
- 5. Association and Correlation: Rank Correlation, Product Moment Correlation, and Simple Regression, Residuals from regression

Practical Record: Each student will submit a record containing five exercises:

- 1. Construct a data matrix of about (100 x 10) with each row representing an areal unit (districts or villages or towns) and about 10 columns of relevant attributes of the areal units.
- 2. Based on the above table, a frequency table, measures of central tendency and dispersion would be computed and interpreted for any two attributes.
- 3. Histograms and frequency curve would be prepared on the entire data set and attempt to fit a normal curve and interpreted for one or two variables.
- 4. From the data matrix a sample set (20 Percent) would be drawn using, random systematic and stratified methods of sampling and locate the samples on a map with a short note on methods used.
- 5. Based on of the sample set and using two relevant attributes, a scatter and regression line would be plotted and residual from regression would be mapped with a short interpretation.

- 1. Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis A Reader in Geography.
- 2. Ebdon D., 1977: Statistics in Geography: A Practical Approach.
- 3. Hammond P. and McCullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction, Oxford University Press.
- 4. King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall.
- 5. Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept.
- 6. Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi.
- 7. Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.
- 8. Spiegel M. R.: Statistics, Schaum's Outline Series.
- 9. Yeates M., 1974: *An Introduction to Quantitative Analysis in Human Geography*, McGraw Hill, New York.

- 1. Physical: Relief and drainage systems, soil and vegetation, climate (characteristics and classification)
- 2. Population: Distribution and growth
- 3. Economic: Mineral and power resources distribution and utilisation of iron ore, coal, petroleum, gas; agricultural production and distribution of rice and wheat, industrial development: automobile and Information technology
- 4. Social: Distribution of population by race, caste, religion, language, tribes and their correlates
- 5. Regionalisation of India: Physiographic (Spate and R. L. Singh), Socio cultural (Sopher and A. Ahmed), Economic (Sengupta)

- 1. Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, New Delhi.
- 2. Johnson, B. L. C., ed. 2001. *Geographical Dictionary of India*. Vision Books, New Delhi.
- 3. Mandal R. B. (ed.), 1990: Patterns of Regional Geography An Intenational Perspective. Vol. 3 Indian Perspective.
- 4. Sdyasuk Galina and P Sengupta (1967): *Economic Regionalisation of India*, Census of India
- 5. Sharma, T. C. 2003: India Economic and Commercial Geography. Vikas Publ., New Delhi.
- 6. Singh R. L., 1971: *India: A Regional Geography*, National Geographical Society of India.
- 7. Singh, Jagdish 2003: *India A Comprehensive & Systematic Geography*, Gyanodaya Prakashan, Gorakhpur.
- 8. Spate O. H. K. and Learmonth A. T. A., 1967: *India and Pakistan: A General and Regional Geography*, Methuen.
- 9. Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi.
- 10. Bose, A. et. al. eds, 2001: Population in India's Development, 1947-2000, Vikas, New Delhi
- 11. Pathak, C. R. 2003: *Spatial Structure and Processes of Development in India*. Regional Science Assoc., Kolkata.

PAPER 405

CONCURRENT – DISCIPLINE CENTERED I

SEMESTER 5

PAPER 501 EVOLUTION OF GEOGRAPHICAL THOUGHT

Course Outline

- 1. Pre-Modern Early Origins of Geographical Thinking with reference to the Classical and Medieval Philosophies.
- 2. Modern Evolution of Geographical Thinking and Disciplinary Trends in Germany, France, Britain, United States of America and India.
- 3. Debates Environmental Determinism and Possibilism, Systematic and Regional, Ideographic and Nomeothetic.
- 4. Trends Quantitative Revolution and its Impact, Behaviouralism, Systems Approach, Radicalism, Feminism
- 5. Towards Post Modernism Changing Concept of Space in Geography, Future of Geography

- Arentsen M., Stam R. and Thuijis R., 2000: Post-modern Approaches to Space, ebook.
- 2. Bonnett A., 2008: What is Geography? Sage.
- 3. Dikshit R. D., 1997: Geographical Thought: A Contextual History of Ideas, Prentice–Hall India
- 4. Hartshone R., 1959: Perspectives of Nature of Geography, Rand MacNally and Co.
- 5. Holt-Jensen A., 2011: Geography: History and Its Concepts: A Students Guide, SAGE.
- 6. Johnston R. J., (Ed.): *Dictionary of Human Geography*, Routledge.
- 7. Johnston R. J., 1997: Geography and Geographers, Anglo-American Human Geography since 1945, Arnold, London.
- 8. Kapur A., 2001: Indian Geography Voice of Concern, Concept Publications.
- 9. Martin Geoffrey J., 2005: All Possible Worlds: A History of Geographical Ideas, Oxford.
- 10. Soja, Edward 1989. *Post-modern Geographies*, Verso, London. Reprinted 1997: Rawat Publ., Jaipur and New Delhi.

- 1. Situating Social Geographies: Origin, Nature and Scope of Social Geography.
- 2. Concept of Social Space: First, Second and third Space.
- 3. Social Categories: Defining Caste, Class, Religion, Ethnicity and Gender and their Spatial Underpinnings
- 4. Geographies of Welfare and Well being: Concept and Components Healthcare, Housing and Education with Special Reference to Problems of Children, Youth, Aged and Differently Abled Populations.
- 5. Social Geographies of Inclusion and Exclusion, Slums, Gated Communities, Communal Conflicts and Crime.

- 1. Ahmed A., 1999: Social Geography, Rawat Publications.
- 2. Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.
- 3. Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary Issues, Hodder Arnold.
- 4. Holt L., 2011: Geographies of Children, Youth and Families: An International Perspective, Taylor & Francis.
- 5. Panelli R., 2004: Social Geographies: From Difference to Action, Sage.
- 6. Rachel P., Burke M., Fuller D., Gough J., Macfarlane R. and Mowl G., 2001: *Introducing Social Geographies*, Oxford University Press.
- 7. Smith D. M., 1977: *Human geography: A Welfare Approach*, Edward Arnold, London.
- 8. Smith D. M., 1994: Geography and Social Justice, Blackwell, Oxford.
- 9. Smith S. J., Pain R., Marston S. A., Jones J. P., 2009: *The SAGE Handbook of Social Geographies*, Sage Publications.
- 10. Sopher, David (1980): An Exploration of India, Cornell University Press, Ithasa
- 11. Valentine G., 2001: Social Geographies: Space and Society, Prentice Hall.

PAPER 503 FIELD TECHNIQUES (PRACTICAL)

Course Outline

- 1. Field Work In Geographical Studies Role, Value and Ethics of Field-Work
- Defining the Field and Identifying the Case Study Rural / Urban / Physical / Human / Environmental.
- 3. Field Techniques Merits, Demerits and Selection of the Appropriate Technique; Observation (Participant / Non Participant), Questionnaires (Open/ Closed / Structured / Non-Structured); Interview with Special Focus on Focused Group Discussions; Space Survey (Transects and Quadrants, Constructing a Sketch)
- 4. Use of Field Tools Collection of Material for Physical and Socio-Economic Surveys.
- 5. Designing the Field Report Aims and Objectives, Methodology, Analysis, Interpretation and Writing the Report.

Practical Record

- 1. Each student will prepare an individual report based on primary and secondary data collected during field work.
- 2. The students / teachers can opt to take students in or outside the NCR, depending upon, problem to be studied.
- 3. The duration of the field work should not exceed 10 days.
- 4. The word count of the report should be about **8000 to 12,000** excluding figures, tables, photographs, maps, references and appendices.
- 5. One copy of the report on A 4 size paper should be submitted in soft binding.

- 1. Creswell J., 1994: Research Design: Qualitative and Quantitative Approaches Sage Publications.
- 2. Dikshit, R. D. 2003. The Art and Science of Geography: Integrated Readings. Prentice-Hall of India, New Delhi.
- 3. Evans M., 1988: "Participant Observation: The Researcher as Research Tool" in *Qualitative Methods in Human Geography*, eds. J. Eyles and D. Smith, Polity.
- 4. Mukherjee, Neela 1993. Participatory Rural Appraisal: Methodology and Application. Concept Publs. Co., New Delhi.
- 5. Mukherjee, Neela 2002. Participatory Learning and Action: with 100 Field Methods. Concept Publs. Co., New Delhi
- 6. Robinson A., 1998: "Thinking Straight and Writing That Way", in Writing Empirical Research Reports: A Basic Guide for Students of the Social and Behavioural Sciences, eds. by F. Pryczak and R. Bruce Pryczak, Publishing: Los Angeles.
- 7. Special Issue on "Doing Fieldwork" The Geographical Review 91:1-2 (2001).
- 8. Stoddard R. H., 1982: Field Techniques and Research Methods in Geography, Kendall/Hunt.
- 9. Wolcott, H. 1995. The Art of Fieldwork. Alta Mira Press, Walnut Creek, CA.

PAPER 504 AGRICULTURAL GEOGRAPHY

Course Outline

- 1. Defining the Field: Introduction, nature and scope, Landuse/ landcover classification and definition. .
- 2. Determinants of Agriculture: Physical, Technological and Institutional
- 3. Agricultural Regions: Agroclimatic, Agroecological & Crop Combination Regions.
- 4. Agricultural Systems of the World: Whittlesey's classification.
- 5. Agricultural Land use model of Von Thuenen, modification and relevance.

- 1. Basu, D.N., and Guha, G.S., 1996: *Agro-Climatic Regional Planning in India*, Vol.I & II, Concept Publication, New Delhi.
- 2. Bryant, C.R., Johnston, T.R, 1992: *Agriculture in the City Countryside*, Belhaven Press, London.
- 3. Burger, A., 1994: Agriculture of the World, Aldershot, Avebury.
- 4. Grigg, D.B., 1984: Introduction to Agricultural Geography, Hutchinson, London.
- 5. Ilbery B. W., 1985: *Agricultural Geography: A Social and Economic Analysis*, Oxford University Press.
- 6. Mohammad, N., 1992: *New Dimension in Agriculture Geography*, Vol. I to VIII, Concept Pub., New Delhi.
- 7. Roling, N.G., and Wageruters, M.A.E.,(ed.) 1998: *Facilitating Sustainable Agriculture*, Cambridge University Press, Cambridge.
- 8. Shafi, M., 2006: *Agricultural Geography*, Doring Kindersley India Pvt. Ltd., New Delhi
- 9. Singh, J., and Dhillon, S.S., 1984: Agricultural Geography, Tata McGraw Hill, New Delhi.
- 10. Tarrant J. R., 1973: Agricultural Geography, David and Charles, Devon.

- 1. Defining the Field Concept, And Relevance
- 2. Evolution of Plants and Animals Adaptation, Dispersal, Colonization and Extinction.
- 3. Factors Affecting the Community Plant Succession, Arresting Factors, Vegetation Climax
- 4. Biomes Forest, Grassland, Desert and Mountain.
- 5. Biodiversity Preservation and Conservation.

- 1. Dansereau, P. M., 1957: Biogeography: An ecological Perspective, Ronald Press.
- 2. Dennis M., 2009: Here Be Dragons: How Study of Animal and Plant Distribution Revolutionised Our View of Life and Earth, Oxford University Press.
- 3. Eyre S. R. and Jones, G.R. (eds) 1966: *Geography as Human Ecology*, Edward Arnold, London.
- 4. Eyre S. R., 1963: Vegetation and Soils: A World Picture, Aldine Publishing, Chicago.
- 5. Lomolino M. V., Riddle B. R., Whittaker R., and Brown J. H., 2010: *Biogeography*, Sinauer Associates.
- 6. Mathur H. S., 1998: Essentials of Biogeography, Anuj Printers, Jaipur.
- 7. Millington A., Blumer M. and Schickhoff U., 2011: Sage Handbook of Biogeography, Sage.
- 8. Morand S. and Krasnov B., 2010: *The Biogeography of Host Parasite Interaction*, Oxford University Press.
- 9. Tivy J., 1977: *Biogeography: A Study of Plants in the Ecosphere*, Oliver & Boyd, Edinburg.

- 1. Introduction: Introduction, Nature, Scope and Geopolitics.
- 2. State, Nation and Nation State Concept of Nation and State, Attributes of State Frontiers, Borders, Shape, Size, Territory and Sovereignty, Concept of Nation State.
- 3. Electoral Geography Geography of Voting, Geographic Influences on Voting pattern, Geography of Representation, Gerrymandering.
- 4. Political Geography of Resource Conflicts Water Sharing Disputes, Disputes and Conflicts Related to Forest Rights and Minerals, issues of land locked states in Asia and Africa
- 5. Politics of Displacement: Issues of relief, compensation and rehabilitation: with reference to Dams and Special Economic Zones

- 1. Agnew J., 2002: Making Political Geography, Arnold.
- 2. Agnew J., Mitchell K. and Toal G., 2003: A Companion to Political Geography, Blackwell.
- 3. Cox K. R., Low M. and Robinson J., 2008: *The Sage Handbook of Political Geography*, Sage Publications.
- 4. Cox K., 2002: Political Geography: Territory, State and Society, Wiley-Blackwell
- 5. Gallaher C., et al, 2009: Key Concepts in Political Geography, Sage Publications.
- 6. Glassner M., 1993: Political Geography, Wiley.
- 7. Jones M., 2004: An Introduction to Political Geography: Space, Place and Politics, Routledg.
- 8. Mathur H M and M M Cernea (eds.) Development, Displacement and Resettlement Focus on Asian Experience, Vikas, Delhi
- 9. Painter J. and Jeffrey A., 2009: *Political Geography*, Sage Publications.
- 10. Taylor P. and Flint C., 2000: *Political Geography*, Pearson Education.
- 11. Verma M K (2004): Development, Displacement and Resettlement, Rawat Publications. Delhi
- 12. Hodder Dick, Sarah J Llyod and Keith S McLachlan (1998), Land Locked States of Africa and Asia (vo.2), Frank Cass

SEMESTER 6

PAPER 601 DISASTER MANAGEMENT

Course Outline

- Disasters Definition, Classification and related concepts of Hazard and Risk.
- 2. Impact of Disasters: Case Studies from Developed and Developing Countries.
- 3. Vulnerability to Disasters Concept and Dimension.
- 4. Response to Disasters Community, Non-Government Organizations, National and International.
- 5. Disaster Management Mitigation and Preparedness.

- 1. Frampton C., Hardwick and McNaught, 1999: *Causes, Consequences and Management of Disasters*, Hodder and Stoughton, London.
- 2. Frank W. L., 1986: *The Violent Earth*, Croom Helm, London.
- 3. Goel S. L., 2001: *Encyclopaedia of Disaster Management*, Vol. 1, 2 and 3, Deep and Deep Publications, New Delhi.
- 4. Kapur A., 2010: *Vulnerable India: A Geographical Study of Disasters*, Sage Publication, New Delhi.
- 5. Keith S., 2002: *Environmental Hazards: Assessing Risk and Reducing Disaster*, Routeledge, London.
- 6. Keller E. A. and Blodgett R. H., 2006: *Natural Hazards: Earth's Processes as Hazards, Disasters and Catastrophe*, Prentice Hall, New Jersey.
- 7. Singh R. B. (ed.), 2006: *Natural Hazards and Disaster Management: Vulnerability and Mitigation*, Rawat Publications, New Delhi.
- 8. UN and WMO, 2002: Living with Risk: A Global Review of Disaster Reduction Initiatives, International Strategy for Disaster Reduction, (ISDR), WMO and UN Publication.
- 9. Wisner B., Blaike P., Cannon T. et al., 1994: *At Risk: Natural Hazards, People's Vulnerability and Disasters*, Routledge, London.

- 1. Introduction: Concept of Region, Regional Disparities, Need for Regional Planning,
- Regional Planning in India: Regional Approach to Planning in India's Five Year Plans;
 Experience of Regional Planning in India: Multi-Level Planning (State, District and Block level Planning)
- 3. Regions for Planning (identification, characteristics, problems and policies): Case Studies of:
 - a. River Valley Development Plan: Damodar Valley and Tribal Area Development Plan: Bastar District.
 - b. Hill Area Development Plan: Western Ghats and Himalaya
 - c. Metropolitan Regional Plan: National Capital Region.

- 1. Bhalla A. S., 1992: *Uneven Development in the Third World: A Study of India and China*, Macmillan, London.
- 2. Bhat, L.S., 1976: Micro Level Planning in India, K.B. Pub. New Delhi.
- 3. Dreze J. and Sen A., 1996: *Indian Development: Select Regional Perspectives,* Oxford University Press.
- 4. Hall, Peter 1992: Urban and Regional Planning, Routledge, London.
- 5. Misra R. P. (ed), 1980: Regional Planning Concepts, Techniques, Policies and Case Studies, Vikas Publishing, Delhi.
- 6. Misra R. P., Sundaram K. V. and Prakasa Rao V. L. S., 1974: *Regional Development Planning in India A New Strategy*, Vikas Publishing, Delhi.
- 7. Sharma H. S and Chattopadhyaya S., 1998: Sustainable Development: Issues and Case Studies, Concept Publishing, Delhi
- 8. Sundaram K. V., 1980: Decentralised Multilevel Planning: Principles and Practices (Asian and African Experiences), Concept Publishing, Delhi.
- Yugandhar, B. N. and Mukherjee, Amitava (eds.) 1991: Readings in De-centralised Planning (with special reference to District Planning), 2 vols. Concept Publs. Co., New Delhi.
- 10. Misra, R. P. & Misra, K. eds. 1998: *Million Cities of India,* Sustainable Development Foundation, New Delhi.

PAPER 603 GEOGRAPHICAL INFORMATION SYSTEM (PRACTICAL)

Course Outline

- 1. Geographical Information System (GIS) Definition, Components and Significance.
- 2. Global Positioning System (GPS) Principles and Uses.
- 3. GIS Data Structures Types (spatial and non-spatial), Point, Line and Area; Raster and Vector Data Structure.
- 4. GIS Data Analysis Input, Editing and Output; Overlays.
- 5. Application of GIS Forests Monitoring, Urban Sprawl Analysis.

Practical Record: A project file consisting of 5 exercises on GIS and GPS application using any GIS Software.

- 1. Burrough P. A. and McDonnell R. A., 2000: *Principles of Geographical Information Systems—Spatial Information Systems and Geostatistics*, Oxford University Press.
- 2. Chang K.-T., 2009: Introduction to Geographic Information Systems, McGraw-Hill.
- 3. Clarke K. C., 2001: Getting Started with Geographic Information Systems, Prentice Hall.
- 4. DeMers M. N., 2000: Fundamentals of Geographic Information Systems, John Wiley & Sons.
- 5. French, G. T. 1996, Understanding the GPS: An Introduction to the Global Positioning System, GeoResearch Inc.
- 6. Heywood I., Cornelius S. and Carver S., 2006: *An Introduction to Geographical Information Systems*, Prentice Hall.
- 7. Schuurman N., 2004: GIS A Short Introduction, Blackwell.

- 1. Scope and Nature Concepts and Issues, Types of Tourists (Visitor, Traveller, and Excursionist–Definition and differentiation); Tourism, recreation and leisure, their interrelationships
- 2. International and Domestic Tourism Recent Trends
- 3. Type of Tourism : Nature tourism, Heritage Tourism, Medical Tourism, Pilgrimage
- 4. Impact of Tourism: On Economy, Environment and Society; Concept of Ecotourism
- 5. Tourism Infrastructure Transport, Facilitations and Hospitality Industry

- 1. Babu S. S., Mishra S., and Parida B. B. (eds.): *Tourism Development Revisited Concepts, Issues and Paradigms*, Sage.
- 2. Bhardwaj et. al. (eds.): International Tourism: Issues and Challenges, Kanishka New Delhi
- 3. Bhatia, A. K., 1991: *International Tourism: Fundamentals and Practices*, Sterling Publishers, New Delhi.
- 4. Boniface B. G. and Chris C., 2005: *Worldwide Destinations: The Geography of Travel and Tourism*, Elsevier Butterworth-Heinemann, Oxford.
- 5. Dhar P. N., 2006: *International Tourism: Emerging Challenges and Future Prospects*, Kanishka, New Delhi.
- 6. Hall M. and Stephan P., 2006: Geography of Tourism and Recreation Environment, Place and Space, Routledge, London.

PAPER 605 CONTEMPORARY ENVIRONMENTAL ISSUES

Course Outline:

- 1. Global Environmental Challenges: Trends, Issues and International Agreements.
- 2. Climate Change: Mechanism, Impact and Coping Strategies.
- 3. Water: Conflicts and Policies Surface and Ground Water.
- 4. Waste Disposal and Pollution: Problems of Mega cities
- 5. Deforestation and Extinction: Extent and Magnitude

- 1. Harriet B. H. and Betsill M., 2005: *Cities and Climate Change: Urban Sustainability and Global Environmental Governance*, Routledge.
- 2. Hester R. E. and Harrison R. M., 2002: *Global Environmental Change*, Royal Society of Chemistry.
- 3. Kumar B. and Singh R. B., 2003: *Urban Development and Anthropogenic Climate Change*, Manak Publisher, New Delhi.
- 4. Meadows, D.H., Meadows, D.L. and Randers, J. 1992: Beyond the Limits. Confronting Global Collapse, Envisioning a Sustainable Future (A sequel to The Limits to Growth). Chelsa Green Publ., Post Mills VT, USA.
- 5. Nigel A., 2002: *Hydrology and Global Environmental Change*, Pearson Higher Education.
- 6. Rai S C (2009): Land Use and Climate Change, Nova Science Publication, New York,
- 7. Singh R. B., 1995: *Global Environmental Change*, Oxford and IBH. New Delhi.
- 8. UNEP, 2007: Global Environment Outlook: GEO4: Environment For Development. United Nations Environment Programme.

- 1. Defining Development: Inter-Dependence of Urban and Rural Sectors of the Economy; Need for Rural Development, Gandhian Concept of Rural Development.
- 2. Rural Economic Base: Agriculture and Allied Sectors, Seasonality and Need for Expanding Non-Farm Activities
- 3. Area Based Approach to Rural Development: Green Revolution, Drought Prone Area Programmes, PMGSY.
- 4. Target Group Approach to Rural Development: SJSY (Integrated Rural Development Programme).
- 5. Provision of Services Physical and Socio-Economic Access to Elementary Education and Primary Health Care and Micro credit

- 1. Gilg A. W., 1985: An Introduction to Rural Geography, Edwin Arnold, London.
- 2. Krishnamurthy, J. 2000: *Rural Development Problems and Prospects,* Rawat Publs., Jaipur
- 3. Lee D. A. and Chaudhri D. P. (eds.), 1983: *Rural Development and State*, Methuen, London.
- 4. Misra R. P. and Sundaram, K. V. (eds.), 1979: Rural Area Development: Perspectives and Approaches, Sterling, New Delhi.
- 5. Misra, R. P. (ed.), 1985: Rural Development: Capitalist and Socialist Paths, Vol. 1, Concept, New Delhi.
- 6. Palione M., 1984: Rural Geography, Harper and Row, London.
- 7. Ramachandran H. and Guimaraes J.P.C., 1991: *Integrated Rural Development in Asia Leaning from Recent Experience*, Concept Publishing, New Delhi.
- 8. Robb P. (ed.), 1983: Rural South Asia: Linkages, Change and Development, Curzon Press.
- UNAPDI 1986:Local Level Planning and Rural Development: Alternative Strategies. (United Nations Asian & Pacific Development Institute, Bangkok), Concept Publs. Co., New Delhi.
- 10. Wanmali S., 1992: Rural Infrastructure Settlement Systems and Development of the Regional Economy in South India, International Food Policy Research Institute, Washington, D.C.
- 11. Yugandhar, B. N. and Mukherjee, Neela (eds.) 1991: *Studies in Village India: Issues in Rural Development*, Concept Publs. Co., New Delhi.

PAPER 607 CONCURRENT – DISCIPLINE CENTERED II