

DEPARTMENT OF GEOGRAPHY
B.A./B.SC. HONOURS SYLLABUS

Semester	Paper Code No	Papers	Credits	Marks
I	GEO-UG-E101	Physical Geography	4	100
II	GEO-UG-E201	Human Geography	4	100
III	GEO-UG-E301	Economic Geography	4	100
IV	GEO-UG-C401	Elements of Geomorphology	4	100
	GEO-UG-C402	Advanced Cartography	4	100
V	GEO-UG-C501	Geography of India	4	100
	GEO-UG-C502	Analytical Techniques in Geography	4	100
VI	GEO-UG-C601	Evolution of Geographical Thoughts	4	100
	GEO-UG-C602	Disaster Management with special reference to India (option A)	4	100
	GEO-UG-C603	Population Geography (option B)	4	100
	GEO-UG-C604	Soil & Biogeography(option C)	4	100
	GEO-UG-C605	Geography of Tourism(option D)	4	100
	GEO-UG-C606	Settlement Geography(option E)	4	100

GEO-UG-C101: Physical Geography

Unit I: Earth's Interior & Earth Movements

- i. Nature and scope and its relation with Earth Science
- ii. Earth's Interior: Composition and Structure
- iii. Folds and Faults- Origin and Classification.

Unit II: Rocks, Agents of Denudation and Deposition

- i. Rocks: - Origin, Classification and Characteristics.
- ii. Denudation: Weathering Meaning, Types.
- iii. Agents of erosion- river and glacier and their resultant topographical features.

Unit III: Atmospheric Circulation

- i. Structure and composition of atmosphere. Atmospheric temperature- Insolation and heat budget, vertical and horizontal distribution of temperature.
- ii. Atmospheric pressure and winds-Air mass, Frontogenesis, Tropical Cyclone and Origin and mechanism of Monsoon
- iii. Global warming and Climate change: Concept and consequences

Unit IV: Hydrology and Oceanography

- i. Hydrological Cycle: Factors affecting run-off, infiltration and groundwater.
- ii. Water Storage and Circulation.
- iii. Ocean Salinity, Temperature , Tides: Origin and Types, Ocean Currents (Pacific and Indian)

Reading List

1. Alan H. Strahler, Arthur Strahler, *Introducing Physical Geography*, John Wiley & Sons, New York, 2005
2. King, C.A.M., *Oceanography for Geographers*, E. Arnold, London, 1975
3. Garrison, T., *Oceanography*, Wadsworth.com. USA 1998. King, C.A.M., *Beaches and Coasts*, E. Arnold, London, 1972
4. Monkhouse, F.J., *Principles of Physical Geography*, Hodder and Stoughton, London.1960
5. Pitty, A., *Introduction to Geomorphology*, Methuen, London, 1974
6. Steers, J.A., *The Unstable Earth: Some recent views in geography*, Kalyani Publishers, New Delhi, 1964.
7. Strahler, A.N. and Strahler, A.H., *Modern Physical Geography*; John Wiley & Sons, Revised edition 1992
8. Thornbury, W.D., *Principles of Geomorphology*, Wiley Eastern, 1969
9. Wooldridge, S.W. and Morgan, R.S., *The Physical Basis of Geography - An Outline of Geomorphology*, Longman Green & Co., London, 1959
10. Critchfield, H., *General Climatology*, Prentice-Hall, New York,1975.

GEO-UG-C201: Human Geography**Unit I: Introduction to Human Geography**

- i. Definition, nature and scope.
- ii. Fundamental concept in Human Geography (Place, Space and Landscape).
- iii. Understanding of man nature relationship: Determinism, Possibilism and Neo-determinism.

Unit II: Population and Settlement

- i. Growth of population, distribution, density of the world;
- ii. Migration: causes, types and consequences.
- iii. Theory and Model of population growth: Malthus and Demographic Transition.
- iv. Structure, Types and characteristics of human settlement; Christaller's Central Place Theory.

Unit III: Socio-Economic and political dimension

- i. Languages, religion and races- definition and world distribution;
- ii. Habitat and economy of selected communities (Santhal, Khasi, Eskimo, Bushmen).
- iii. Economic Activities: Concept and classification-primary, secondary and tertiary
- iv. Concept of Nation and State; Frontiers and Boundaries-Definition and Types

Unit IV: Geography and Development.

- i. Concept of development and Sustainable Development.

- ii. Indicators and measures of development (economic, social and environmental)
- iii. Global pattern of development: inter-regional variations, HDI.

Reading List

1. Bergwan, Edward E., *Human Geography: Culture. Connections and Landscape*, Prentice Hall, New Jersey. 1995
2. Carr, M., *Patterns, Process and change in Human Geography*, MacMillan Education, London, 1987
3. Daniels Peter, Bradshaw Michae, Shaw Davil and Side way James, *Human Geography: Issues for the Twenty First Century*, Prentice Hall, New Jersey, 2001
4. Fellman, J.L., *Human Geography-Landscapes of H u m a n Activities*, Brownand Benchman Pub., U.S.A, 1997
5. DeBlij, H.J., *Human Geography, Culture, Society and Space John Wiley*, New York, 1996
6. James, M. Robenstein, *An Introduction to Human Geography*, Prentice Hall, New Jersey, 2001
7. Johnston, R.J. (editor), *Dictionary of Human Geography Blackwell*, Oxford, 1994.
8. Mc Bride, P.J., *Human Geography: Systems, Patterns and Change*, Nelson, U.K. and Canada, 1996
9. Michael, Can, *New Patterns: Process and Change in Human Geography Nelson*, 1997
10. Rubenstein, J.H. and Bacon, R.S., *The Cultural Landscape -A Introduction to Human geography*, Prentice Hall, India, New Delhi, 1990

GEO-UG-C301: Economic Geography

Unit I: Introduction

- i. Definition, nature, scope and recent trends in economic geography.
- ii. Its relation with economics and allied subjects.
- iii. Concept and classification of Economic Activities – Primary, Secondary and Tertiary.

Unit II: Resources

- i. Definition, Concept and classification of Resources
- ii. Classification of Natural Resources.
- iii. Classification of minerals; ferrous and non-ferrous and their world distribution, energy minerals and resources;
- iv. Conservation and management of Resource for sustainable Development.

Unit III: Primary Activities

- i. Distribution primary economic activities- mining, forestry, fishing.
- ii. Agriculture-physical, social, cultural environment influencing crop production; spatial distribution of major food and cash crops of the world.

Unit IV: Secondary and Tertiary Activities

- i. Industries- factors of localization, major industries-iron and steel, textile, chemicals, paper;
- ii. Transport: geographical factors in their development, major water, land and air transport;
- iii. Internal and international trade.

Reading List

1. Boesch, H., *A Geography of World Economy*, D. Van Nostrand Co., New York, 1964
2. Chapman, J.D., *Geography and Energy*, Longman, London, 1989
3. Gregor, H.F., *Geography of Agriculture*, Prentice Hall, New Jersey, USA, 1970
4. Griggs, D.B., *The Agricultural Systems of the World*, Cambridge University Press, New York, 1974
5. Hartshorne, T.N. and Alexander, J.W., *Economic Geography*, Prentice Hall, New Delhi, 1988
6. Jones, C.F. and Darkenwald, G.G., *Economic Geography*, McMillan Co., New York, 1975
7. Millar, E., *Geography of Manufacturing*, Prentice Hall, New York, 1962
8. Neil Coe, Philip Kelly, and Henry Wai-Chung Yeung, *Economic Geography: A Contemporary Introduction*, Wiley-Blackwell, New York, 2007
9. Raza, M. and Agrawal, Y., *Transport Geography of India*, Concept, New Delhi, 1986
10. Baldwin, Richard, Rikard Forslid, Philippe Martin, Gianmarco Ottaviano, Frederic Robert Nicoud, *Economic Geography and Public Policy*, Princeton University Press, New Jersey, 2005

GEO-UG-C401: Elements of Geomorphology

Unit I: **Origin and Constitution of Earth.**

- i. Geomorphology-meaning, scope
- ii. Evolution of Geomorphic concept : Davis & Post Davisian; Fundamental concepts and recent trends
- iii. Theories of origin of the earth: Kant, Chamberlin and Big Bang theory

Unit II: **Earth Movements**

- i. Earth Movements: Slow and Sudden forces
- ii. Isostasy (Airy and Pratt), Continental Drift theory, Sea floor spreading and Plate Tectonics.
- iii. Geosynclines: Concept and stages
- iv. Mountain Building Theories (Kober and A. Holmes)

Unit III **Geomorphic Agents and Processes**

- i. Mass Wasting: Definition and types
- ii. Process of landform (underground water, Sea Waves and Aeolian) and their resultant landforms.
- iii. Geomorphic Cycle: Davis and W. Penck. Rejuvenation

Unit IV **Applied Geomorphology**

- i. Definition, nature and scope of Applied Geomorphology.
- ii. Application of Geomorphology in transportation, mining and urbanization.
- iii. Geomorphology and environmental hazards with special reference to landslides and flash floods.

Reading List

1. Dury, G.H., *The Face of the Earth*, Penguins, 1980
2. Ernst, W.G., *Earth systems -Process and Issues*, Cambridge University Press, 2000
3. Kale, V. and Gupta, A., *Element of Geomorphology*, Oxford University Press, Calcutta, 2001

4. Kondolf, G. Mathias and Piegery, Herve, *Tools in Fluvial Geomorphology*, Wiley Publisher, 2003
5. Pitty, A., *Introduction to Geomorphology*, Methuen, London, 1974
6. Small, R.J., *The Study of Landforms*, Mc.Graw Hill, New York, 1985
7. Sparks, B.W., *Geomorphology*, Longmans, London, 1960
8. Steers, J.A., *The Unstable Earth*, Methuen and Co, London, 1945
9. Strahler, A.N., *Environmental Geo-Science*, Hamilton Publishing, Santa Barbara, 1973
10. Strahler, A.N. and Strahler, A.H., *Modern Physical Geography*, John Wiley & Sons, Revised edition 1992

GEO-UG-C402: Advanced Cartography

Unit I: Cartography and Map Projections

- i. Definition of Scale: Simple Scale, diagonal scale, scale conversion.
- ii. Construction, Properties, limitation and uses of (a) Gnomonic Projection (polar case), (b) Simple Conical Projection with one standard parallel, (c) Cylindrical Equal Area Projection and (d) Mercator's Projection and UTM.

Unit II: Topographical Maps

- i. Interpretation of topographical maps: plains, plateaus, mountains, coastal area [any one]: (Broad physiography, drainage, natural vegetation, settlement, communication and transport); simple profile and transect chart to be covered.
- ii. Determinants and representation of gradient and average slope (Wentworth's method), relative relief, drainage pattern and density (Rotameter and Planimeter), dissection index, profile –serial, super-imposed, composite and projected.

Unit III: Geological Maps and Rocks Identification

- i. Drawing of sections and interpretation of relief and structure from the geological maps showing: a) Horizontal beds b) Uniclinal beds c) folded d) faulted e) unconformities f) intrusions.
- ii. Cartographic Methods, their uses and interpretation: Pie Diagram, Proportional Circles, dot and sphere, Choropleth, isopleths and Age sex-pyramid.

Unit IV: Field Visit and Field Observation

Field report is to be prepared (handwritten) on the basis of the study of the given area [administrative division/physical division]. The topic should be related to physical/socio-economic/disaster management. Collected primary data should be processed by suitable methods. Report should contain adequate number of diagrams, maps and photographs. Photocopying is not allowed. Field report should be authenticated by the concerned supervisor(s). The field report is subject to viva examination for evaluation. Participation of field work and preparation of report is mandatory for all the students.

Reading List

1. I.J. Platt, *Series of Elementary exercises upon Geological Maps*, Thomas Murby and Co, London, 1928
2. M. Ishtiaqu, *A Text Book of Practical Geography*, Heritage Publishers, New Delhi, 1989
3. R. P. Mishra & A. Ramesh, *Fundamentals of Cartography*, Concept Publication, New Delhi, 1989

- A. Sarkar, *Practical Geography: A Systematic Approach*, Orient Longman, 1997
4. T. P. Kanitkar & S. V. Kulkarni, *Surveying and Levelling*, Vol I & II, Vidyarthi Gruh Prakashan,
5. Z. A. Khan, *A Text Book of Practical Geography*, Concept, New Delhi, 1998.
6. F. J. Monkhouse & H. R. Wilkinosn, *Maps and Diagrams*, Methuen and Co, London, 1994

GEO-UG-C501: Geography of India

Unit I: Physical Setup

- i. Concept of Region and Regionalization, Macro, meso and micro regions of India.
- ii. Physiographic Division of India
- iii. Major Drainage System – Himalayan and Peninsular Rivers.
- iv. Climate and Its Characteristics (monsoon)

Unit II: Natural Resources

- i. Soils types and distribution.
- ii. Natural Vegetation.
- iii. Mineral Resources: Iron-ore and Bauxite (Production and Distribution)
- iv. Energy Resources: Coal, Petroleum, Hydro-electricity Solar and Wind.

Unit III People and Economy

- i. Growth of population, distribution and density; Urbanization and mobility.
- ii. Agriculture growth; agricultural regions; green revolution; Industrial growth; industrial regions of India; SEZ.
- iii. Transport and Communication; Composition of domestic and foreign trade.

Unit IV: Geography of Sikkim

- i. Physical setup of Sikkim.
- ii. Economy of Sikkim: Tourism, industry and Agriculture.
- iii. Population: Growth, Distribution and Density.

Reading List

1. Deshpande, C.D., *India- A Regional Interpretation*, Northern Book Centre, New Delhi, 1992
2. Farmer, B.H., *An Introduction to South Asia*, Methuen, London, 1983
3. Govt. of India, *India - Reference Annual - 2001*, Pub. Div, New Delhi, 2001
4. Govt. of India, *National Atlas of India*, NATMO Publication, Calcutta
5. Govt. of India, *The Gazetteer of India*, Vol I & III Publication Division, New Delhi, 1965
6. Khullar, D.R., *India: A Comprehensive Geography*, Kalyani Publication, New Delhi, 2006
7. Learmonth, A.T.A. et.al (eds.), *Man and Land of South Asia*, Concept, New Delhi, 1982
8. Mitra, A., *Levels of Regional Development in India*, Census of India, Vol I, Part I-A (i) and (ii), New Delhi, 1967
9. Routray, J.K., *Geography of Regional Disparity*, Asian Institute of Technology, Bangkok, 1993
10. Shafi, M., *Geography of South Asia*, McMillan & Co., Calcutta, 2000

GEO-UG-C502: Analytical Techniques in Geography

Unit I: Tabulation and Descriptive Statistics

- i. Mean, Median and Mode; graphical location of median and mode; quartile, deciles and percentiles.
- ii. Graphical representation of Frequency distribution: cumulative frequency polygon, cumulative frequency curve and ogive.
- iii. Range, mean deviation, standard deviation (step-deviation method) and variance. Bi-Variate Data: scatter diagrams, correlation, rank correlation and simple regression.

Unit II: Theoretical Frequency Distribution

- i Normal curve and its properties and uses; theoretical frequency under normal curve; fitting the normal curve to data.
- ii Sampling Techniques: Meaning and Types.

Unit III: Remote Sensing and Application

- i Definition, principles, platforms and types;
- ii Electromagnetic radiation; flow of energy; physical basis and interaction with earth surface and atmosphere(vegetation, soil, water and cloud).
- iii Aerial Photography: definition, types and scale. Photographic elements: key to photo interpretation;
- iv Aerial photo interpretation: orientation of stereo model under stereoscope (pocket); geometry of aerial photograph (scale, height and focal length)
- v Visual satellite image interpretation (LIS III etc)

Unit IV: GIS and GPS

- i. GIS: Definition and components;
- ii. GIS: database, nature of geographic data: spatial and non-spatial data, automatic thematic linkages and design.
- iii. Computers and GIS: exercises on PC-based GIS software, RASTER-VECTOR transformation: overlay analysis and preparation of thematic maps
- iv. GPS: introduction, basics and application of GPS.

Reading List

1. Barber, G. M., *Elementary Statistics for Geographers*, Guilford Press, New York, 1988
2. Clark, W. A.V. and Hosking, P.L., *Statistical Methods for Geographers*, John Wiley and Sons, New York, 1986
3. Ebdon, D., *Statistics in Geography: A Practical Approach*, Basil Blackwell, Oxford, 1977
4. Gregory, S., *Statistical Methods and the Geographer*, Fourth Edition, Longman, London, 1978
5. Griffith, D.A., and Amrthein, C.G., *Statistical Approaches to Geography*, Prentice Hall, Englewood Cliffs, NJ, 1991
6. Mahmood, A., *Statistical Methods in Geographical Studies*, Rajesh Publication, New Delhi [latest edition].
7. Monroe, C.B. and Chapman, M.J., *Introduction to Statistical Problem Solving in Geography*, WC Brown, Iowa City, 1993
8. Pal, S.K., *Statistics for Geo-scientists: Techniques and Applications*, Concept, New Delhi, 1998
9. Shaw, G. and Wheeler, D., *Statistical Techniques in Geographical Analysis*, John Wiley and Sons, New York, 1985

GEO-UG-C601: Evolution of Geographical Thought

Unit I: Nature of Geography

- i. Nature and scope of Geography: Geography as a spatial science, as interdisciplinary and integrated discipline.
- ii. Place of Geography in the system of Sciences (Physical and Human Sciences).

Unit II: Geographical Tradition

- i. Classical – Greek, Roman and Indian.
- ii. Medieval – Age of Discovery and Arab Geographical Tradition.
- iii. Modern – Humbolt & Ritter, European and American schools of thought

Unit III: Dualism and Dichotomy in Geography

- i. Physical or Human science (dichotomy)
- ii. Regional versus Systematic, Ideographic versus Nomothetic (dualism)

Unit IV: Contemporary movements in Geography

- i. Radicalism - Radical/Marxist ideas in Geography.
- ii. Humanistic and Behaviorism; Quantitative Revolution; and model building (Chorley, Hagget and Haggerstrand).

Reading List

1. Adhikari, *Fundamentals of Geographic Thought*, Chaitanya Publishing House, Allahabad, 1992
2. Chorley, R.J. and Haggett, P. (Eds), *Models in Geography*, Methuen, London, 1967
3. Dickinson, R. E., *The Makers of Modern Geography*, Routledge and Kegan Paul, London, 1969
4. Dikshit, R.D., *Geographical Thought: A Contextual History of Ideas*, Prentice Hall of India Pvt Ltd, New Delhi, 1997
5. R. Hartshorn, *The Nature of Geography*, Association of American Geographers, Washington DC, 1939
6. Harvey, D., *Explanation in Geography*, Edward Arnold, London, 1969
7. Holt-Jenson, A., *Geography: Its History and Concepts*, Harper and Row, 1980
8. Hussain, M., *Evolution of Geographical Thought*, Third Edition, Rawat Publication, Jaipur, 1995
9. Johnston, R.J., *Philosophy and Human Geography*, Edward Arnold, London, 1983
10. Johnston, R.J., *Geography and Geographers: Anglo American Human Geography Since 1945*, Fourth Edition, Edward Arnold, London, 1991

GEO-UG-O602: Disaster Management with Special Reference to India

Unit I: Introduction and Classification of Disasters

- i. Concept of Hazard, Stress, Risk & Vulnerability and Disaster.
- ii. Types of Disasters
- iii. Classification of Disasters: - Earthquakes, Cyclones, Tsunami, Floods, Drought, Landslides, Forest Fires, Global warming, Ozone Depletion etc.

Unit II: Trends and Patterns in Hazards

- i Trends, frequency and patterns of world hazards.

- ii Global distribution in frequency of hazards; Causes and Consequences;
- iii Enhancing factors in Disaster: location, urbanization, slope etc.

Unit III: Disaster Preparedness

- i. Approaches to Disaster Management
- ii. Pre-disaster stage, Emergency Stage, Post-disaster stage; Rehabilitation and Mitigation.
- iii. Study of distribution of selected hazards in the hills

Unit IV: Field Report/Case Study

Case study of a region where natural/man-made disaster has occurred. Students are required to study the causes, consequences, programmes, disaster management strategies and their implications and write a field report. It contains some diagram, photos and maps. Evaluation will be based on field report and viva voce examination.

Reading List

- R. B. Singh., *Environmental Geography*, Heritage Publishers, New Delhi, 1990
 Savinder Singh., *Environmental Geography*, Prayag Pustak Bhawan, 1997
 B. I. Kates & White, G. F., *The Environment as Hazards*, Oxford, New York, 1978
 R. B. Singh., *Disaster Management*, Rawat Publication, New Delhi, 2000
 H. K. Gupta, *Disaster Management*, University Press, India, 2003
 R. B. Singh., *Space Technology For Disaster Mitigation in India*, (INCED), University of Tokyo, 1994
 Satender, *Disaster Management in Hills*, Concept Publishing Co. New Delhi, 2003
 A. S. Arya., *Action Plan For Earthquake*, Disaster Mitigation in V. K. Sharma (ed) Disaster Management, IIPA Publication New Delhi, 1994
 R. K. Bhandari., *An Overview on Natural & Manmade Disaster & their Reduction*, CSIR, New Delhi
 M. C. Gupta, *Manuals on Natural Disaster management in India*, National Centre for Disaster management, IIPA, New Delhi, 2001
 Jana, N. C., *Tsunami in India: Impact Assessment and Mitigation Strategies*, Prayas, Kolkata, 2008

GEO-UG-O603: Population Geography

Unit I: Introduction

- i. Nature, scope, contents of Population geography
- ii. Its relationship with other branches of social science (Sociology, Demography).
- iii. Types and Source of Data (Census, Vital statistics, NSS and NFHS)

Unit II: Growth and composition of Population

- i. Growth, Density and Distribution population and their determinants: world and India
- ii. Age-Sex Composition, Literacy and rural-urban

Unit III: Dynamics, Policies and Issues.

- i. Population size, Distribution and Growth – Determinants and Patterns; Theories of population growth: Malthusian and Marx
- ii. Population dynamics: Fertility, Mortality, Determinants and Consequences of Migration.
- iii. Population policies of India. Contemporary Issues – Patterns of child sex ratio and Ageing Population.

Unit IV: Population and Environment Interface

Students are expected to undertake field study of a local area to study the population and environment relationship in that region and write a handwritten field report.

Reading List

1. Beaujeu-Garnier, J., *Geography of Population*, (Translated by Beaver, S.H.) Longmans, London, 1966
2. Census of India Series-I, *India Provisional Population Totals*, Published by Registrar General & Census Commissioner, India, 2001
3. Census of India, *India: A State Profile* Office of the Registrar General of India, Census Operations, New Delhi
4. Chandna, R.C., *Geography of Population: Concepts, Determinants and Patterns*, Kalyani Publishers, New Delhi, 2000
5. Clark, J., *Population Geography*, Permagon Press, New York, 1965
6. Gary, L. Peters, Robert P. Larkin, *Population Geography: Problems, Concepts and Prospects*, Kendall Hunt Pub Co., London, 2005
7. Mohammad, Izhar Hassan, *Population Geography*, Eastern Book Corporation, 2005
8. Sundram, K.V. & Nangia, Sudesh, (editors), *Population Geography*, Heritage Publishers, Delhi, 1986
9. Peters, G.L. and Larkin, R.P., *Population Geography: Problems, Concepts and Prospects* Kendele-Hunt Iowa, 1979
10. Premy, M.K., *Population in India in the New Millenium: Census of India 2001*, Naitonal Book Trust, New Delhi, 2006

GEO-UG-O604: Soil and Biogeography

Unit I: Introduction

- i. Definition, scope and significance of Biogeography,
- ii. Trophic levels, food chain and energy flow in ecosystem
- iii. Biogeochemical cycle and carbon cycle in ecosystem
- iv. Biosphere as an ecosystem

Unit II: Flora and Fauna

- i. Animal kingdom: evolution of animals, dispersal of animal, distribution of animal on land and marine.
- ii. Plant kingdom: evolution of plants, successional development of plant community and dispersal plants
- iii. Biomes: meaning, concepts and types

Unit III: Ecological Regions and National Parks

- i. Ecological regions of India : their interrelations, problems, conservation and management: (a) Mangrove (b) Tropical rainforest (c) Desert (d) Mountain (e) Fresh water and marine
- ii. National Parks and Sanctuaries in India
- iv. Biodiversity and conservation & management

Unit VI: Field Study

Detailed study of a Bio-sphere Reserve with report writing, seminar presentation and viva-voce

Reading List

1. Barry, C., *Biogeography -An Ecological and Evolutionary Approach*, Cox Blackwell, Oxford, 1977
2. Hagget, R.J., *Fundamentals of Biogeography*, Routledge, London, 1988
3. Hagget, R.J., *Geoecology: An Evolutionary Approach*, Routledge, London, 1995
4. Jorge V. Crisci, Liliana Katinas, Paula Posadas, *Historical Biogeography: An Introduction*, Harvard Univ. Press, Massachusetts, 2003.
5. Joy, T., *Biogeography: A Study of Plants in the Ecosphere*, Longman Sci & Tech., U.K. 1993
6. Mark, V. Lomolino, James, H. Brown, Brett, R. Riddle, *Biogeography*, Sinauer Associates Inc, Sunderland, 2005
7. Martin, C., *Plant Geography*, Methuen, 1975
8. Phillip, J., *Zoo Geography, The Geographical Distribution of Animals*, John Wiley, New York, 1957
9. Robinson, H., *Biogeography*, McDonald and Evans, London, 1982
10. Seddon, B., *Biogeography*, Duckworth, London, 1971

GEO-UG-O605: Geography of Tourism

Unit I: Introduction

- i. Definition, scope, approaches
- ii. Geographical parameters of tourism
- iii. Significance of tourism: physical, social, economic and political
- iv. Types of tourism: base on geographical locale (International, domestic, inter-regional, local) and base on reason: Eco-tourism, adventure, religion, health, recreation etc.

Unit II: Tourism Marketing

- i. Marketing: Processes and functions
- ii. Promotion : Role of public and private entrepreneurs
- iii. Factors of promotion [like transport, board and lodging, health infrastructure, security, tourist guides etc]

Unit III: Growth and Development

- i. Growth and development of tourism with special reference to India
- ii. Major tourist centres and their characteristics
- iii. Development of tourism in Sikkim
- iv. Problems and prospects of tourism development (India and Sikkim)

Unit VI: Case study of a Tourist Centre

The student shall have to prepare a hand-written field report based on field work/survey in a tourist centre, supplemented with photographs, tables etc, under a guidance of supervisor/s allotted by the department. The field report is subject to viva for evaluation.

Reading List

1. Bhatia, A.K., *Tourism Development: Principles and Practice*, Sterling Publishers, Delhi, 1997
2. Boniface, BG and Cooper, C, *The Geography of Travel and Tourism*, Hememann, Butterworth,

1994

3. Burns, P.M. and Holden, A, *Tourism: A New Perspective*, Prentice Hall, London, 1995.
4. Burton, S., *Travel Geography*, Pitman, London, 1995
5. C. Michael Hall, *Tourism Planning: Policies, Processes and Relationships*, Pearson Education, 2007
6. Carter, E. and Lowman, G., *Ecotourism*, John Wiley and Sons, New York, 1994
7. Cooper, C., *Tourism: Principles and Practice*, Pitman, London, 1993
8. Geoffrey, Wall and Alister, Mathieson, *Tourism: Change, Impacts, Opportunities*, Pearson Education, 2005
9. Kaul, R.N., *Dynamics of Tourism: A Trilogy*, Sterling Publishers, New Delhi, 1985
10. Page, S., *Urban Tourism*, Routledge and Kegan Paul, London, 1995

GEO-UG-O606: Settlement Geography

Unit I: Introduction

- i. Nature, scope and contents settlement geography
- ii. Site, situation and evolution of settlement

Unit II: Classification of Settlements

- i. Dichotomy of settlement: rural and urban
- ii. Rural: classification, function of village and environment relationship
- iii. Urban: definition, classes of town, classification on culture and functional classification; Salient features of Indian urbanization
- iv. Rural-urban linkages in a metropolitan system in India

Unit III: Settlement System

- i. Models and Theories : the rank size rule, the primate city, the central place theory and urban morphology (concentric zone theory, sector theory and multiple nuclei theories)

Unit IV: Fieldwork

Case study of a settlement, observations of its various characteristics- structure, form, house types, building material, functions, population characteristics, transport, market etc. The student is expected to write a report and present it for the viva-voce examination.

Reading List

1. Bose, A., *India's Urbanization 1947-2000*, Tata McGraw Hill, New Delhi
2. Carter H., *The Study of Urban Geography*, Edward Arnold, London, 1972
3. Chisholm, M., *Rural Settlement and Land Use*, Hutchinson, London, 1970
4. Clout, R.D., *Rural Geography*, Pergamon Press, London, 1970
5. Dickinson, R.E., *City, Region and Regionalism*, Kegan Paul, Trench, Trubner & Co., London, 1947
6. Ghosh, Sumita, *Introduction to Settlement Geography*, Orient Longman, Calcutta, 1998
7. Johnson, J.H., *Urban Geography: An Introductory Analysis*, Pergamon Press, London, 1967
8. Krishan, G., *Nagar Bhoogol*, Punjab State University Text Book Board, Chandigarh (Punjab)
9. Mayer, H.M. & Kohn, C.F.(eds.), *Readings in Urban Geography*, Chicago Printing Press, Chicago, 1967
10. Michael, Hill, *Urban Settlement and Land Use*, Hodder Murray, 2005