

**FIRST SEMESTER**  
**Core Course: C-1: Understanding Geography**  
**Total Marks: 100**  
**60(Th) + 20(P) + 20(IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Field of Geography (20 classes)**

- Nature and scope of Geography: Geography as a spatial science, present day relevance of Geography
- Physical Geography and Human Geography: Nature, Contents and Interrelationship

**Unit 2: Fundamental Concepts in Geography (15 classes)**

- Relation of Geography with natural and social Sciences
- Spatial and temporal variation, spatial association, spatial interaction, spatial diffusion, system concept, Man-Environment Relationship
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**Unit 3: Map and Geography (15 classes)**

- Importance of map in Geography, Types of map
- Representation of interrelationship among the physical and cultural features from Topographical Maps and Interpretation

**Unit 4: Practical (10 classes)**

- Elements of map reading and Interpretation of toposheet
- Representation of interrelationship among the physical and cultural features from Topographical Maps and Interpretation

**Books Suggested:**

1. Hussain, M., 1989: Evolution of Geographic Thought, Rawat Publications, Jaipur
2. Dikshit, R.D., 1997: Geographical Thoughts: A Contextual History of Ideas, Printice Hall of India, New Delhi
3. Adhikari, S., 1992: Geographical Thought, Chaitanya Pustak Allahabad
4. Abler, R., Adams, J. and Gould, P.P., 1971: Spatial Organization: the Geographers' View of the World, Prentice Hall, Englewood Cliff
5. Hussain, M.: Human Geography, Rawat Publications, Jaipur 3
6. Brunhes, J., 1920: Human Geography, edited by Isaisah Bowman
7. Hartshorne, R., 1939: The Nature of Geography, Rand Mckully, Chicago
8. Knox, P.L., 1975: Social Well-being: A Spatial Perspective, Oxford University
9. Smith, David M., 1977: Human Geography: A Welfare Approach, Edward Arnold, London
10. Chorley, R.J. and Hagget, P. (eds.) 1967: Models in Geography, Methuen, London
11. Hartshorne, R., 1959: Perspective on the Nature of Geography, Indians edition, Scientific Publishers, Jodhpur
12. Johnston, R.J. (ed): The Dictionary of Human Geography, Oxford, Basil, Blackwell
13. Harvey, D., 1969: Explanation in Geography, St. Martin Press, New York
14. Dikshit, R.D., 1994: The Art and Science of Geography, Printice Hall of India, New Delhi

**Core Course: C-2: Geomorphology**  
**Total Marks: 100**  
**60(Th) + 20(P) + 20(IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Basics of Geomorphology ( 10 classes)**

- Geomorphology: Definition, Nature and Scope, Evolution of Geomorphological Thoughts
- Theories of origin and Evolution of Earth (Big Bang theory)
- Earth: Chemical Composition and Interior Structure of the Earth

**Unit II: Earth Movements ( 10 classes)**

- Continental Drift Theory, Isostasy, Plate Tectonics, Mountain building (Orogeny) L. Kober and Arthur Holmes
- Volcanoes and its location

**Unit III: Geomorphic Processes (20 classes)**

- Weathering, Mass Wasting, Cycle of Erosion (Davis and Penck)
- Evolution of Landforms (Erosional and Depositional): Karst and Coastal

**Unit IV: Practical (20 classes)**

- Relief representation through serial profiles, superimposed profiles, composite profiles and Projected profiles
- Demarcation of basin and representation of basin relief through profiles, interpretation
- Preparation of Relative Relief Map using Smith's Method from Topographical Maps
- Drawing and analysis of Average Slope Map by Wentworth's Method

**Books Suggested:**

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. Gautam, A (2010): Bhautik Bhugol, Rastogi Publications, Meerut

## Generic Elective Paper

### Generic Elective: GE-1: Disaster Management

Total Marks: 100

60 (Th) +20(R) + 20(IA)

Total Credit: 6 (Total Number of Classes: 60)

#### Unit I: Fundamentals of Disaster Management (15 classes)

- Definition and Concepts: Hazards, Disasters; Risk and Vulnerability
- Concept of Disaster Resilience, Do's and Don'ts During and Post Disasters
- Indigenous Knowledge and Community based Disaster Management

#### Unit II: Natural Factors (15 classes)

- Disasters in India: (a) Flood: Causes, Impact and Distribution; Landslide: Causes, Impact, and Distribution; Drought: Causes, Impact and Distribution
- Disasters in India: (b) Earthquake : Causes, Impact and Distribution
- Major Earthquake, flood and landslide with special reference to North East India

#### Unit III: Anthropogenic Factors (18 classes)

- Manmade disasters: Causes, Impact, Distribution and Mapping
- Urban Flooding
- Response and Mitigation to Disasters: Mitigation and Preparedness, National Disaster Management Authority (NDMA)

#### Unit IV: Project Report (12 classes)

A report on risk and response of Flood, Drought, Forest Fire, Cyclone, Landslide, Earthquake etc

#### Book Suggested:

1. Government of India. (1997): Vulnerability Atlas of India, New Delhi, Building Materials & Technology Promotion Council, Ministry of Urban Development, Government of India.
2. Kapur, A. (2010) Vulnerable India: A Geographical Study of Disasters, Sage Publication, New Delhi.
3. Modh, S. (2010) Managing Natural Disaster: Hydrological, Marine and Geological Disasters, Macmillan, Delhi.
4. Singh, R. B. (ed.), (2006) Natural Hazards and Disaster Management: Vulnerability and Mitigation, Rawat Publications, New Delhi.
5. Sinha, A. (2001). Disaster Management: Lessons Drawn and Strategies for Future, New United Press, New Delhi.
6. Stoltman, J.P. et al. (2004) International Perspectives on Natural Disasters, Kluwer Academic Publications. Dordrecht.
7. Singh Jagbir (2007) "Disaster Management Future Challenges and Opportunities", Publisher- I.K. International Pvt. Ltd. S-25, Green Park Extension, Uphaar Cinema Market, New Delhi, India (www.ikbooks.com).

**THIRD SEMESTER**  
**Core Course: C-5: Climatology**  
**Total Marks: 100**  
**60(Th) +20(P)+20(IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Atmospheric Layer and Thermal Variation (10 Classes)**

- Nature, Composition and Structure of Atmosphere
- Factors Controlling insolation, Heat Budget of Atmosphere
- Factors controlling Horizontal and Vertical Distribution of Temperature

**Unit 2: Atmospheric Pressure, Air Circulation and Precipitation (20 Classes)**

- Global atmospheric pressure belts and their oscillation
- Planetary Wind System, Forces affecting Movement of Air, Monsoon
- Forms and types of precipitation
- Air Masses: Origin, classification and characteristics
- Fronts: source regions, types and associated weather

**Unit 3: Weather Disturbances and Climatic Classification (10 Classes)**

- Cyclones: Tropical and Temperate, Effects of El Niño and La Niña
- Climatic classification after Köppen

**Unit 4: Practical (20 Classes)**

- Construction of a schematic diagram of the vertical layers of earth's atmosphere and tabulation of compositional characteristics
- Drawing and interpretation of rainfall-temperature-humidity graph of tropical, sub-tropical and temperate regions/stations
- Study of weather condition depicted by Indian Weather maps and prediction of weather conditions for next 48 hours

**Book Suggested:**

1. Barry R. G. and Carleton A. M., 2001: Synoptic and Dynamic Climatology, Routledge, UK.
2. Barry R. G. and Corley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York.
3. Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi
4. Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: The Atmosphere: An Introduction to Meteorology, Prentice-Hall, Englewood Cliffs, New Jersey.
5. Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi.
6. Trewartha G. T. and Horn L. H., 1980: An Introduction to Climate, McGraw-Hill.
8. Lal, D. S. (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad

**Core Course: C-6: Evolution of Geographical Thought**

**Total Marks: 100**

**60(Th) +20(P) +20(IA)**

**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Foundation of Geography (20 Classes)**

- Pre-Modern - Early Origins of Geographical Thinking with reference to the Classical : Greek, Roman, Indian, and Arab
- Modern - Evolution of Geographical Thinking and Disciplinary Trends in Germany, United States of America

**Unit 2: Dichotomies in Geography (10 Classes)**

Environmental Determinism and Possibilism, Systematic and Regional, Ideographic and Nomothetic

**Unit 3: Explanation in Geography (20 Classes)**

- Quantitative Revolution and its Impact, Systems Approach Morphology of landscape, Areal differentiation, locational school
- Humanism and Behaviouralism

**Unit 4: Practical (10 Classes)**

- Outline of the world map of Hecataeus, Anaximander, Eratosthenese, and Ptolemy
- Outline of the world map of Mercator

**Books Suggested:**

1. Arentsen M., Stam R. and Thuijjs R., 2000: Post-modern Approaches to Space, ebook.
2. Bhat, L.S. (2009) Geography in India (Selected Themes). Pearson
3. Bonnett A., 2008: What is Geography? Sage.
4. Dikshit R. D., 1997: Geographical Thought: A Contextual History of Ideas, Prentice– Hall India.
5. Hartshorn R., 1959: Perspectives of Nature of Geography, Rand MacNally and Co.
6. Holt-Jensen A., 2011: Geography: History and Its Concepts: A Students Guide, SAGE.
7. Johnston R. J., (Ed.): Dictionary of Human Geography, Routledge.
8. Johnston R. J., 1997: Geography and Geographers, Anglo-American Human Geography since 1945, Arnold, London.
9. Kapur A., 2001: Indian Geography Voice of Concern, Concept Publications.
10. Martin Geoffrey J., 2005: All Possible Worlds: A History of Geographical Ideas, Oxford.
11. Soja, Edward 1989. Post-modern Geographies, Verso, London. Reprinted 1997: Rawat Publication, Jaipur and New Delhi.

**Core Course: C-7: Population and Settlement Geography**

**Total Marks: 100**

**60(Th) +20(P) +20(IA)**

**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Field of Population Geography (15 classes)**

- Meaning and scope of population geography; sources of population data
- Malthus theory of population growth; and Demographic Transition Model
- Factors influencing distribution and density of population
- Causes and consequences of migration

**Unit 2: Population Characteristics and Population-Resource Relationship (15 classes)**

- Age-Sex composition; literacy and education; and occupational composition
- Concept of population-resource relationship with reference to optimum population, over population and under population

**Unit 3: Field of Settlement Geography (15 classes)**

- Meaning and scope of settlement geography
- Concept of hierarchy of settlements and Christaller's Central Place Theory
- Factors influencing origin and growth of rural and urban settlements

**Unit 4: Practical (15 classes)**

- Determination of Spatial Mean and Median Centres of Settlements and Standard Distance
- Trend of world population growth, major population density zones in the world
- Age-Sex pyramid
- Mapping Settlement Types and Pattern

**Books Suggested:**

1. Leong, G.C. and Morgan, G.C., 1992: Human and Economic Geography, Oxford University Press, Oxford
2. Chandna, R.C., 1986: A Geography of Population, Kalyani Publishers, New Delhi 18
3. Clarke, J.I., 1972: Population Geography, Pargamon Press, Oxford
4. Singh, R.L. and Sing, K.N. (eds), 1975: Readings in Rural Settlement Geography, BHU, Varanasi
5. Singh., R.Y., 1994: Geography of Settlement, Rawat Publication, Jaipur & Delhi
6. Zelinsky, W., 1966: A Prologue to Population Geography, Printice-Hall, Englewood Cliffs.
7. Hagget, P., 1972: Geography: A Modern Synthesis, Harper & Row, New York
8. Money, D.C., 1972: Patterns of Settlement, Evan Brothers, London

## Generic Elective Paper

### Generic Elective: GE-3: Development Studies

Total Marks: 100

60 (Th) +20(R) + 20(IA)

Total Credit: 6 (Total Number of Classes: 60)

#### Unit 1: Defining Development (15 classes)

- Introduction: Changing Concept of Development, Measuring development: Indicators (Economic, Social and Environmental)
- Concept of Under development
- Theories of Development: Myrdal, Rostow and Friedmann

#### Unit 2: Global Pattern of Development (15 classes)

- Human development: International, interstate comparison of India
- Inter-Dependence of Urban and Rural Sectors of the Economy

#### Unit 3: Rural Development (15 classes)

- Need for Rural Development, Gandhian Concept of Rural Development
- Area Based Approach to Rural Development: Green Revolution, Drought Prone Area Programmes, PMGSY

#### Unit 4: Project Report (15 classes)

A Report on Physical and Socio-Economic Access to Elementary Education, Primary Health Care and Micro credit in nearby area

#### Book Suggested:

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., 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. Krishnamurthy, J. 2000: Rural Development - Problems and Prospects, Rawat Publs., Jaipur
7. Lee D. A. and Chaudhri D. P. (eds.), 1983: Rural Development and State, Methuen, London.
8. Misra R. P. and Sundaram, K. V. (eds.), 1979: Rural Area Development: Perspectives and Approaches, Sterling, New Delhi.
9. Misra, R. P. (ed.), 1985: Rural Development: Capitalist and Socialist Paths, Vol. 1, Concept, New Delhi.
10. Palione M., 1984: Rural Geography, Harper and Row, London.
11. Ramachandran H. and Guimaraes J.P.C., 1991: Integrated Rural Development in Asia – Learning from Recent Experience, Concept Publishing, New Delhi.

**Skill Enhancement Course**  
**Skill Enhancement Course: SEC-1: Statistical Methods in Geography**  
**Total Marks: 50**  
**40 (Th) + 10 (IA)**  
**Total Credit: 2 (Total Number of Classes: 30)**

Unit 1: Nature of Geographic Data (20 classes)

- Use of Data in Geography, Geographical Data Matrix, Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio)
- Tabulation and Descriptive Statistics their use in Geography: Frequencies, Cross Tabulation, Measures of Central Tendency (Mean, Median and Mode) Measures of Dispersion (Range, Standard Deviation and Relative Dispersion)

Unit 2: Quantitative Expression of Geographic Data (10 classes)

- Use of Sampling Technique in Geography, Method of Sampling (Purposive, Random, Systematic and Stratified)
- Correlation (Karl Pearson and Spearman's Rank method) and Regression analysis

**Books Suggested:**

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. Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan Private Ltd., New Delhi
8. Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.
9. Spiegel M. R.: Statistics, Schaum's Outline Series.
10. Yeates M., 1974: An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, NewYork.
11. Shinha, I. (2007) Sankhyikibhugol. Discovery Publishing House, New Delhi



**FIFTH SEMESTER**  
**Core Course: C-11: Regional Planning and Development**  
**Total Marks: 100**  
**60 (Th) +20 (P) + 20 (IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Fundamentals (15 classes)**

- Definition of Region, Evolution and Types of Regional planning (Formal and Functional), Regionalism and Types of regional Planning
- Concept of Development, Sectoral Development and Regional Development, and development indicators

**Unit 2: Models for Development (15 classes)**

- Delineation of Planning Region; Regionalization of India for Planning (Agro Ecological Zones)
- Theories and Models for Regional Planning: Growth Pole Model of Perroux; Growth Centre Model in Indian Context

**Unit 3: Developmental Strategies (15 classes)**

- Global Pattern of Development, Inter-regional variations
- Changing Concept of Development, Concept of underdevelopment
- Regional Planning in India, Decentralization and Multi-Level Planning - State, District and Block level planning in India
- Planning regions of India; Case Studies of a River Valley Development Plan – Damodar Valley and National Capital Region Plan

**Unit 4: Practical: (15 classes)**

- Measures of Disparity Calculation for Indicators of Development
- Measures of level of development with the help of Z-Scores
- Delineation of Industrially backward regions of India with choropleth mapping
- Regional mapping of developmental activities in India with special reference to Assam

**Book Suggested:**

1. Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons.
2. Claval P.I, 1998: An Introduction to Regional Geography, Blackwell Publishers, Oxford and Massachusetts.
3. Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press, Massachusetts.
4. Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London.
5. 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.
6. Haynes J., 2008: Development Studies, Polity Short Introduction Series.
7. Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press, Massachusetts.
8. Peet R., 1999: Theories of Development, The Guilford Press, New York.
10. World Bank 2001-05: World Development Report, Oxford University Press, New

**Core Course: C-12: Remote Sensing and Geographic Information System**

**Total Marks: 100**  
**60 (Th) +20 (P) + 20 (IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Fundamentals of Remote Sensing and GIS (18 classes)**

- Remote Sensing and GIS: Definition, Components and Principles, Electro Magnetic Radiation
- Remote Sensing, Platforms and Types, Global Positioning System (GPS ) Principles and application
- Aerial Photography: Types and Geometry of Aerial Photograph, Satellites (Landsat and IRS) and Sensors, Type of resolution

**Unit 2: Geographic Information System (16 classes)**

- GIS Data Structures: Types (spatial and Non-spatial), Raster and Vector Data Structure
- Image Classification: Supervised and Un-supervised, Geo-Referencing; Editing and Output
- Overlay Operations and its advantages

**Unit 3: Application of Remote Sensing and GIS (10 classes)**

- Elements of Image interpretation and application of Remote Sensing and GIS: Land use/ Land Cover, Urban Sprawl Analysis; Forests Monitoring, Watershed management, and Disaster management

**Unit 4: Practical (16 classes)**

- Geo-Referencing the map/Toposheet, Drawing base map from Satellite imagery/Toposheet,
- Mapping point, line and polygon features, Land use/ Land Cover mapping (Supervised and Un-supervised), Isopleths, Choropleth and Chorochromatic mapping
- Relief analysis from DEM. Data collection from GPS and mapping

**Books Suggested:**

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.

**Discipline Specific Elective**  
**Discipline Specific Elective: DSE-1: Soil and Biogeography Geography**  
**Total Marks: 100**  
**60(Th)+20(P)+20(IA)**  
**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Nature and Scope of Soil Geography (15 classes)**

- Definition and Scope of Soil Geography, Soil Formation, Characteristics and Properties, Soil as life supporting system
- Soil profile (Soil horizon) – their characteristics and significance

**Unit 2: Soil and Land Management (15 classes)**

- Physical and Chemical properties of soil: Soil texture, Structure and Moisture, Soil colour, pH value, Organic Matter and NPK.
- Processes and Controlling factors of soil erosion, Various measures of soil conservation,

**Unit 3: Concepts of Biogeography (15 classes)**

- Definition and scope of biogeography, Concept and Components of Biosphere, vertical and horizontal limits of biosphere
- Concept of Ecology and Ecosystem, Types of Ecosystem, Trophic Structure, Food Chain and Food Web, Energy flow in Ecosystem
- Concept of biodiversity, its types and conservational issues, Nature and distribution of biodiversity in N.E. India and Assam; Man as an agent of environmental/ecological change

**Unit 4: Practical (15 classes)**

- Construction and interpretation of soil profile with the data derived from the field (college campus/ river site/ foot hill, etc.)
- Drawing and interpretation of soil map of India/North East India
- Mapping of vegetation of India/north east India, Representation of soil-vegetation relationship along selected cross-section of India and North-East India Biogeographic regions of the world
- Mapping of the national parks and sanctuaries of India with the major species therein

**Book Suggested:**

1. Bunting, B. T., 1967: The Geography of Soil, Hutchinson, London.
2. Foth, H. D. and Turk, L. M. 1972: Fundamentals of Soil Science, John Wiley, New York.
3. GovindaRajan, S. V. and Gopala Rao, H. G., 1978: Studies on Soils of India, Vikas, New Delhi.
4. Goudie, Andrew, 1981: The Human Impact, Basil Blackwell, Oxford.
5. Hussain, M. (ed), 1994: Biogeography (Part I&II), Anmol Publications Pvt. Ltd., New Delhi.
6. Newbiggin: Plant and Animal Geography.
7. Pears, N., 1985: Basic Biogeography. 2nd Edition, Longman, London.
8. Robinson, H., 1982: Biogeography, E.L.B.S., Mc Donald & Evans, London.

**Discipline Specific Elective: DSE-2: Urban and Cultural Geography**

**Total Marks: 100**

**60(Th)+20(P)+20(IA)**

**Total Credit: 6 (Total Number of Classes: 60)**

**Unit 1: Urban Geography (15 classes)**

- Introduction, nature and scope, Patterns of Urbanization in developed and developing countries
- Functional classification of cities: Quantitative and Qualitative Methods

**Unit 2: Urban Issues (15 classes)**

- Problems of housing, slums, civic amenities (water and transport)
- Case studies of Delhi, Mumbai, and Guwahati with reference to Land use and Urbanization, Urban sprawl, Sustainable development of cities

**Unit 3: Cultural Geography (20 classes)**

- Introduction, Nature and Scope of Cultural Geography
- Concept of Society, Culture, Race, and Ethnicity
- Major Tribes of India and their problems

**Unit 4: Practical (10 classes)**

- Major Tribal area of India
- Linguistic Region of India
- Cultural Region of the world

**Books Suggested:**

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
11. Singh, R.B. (Eds.) (2001) Urban Sustainability in the Context of Global Change, Science Pub., Inc., Enfield (NH), USA and Oxford & IBH Pub., New Delhi.
12. Singh, R.B. (Ed.) (2015) Urban development, challenges, risks and resilience in Asian megacities. Advances in Geographical and Environmental Studies, Springer