

UNIT 1

Meaning, Scope and Branches of Physical Geography, Origin of Universe, Solar system and Earth. Geological Time Scale, Theories of Laplace, Chamberlin, James Jeans, Jeffreys, and Hoyle & Lyttleton, Interior of the earth, Rocks: origin and classification

UNIT 2

Origin of continents and ocean basins: Continental drift and convectional current theories, Plate Tectonics, Isostasy, Earth movements, Endogenetic forces,

landforms: Mountains, Plateau and Plains, Gradational processes, Weathering and Erosion, normal cycle of erosion, Arid, Glacial, Marine and Karst topographies, Vulcanicity and Earthquakes.

UNIT 3

Soil as a basic component of environment, Soil profile (Soil horizon): Characteristics and Significance, Processes and factors of soil formation. Biodiversity and Biosphere, Biotic succession, Biomes and their types, Zoogeographical regions of the world. Biodiversity conservation.

UNIT 4

Composition and structure of atmosphere, Insolation, Vertical and Horizontal Distribution of temperature, Pressure and pressure belts, Winds: Planetary, Periodic and Local. Humidity, Clouds and Precipitation, Cyclones and Anticyclones.

UNIT 5

Ocean bottom topography, Ocean deposits, Salinity, Temperature, Ocean currents, Tides and Coral reefs.

References:

1. Barry, R.G. and Chorley, R.J. (1998). Atmosphere, Weather and Climate. Routledge, London.
2. Bryant, H. Richard (2001). Physical Geography Made Simple. Rupa and Co., New Delhi.
3. Bunnett, R.B. (2003). Physical Geography in Diagrams, Fourth GCSE edition, Pearson Education (Singapore) Pvt Ltd.

4. Garrison T (1998). Oceanography. Wordsworth Cp, Bedmont.
5. Lake, P. (1979). Physical Geography (English & Hindi Edition) Cambridge Univ. Press, Cambridge.
6. Monkhouse, F I (1979). Physical Geography, Methuen, London.
7. Singh, S. (2003). Physical Geography (English and Hindi Editions) Prayag Pustak Bhawan, Allahabad.
8. Singh, M.B. (2001) Bhoutik Bhoogol, Tara Book Agency, Varanasi.
9. Strahler, A.N. and Strahler A.M. (1992). Modern Physical Geography, John Wiley and Sons, New York
10. Wooldridge, S.W. and Morgan, R.S. (1959). The Physical Basis of Geography: An Outline of Geomorphology. Longman, London.

UNIT 1

Definition and scope of Human Geography; human versus physical geography; branches of Human Geography; Development of Human Geography; Contributions of German and French Geographers. Contribution of Indian Geographers

UNIT 2

Schools: Determinism, possibilism, welfare or humanistic and positivism; Approaches: ecological, landscape, locational, welfare and humanistic.

UNIT 3

Elements of environment; physical and human environment; constraints and opportunities of the environment; impact of environment on man; impact of man

on environment; environmental problems; pollution, natural hazards, and climate change.

UNIT 4

Evolution of man: Classification of races, Characteristics of races and their world distribution, Human adaptation to the environment: Eskimo, Bushman and Masai.

Tribes of India; habitat, economy and culture with special reference to Naga, Bhil, Santhal, Gaddi, Bhotia, and Tharu tribes.

UNIT 5

Human Settlements: Origin, types and patterns (Rural and Urban) characteristics, House types and their distribution with special reference to India.

References:

1. Singh, L.R. (2005). Fundamentals of Human Geography. Sharda Pustak Bhawan, Allahabad.
2. DeBlij, H.J. Human Geography: Culture, Society and Space. John Wiley, New York.
3. Haggett, P. (2004). Geography: A Modern Synthesis. Harper & Row, New York
4. Hussain, M. (1994): Human Geography. Rawat Publication, Jaipur.

5. Kaushik, S.D.& Sharma, A.K. (1996): Principles of Human Geography (in Hindi), Rastogi Pub. Meerut.
6. Norton W. (1995). Human Geography. Oxford University Press, New York.
7. Singh, K. N. & Singh J. (2001). Manviya Bhoogol. Gyanodaya Prakashan, Gorakhpur.

UNIT 1

Concept of Leisure and Tourism; Development of Tourism; Types of Tourism; Definition, Scope and Significance of Geography of Tourism; Geographical Basis of Tourism; Resources and Infrastructure for Tourism: Transportation, Accommodation and Basic Infrastructure.

UNIT 2

Impact of Tourism: Physical, Economic, Social and Cultural Impacts; Concept of Ecotourism; New Emerging Trends in Tourism. Statistics of tourism and data collection.

UNIT 3

Tourism Marketing: Marketing Concepts and Marketing in Tourism; The Tourist Product; Segmentation- A Priori Segmentation; Tourism Circuits; Tour Agencies. Components of a Tourism Plan, The Tourism Planning Process.

UNIT 4

Globalization and Tourism; Tourism in India; Resource and Growth; National Tourism Policy in India; Tourism Organizations. Role of WTO, IATA, UPTAA, AI, IATO, etc. in promotion and development of tourism

UNIT 5

Sustainable Tourism Development in Uttarakhand: Policies and Planning for Tourism Development; Tourism Carrying Capacity and Limits of Acceptable Change; Pro-Poor Tourism (PPT); Environmental, Cultural, Social and Historical Attractions with special reference to Uttarakhand Himalaya; Framework for Monitoring Sustainability of Tourism in Uttarakhand.

References:

UNIT 1

Regional concept in geography: Concept, Scope & purpose of regional planning, Types of regions: Formal and functional; uniform and nodal, single purpose and composite region.

UNIT 2

Regional Planning: Planning process - sectoral, temporal and spatial dimensions; short-term and long-term perspective planning, Indicators of development and their data sources, measuring levels for regional development and disparities, Planning for regional development and multiregional planning in national context

UNIT 3

Regional development strategies: Concentration vs. dispersal, Case studies for plans of developed and developing countries, Regional planning and development in India through Five year plans, problems and prospects, Regional disparities: causes and consequences.

UNIT 4

Concept of Multi-level planning: Decentralized planning; peoples participation in the planning process, Concept and approaches of urban development, Landscape ecology and sustainable urban development, Application of remote sensing and Geographic Information System in Development Planning.

UNIT 5

Theories and Models for Regional Planning: Growth Pole Model of Perroux; Myrdal, Hirschman, Rostow and Friedmann.

References:

1. Chitambar, J.B. (1993) Introductory Rural Sociology, Wiley Eastern, New Delhi.
2. Goomen, M.A. and Datta, A. (1995) Panchayats and their Finance, Rawat Pub. Co., New Delhi.
3. Matthews G. (editor) (1995) Status of Panchayati Raj: 1994, Institute of Social Sciences / Rawat Pub. Co., New Delhi.
4. Matthews A. (1994) Panchayati Raj: From Legislation to Movements, Rawat Pub. Co., New Delhi:
5. Misra, H.M. (ed) (1987) Contributions to Indian Geography, Volume 9: New Delhi.

6. De Blij, H.J. and Muller, P.O. (1997) *Geography: R.R.C*, 8th edition, J. W. & S. Ltd., New York.
7. Dickinson, J., Gould, B., Clarke, C., Mather, S., Prothero, M., Siddle, D., Smith, C. and Thomas-Hope, E. (1996) *A Geography of the Third World*, 2nd edition, Routledge, London
8. Bhat, L.S. (1972) *Regional Planning in India*, Indian Statistical Institute, Calcutta.
9. Bhat, L.S. (2003) *Micro Planning: A Case Study of Karnal Area*, KB Publications, New Delhi.
10. Chand, M. and Puri, V.K. (2004) *Regional planning in India*; Allied Publishers, New Delhi.
11. Chandana, R. C. (2005) *Regional Development and Planning*. Kalyani Publishers, New Delhi.

UNIT 1

India- A subcontinent, Physical features, Geologic structure, Drainage system, Climate, Natural vegetation, Soils, Natural regions.

UNIT 2

Agriculture, Crops (Food, plantation and commercial), Agriculture production, Agriculture regions, Irrigation, Livestock raising and Fishery.

UNIT 3

Industries: Metallurgical, Textile, Engineering, Chemical, Food, Leather, Forest and Agro-industries, Industrial regions, Minerals and Power resources.

UNIT 4

Population (density, distribution and urbanization), Multipurpose projects. Regional development and planning, Regional disparities, Five-year plans, Integrated rural development programme, Panchayati raj, Command area and watershed management

UNIT 5

Transportation: Roads and railways, air transportation and pipeline transportation. Trade: Internal and External (Trend, composition and direction); SEZ (Special Economic Zones).

References:

1. Chauhan B.S. & Gautam Alka (2011) Bharat (Geography of India), Rastogi Publication, Meerut.
2. Chauhan B.S.& Gautam Alka (2013) Bharatvarsh ka Vistrit Bhogool, Rastogi Publication, Meerut.
3. Hussain, Majid (2015) Geography of India, McGraw Hill Education, New Delhi.
4. Matoria, C.B. (2007) Bharat Ka Bhoogol. Sahitya Bahwan, Agra.
5. Sharma, Y.K. (2009) Geography of India, Lakshmi Narayan, Agra.
6. Sharma, M.L. & Sharma H.S. (2011) Bharatka Bhogool, Rastogi Publication, Meerut.
7. Sharma, J.K. & Kalwar, S.C. (2011) Bharat ka Bhogool, Rastogi Publication, Meerut.

8. Singh R. L. (1993) Regional Geography of India, National Geographic Society of India, Varanasi.

UNIT 1

Meaning, aim and scope of economic geography, Resources: Meaning, classification, conservation and concepts, Economic landscapes.

UNIT 2

Primary production, Vegetation & forest economy, Soil resources, Mineral resources (Iron ore and bauxite), Power resources (Coal, Petroleum and Hydroelectricity), Resource conservation.

UNIT 3

Main crops in the world: Wheat, paddy, sugarcane, coffee and tea. industries: Iron & steel, textiles, petro-chemical and sugar.

UNIT 4

Theory of industrial location: Weber and Losch, Industrial regions of India and World.

UNIT 5

World transportation: trans-continental railways, sea and air routes, international trade, patterns and trends, trade blocks: NAFTA, EEC, ASEAN, G7 and G20, Globalization and developing countries.

References:

Suggested Reading:

1. Alexander, I W (1988) Economic Geography. Prentice Hall, New Delhi.
2. Boesch, H (1964) A Geography of World Economy. Von Nostrand, New York.
3. Gautam, A (2006) Arthik Bhugol ke Mool Tatve. Sharda Pustak Bhawan, Allahabad.
4. Hartshorne, TA & Alaxender IW (1988) Economic Geograohy. Englewood Cliff, New Jersey.
5. Singh, KN and Singh I (2003) Arthik Bhugol ke Mool Tatve. Gyanodaya Prakashan, Gorakhpur.

UNIT 1

Remote Sensing: Components of Remote Sensing, Thermal and Radar Remote Sensing; Image Processing Techniques: Visual and Digital, Classification: Supervised and Unsupervised.

UNIT 2

GIS: Geographic Data Types; Spatial and Non-Spatial Data; Raster and Vector Data, Linkages and Matching, Principal Functions of GIS; Data Capture; Geographic Analysis; Scanning System; Data Conversion, Data Base Management System (DBMS), Data Base and Spatial Data Management; Geo- Relational Data Model; Topological Data Structure; Attribute Data Management; Relational Database-Concepts & Model, Digital Elevation Model (DEM): Process, Derivatives and applications.

UNIT 3

Geo-Referencing and Its Importance. Spatial Data Integration (Digitization) – Point, Line, Polygon. Map Design or Layout, Map Production. Import And Export of Map in Various Formats.

UNIT 4

Satellite Data and its type. Downloading Sources of Satellite Data (Google Earth, USGS, GLCF Etc.). Download Process Satellite Imagery. Remote Sensing data download from open sources.

UNIT 5

GIS Software (Including Open-Source Softwares). Creation of Shape files in GIS Softwares. Geo-Referencing and Digitization in GIS Software. Attribute Data Entry, Manipulation of Fields and Attribute Data.

References:

1. Curran, P.J. (1985): Principles of Remote Sensing, Longman, London
2. Chaunial, D. D. (2004): Remote Sensing and Geographical Information System (in Hindi), Sharda Pustak Bhawan, Allahabad

3. Cracknell, A. and Ladson, H. (1990): Remote Sensing Year Book. Taylor and Francis, London.

4. Curran, P.J. (1985): Principles of Remote Sensing. Longman, London.

UNIT 1

Nature, scope, significance and development of Agriculture Geography, Approaches to the study of Agricultural Geography: Commodity, systematic, regional, behavioral and recent approaches etc., Origin and dispersal of agriculture.

UNIT 2

Determinants of agricultural land use: Physical, economic, social and technological factors, Land holding and land tenure systems in India, Land use and land capability.

UNIT 3

Agricultural efficiency Concepts, Techniques and Methods of measurements; Methods of delimiting crop combination region, cropping pattern, crop concentration, intensity of cropping, degree of commercialization, diversification and specialization.

UNIT 4

Theories of Agriculture Geography, Von Thunen's theory (model) of agricultural location and its recent modifications, Demarcation of Agricultural regions, Whittlesey's classification of agricultural regions

UNIT 5

Regional pattern of productivity in India, Green Revolution, White Revolution, Food deficit and food surplus regions; World pattern of Agriculture: Subsistence agriculture, Commercial farming, Plantation agriculture, Mixed agriculture, State, collective and cooperative farming.

References:

1. Bhalla, G.S. and Alagh, Y.K. (1979). Performance of Indian Agriculture: A District-wise Study, Sterling, New Delhi.
2. Das, M.M. (1982) Peasant Agriculture in Assam, Inter India, New Delhi.
3. Gobind, N. (1986) Regional perspective in agriculture, concept, New Delhi.
4. Hussain, M. (1979) Agricultural Geography, Inter India, New Delhi.
5. Mergra, W.B. & Munton, R.J.C. (1971) Agricultural Geography, Methuen, London.

6. Mitchel, P. (1979) Agro-ecosystem, Inter India Publication, New Delhi.
7. Shafi, M. (1984) Agricultural productivity and regional imbalance, concept, New Delhi.
8. Singh J. and Dhillon, S.S. (1985) Agricultural Geography, Tata McGraw Hill, New Delhi.
9. Singh, J. (1974) Agricultural Atlas of India: A Geographical perspective, Vishal Publications,
Kurukshetra.
10. Kumar, Pramila, Krishi Bhoogol, Madhya Pradesh Hindi Granth Academi, Bhopal,MP.