

Course Specific Outcomes CBCS

Semester-I

DC1A: Geotectonic and Geomorphology (Theory)

Part I: Geotectonic

At the end of the course students will:

1. Understand the origin and evolution of the Earth through a geological time scale.
2. Develop knowledge of the internal structure of the earth.
3. Understand the tectonic processes and its effect on the plate.
4. Describe various theories related to Origin of Continents, oceans and mountain building.

Part II: Geomorphology

The students can:

1. Understand the fundamental concepts of Geomorphology.
2. Explain external and internal forces and identify various landforms.
3. Compare and explain denudation processes and resultant landforms.
4. Explain different theories and model of landscape evolution.

DC1B: Geotectonic and Geomorphology (Practical)

1. Students will be able to represent and describe various relief features.
2. They can comprehend physical and cultural aspects of Toposheet.
3. They can identify Rocks and Minerals based on their characteristics.
4. They will acquire knowledge about geological map and identify various geological features.

DC2A: Cartographic Techniques (Theory)

At the end of the course students will:

1. Know about different types of scale and its applications.
2. Acquire knowledge of different types of Map Projection and its utility
3. Knowledge in different types of surveying
4. Develop an idea of different surveying techniques and its uses.
5. Understand and interpret the Topographical Maps (SOI-Old series & OSM)

DC2B: Cartographic Techniques (Practical)

1. Students can convert and represent different types of scales.
2. They will acquire knowledge about different procedures of drawing map projections.
3. They will be able to prepare the Traverses and determine height and distances using Prismatic Compass, Dumpy level and Theodolite.

Paper-GE1A & B

Geotectonic and Geomorphology (Theory)

1. After the completion of this lesson students will be able to explain the origin of earth and different theories related to it.
2. They will have comprehensive knowledge about different types of rocks and characteristics of each type of rock.
3. They will know about various geomorphic processes and can identify different landforms created by geomorphic agents.

Geotectonic and Geomorphology (Practical)

1. They will understand the concept of scale, its types and will be able to convert scale.
2. They will be able to calculate and construct Simple Liner Scale.
3. They can identify various physical and cultural features from Toposheet and can establish relationship between them.
4. They can identify different types of Rocks and Minerals based on their characteristics.

Semester-II

DC3A: Population and Settlement Geography (Theory)

Part I: Population geography

1. Students will understand concept of population geography and demography.
2. They will get better understanding of population dynamics.
3. The students can explain theories related to population.
4. They will have an understanding of trends of the population distribution and its causes in different countries of the world.
5. The students will understand the impact of population growth and policies adopted to mitigate population problems with reference to India.

Part II: Settlement geography

1. The learners will have clear concept of the characteristic of rural and urban settlement.
2. They will know about rural house types and census categories of rural settlement of India.
3. They will learn different theories and functional classification of urban settlement.
4. Recent concepts of urban geography will be understood.

DC3B: Population and Settlement Geography (Practical)

1. Students will be able to calculate arithmetic and agricultural density.
2. They can graphically represent age sex distribution of any country.
3. They will understand the concept and learn calculation of Nearest-Neighbour Analysis.

DC4A: Cartograms and Thematic Mapping (Theory)

After the course is completed the learners will have:

1. Enhanced understanding of the concept of logarithm and anti-logarithm
2. Better understanding the limitations, merits and uses of diagrammatic representation of geographical data.
3. Increased knowledge about presentation and interpretation of large scale thematic map.
4. Understanding of application of GIS in Thematic mapping.

DC4 B: Cartograms and Thematic Mapping (Practical)

When the course is completed students will be able to:

1. Represent geographical data using Cartogram techniques
2. Prepare and interpret thematic maps.

GE2A: Climatology, Soil and Bio-Geography (Theory)

1. The learners will have clear concept of weather and climate
2. They can represent and explain different atmospheric layers.

3. The students will have better understanding of Atmospheric moisture: precipitation, evaporation, condensation and humidity.
4. They will know about the factors of soil formation, Soil profiles, physical and chemical properties of soil.

GE2B: Climatology, Soil and Bio-Geography (Practical)

1. Students can handle Rain Gauge, Maximum and Minimum Thermometer and Hygrometer.
2. Preparation and interpretation of Climograph and Hythergraph.
3. They will be able to prepare the Traverse using a Prismatic compass survey and plain table.

Semester –III

DC5A-Climatology (Theory)

When the course will be completed students will

1. Learn the process of interaction between the atmosphere and the earth's surface.
2. Understand the importance of the ozone layer and effect of green- house gases over climate.
3. Understand how the planetary and periodic wind and pressure belt related to each other.
4. Understand the types of precipitation and their mechanism.
5. Have better understanding of the atmospheric circulation, jet stream, different types of cyclones and their origin.
6. Explain different theories of precipitation and will have in-depth knowledge of the climate of the world.

DC5B- Climatology (Practical)

1. The students can measure weather elements by instruments i.e. Hygrometer, Maximum Minimum Thermometer, Barometer, Rain gauge.
2. They can graphically represent different weather elements through Climograph and Hythergraph.
3. They can graphically show a relationship between weather elements, human activities and seasonal year.

DC6A- Statistical Methods in Geography (theory)

1. At the end of the course students will know the significance of statistics in geography
2. They will be acquainted with different types of data and their importance
3. They will be able to apply different types of sampling in data collection.
4. The students shall know how to organize, manage, and present data.
5. They will know about central tendency, dispersion, correlation and regression.

DC6B-- Statistical Methods in Geography (Practical)

Students shall be able to:

1. Tabulate data and present it graphically.
2. Have better knowledge about association and correlation.
3. Calculate mean, median, mode.
4. Make a rational choice amongst listed various statistical methods.
5. Compute and interpret the results of Regression and Correlation Analysis.

DC7A-Geography of India (Theory)

1. Students will be exposed to physical, economic, cultural, and social characteristics of India.
2. They will be familiar with Indian climate, soil, vegetation and their relation.
3. They will know the agriculture region and impact of green revolution in India.
4. They will gain better knowledge of the distribution of power and mineral resources in India.
5. They will learn about Industrial development, Automobile and information technology.
6. Know about physiographic, socio-economic and economic regions of India.
7. The students will be aware of contemporary population issues and can draw solutions.

DC7B- Geography of India (Practical)

1. After the completion of the course the students will be familiar with different weather elements and conventional signs of weather phenomenon.
2. The students can interpret Indian daily weather Map.
3. They will be acquainted with climatic pattern of India.
4. They can identify different types of rocks and minerals.

GE3A- Social and Cultural Geography (Theory)

1. At the end of this lesson students will understand the concept of culture, cultural groups, cultural region and cultural hearth.
2. They will have in-depth knowledge of social structure of India.
3. They will understand the man's adaptive nature to his environment.

GE3B- Social and Cultural Geography (Practical)

1. After this course the students will be able to graphically represent geographical data.

Semester-IV

Paper-DC8A & B

CO-01: Regional Planning and Development

1. After the completion of course, students will develop understanding about Regional Planning and Regional Development
2. They will understand concept of Metropolitan areas and related models of urban development.
3. They can describe the theory of Regional Planning and Regional imbalances.
4. They will be acquainted with different strategies of regional development.

CO-02: Practical (Regional Planning and Development)

1. At the end of this lesson they will be able to delineate formal and functional region.
2. They will be able to measure regional disparity.

Paper-DC9A & B

CO-03: Economic Geography

1. Through this lesson, the learner will understand the various approaches of economic geography.
2. The learner will understand the concept of economic man and related aspects.
3. They will develop in-depth knowledge of different types of resources and understand its significance.
4. They can differentiate between different economic activities and its distribution in the world.
5. They will be familiar with the concept of Liberalisation, Privatisation and Globalisation and its impact on Indian economy.

CO-04: Practical (Economic Geography)

1. At the end of the course the students can determine agricultural efficiency.
2. They will be able to measure the transport accessibility of a place using Konig and Shimbil index.
3. They will be able to quantify and compare industrial development in the area.

Paper-DC10A & B

CO-05: Environment Geography

1. Through this lesson, the students will develop their knowledge in environmental approaches.
2. They will have clear perception of environment in different stages of civilisation.
3. They will be aware and develop an understanding of Environmental issues at local, regional and global level.
4. They will know about various Environmental programmes and policies which are undertaken at various levels.

CO-06: Practical (Environment Geography)

1. After the course the students will have knowledge of Calculation of EIA.
2. They can determine soil type through Ternary diagram.
3. They will be able to assess the quality of water.

Paper-GE4A & B

CO-07: Economic geography

1. When the course will end the students can distinguish between different types of Economic activities.
2. They will acquire knowledge in Resource conservation and environment
3. They will develop in-depth knowledge of different types of resources and understand its significance.

CO-07: Practical (Economic geography)

1. At the end of the lesson students can present statistical data.
2. They can calculate Map projection and describe its limitations and uses.

Semester-V

Paper-DC11A & B

CO-01: Part-1 Soil Geography and Bio Geography

1. After the completion of this course students will gain knowledge about the factors of soil formation and Soil profiles.
2. They will understand Physical properties and Chemical properties of the soil.

3. They will be able to explain different types of soil and its characteristics.
4. They will understand various factors of Soil erosion and mitigations measures.

CO-02: Part-2 Bio Geography

1. Through this lesson the students will understand the concept of ecology, ecosystem, Biome and Community
2. They will know about thermodynamic and energy flow in ecosystem.
3. They will have enhanced knowledge about biodiversity, wetland-characteristics, degradation and conservation.

CO-03: Practical (Soil Geography and Bio Geography)

1. At the end of this course the students will be able to assess the particle size distribution of soil.
2. They can measure soil nutrients and soil pH using soil kit.
3. They will learn to analyse time series of biogeography data.

Paper-DC12A & B

CO-04: Part-1 Hydrology

1. After the completion of the course students will know about hydrology and can interpret Hydrological Cycle.
2. They will have comprehensive knowledge of different types of Precipitation.
 3. They will understand the rainfall recharge relationship and characteristics of runoff.
 4. They will know about micro watershed planning and can also explain and demonstrate Rainwater Harvesting.

CO-05: Part-2 Oceanography

1. Through this lesson students will learn about the origin and characteristics of the Pacific, Atlantic and Indian Ocean.
2. They will understand the origin and evolution of coral reefs and atolls
3. They will have enhanced knowledge of the physical properties of ocean water.

CO-06: Practical (Hydrology and Oceanography)

1. The students will be able to represent and analyze the discharge.
2. They will be able to measure Run off estimation.
3. They can graphically represent temperature and salinity of ocean and determine water mass.

Paper-DSE1A & B

CO-07: Part-1 Remote Sensing

1. The students will obtain knowledge about Remote Sensing, types of RS satellites and sensors.
2. They will have broad knowledge about sensor resolutions and their applications.
3. They will understand and explain principles of Image interpretation

CO-08: Part-2 Geographical Information System

1. After this course students will obtain knowledge of GIS, its components, data structures, its advantages and disadvantages.
2. They will be able to make use of GIS & GPS software.

CO-09: Practical (RS and GIS)

1. When the course will be completed they will be able to perform Geo-referencing and digitization
2. They will be able to prepare thematic maps using GIS Software.

Paper-DSE2A & B

CO-10: Political Geography

1. They will understand the concept of state, nation, frontiers, boundary and territory
2. They will understand the geostrategic ideas of Mackinder and Spykman.
3. They will acquire knowledge of voting and related aspect.
4. They will also develop ideas in political dispute and contemporary issues.

CO-11: Practical (Political Geography)

1. They will be able to prepare Democracy index, Failed State Index and Happiness Index.
2. They can measure voting behaviours.

Paper-DSE3A & B

CO-12: Fluvial Geomorphology

After this course is completed the students will

1. Acquire knowledge of flow measurement and assessment of its characteristics.
2. Obtain detailed knowledge of fluvial processes and its forms.
3. Understand the impact of human on fluvial system.
4. Understand the processes and management of river bank erosion.

CO-13: Practical (Fluvial Geomorphology)

1. Through this course students will be able to calculate stream ordering, Bifurcation ratio, sinuosity Index and Dissection Index.

Paper-DSE4A & B

CO-14: Part-1 Social Geography

After the completion of this course students will

1. Understand the basic concept of Social and Cultural environment.
2. Assess the social process, social group, social structure and social well-being.
3. Gain knowledge about social inequality and social elements- Caste, Class, Religion, Ethnicity and Language.
4. Know about the evolution of socio-cultural regions of India.
5. Develop in-depth knowledge of gender inequality and contemporary social issues in India.

CO-15: Part-2 Cultural Geography

1. After the course is completed students can assess scope and content of cultural geography.
2. They will have a clear concept of cultural hearth and realm, cultural diffusion, cultural segregation and cultural diversity.
3. They will learn about racial groups of the world and cultural regions of India.

CO-16: Practical (Social and Cultural Geography)

When this course will end they will be able to

1. Prepare choropleth map and bar graph to represent social or cultural group of Indian population.
2. Calculate Human Poverty Index and Gender Parity Index.

Paper-SEC1A & B

CO-14: Geography of Tourism

1. At the end of the course students will have a clear concept of tourism and its types.
2. They will also gain knowledge about the physical, social and economic impacts of tourism.
3. They will be acquainted with the recent trends of tourism and understand the impact of globalization on tourism.
4. They will understand the concept of Sustainable tourism and will also know about National tourism policies.

Semester-VI

Paper-DC13A & B

CO-01: Disaster Management

1. After completion of this lesson students shall have the knowledge and understanding of the different types Hazards and disasters.
2. They will know about the impact of various types of hazards on environment and human life
3. The students will be aware of preventive and precautionary measures of different hazards.
4. The students will have in-depth understanding of the responses to the disasters.

CO-02: Practical (Disaster Management)

1. Students will learn to calculate flood frequency and determine the magnitude of flood.
2. They can compute Standardized precipitation index and assess drought severity.

Paper-DC14A & B

CO-01: Evolution of Geographical thought

1. At the end of this lesson students will have thorough understanding of the Evolution of Geographical thought.
2. Assess the geographical school of British, French, German and America
3. They can assess the approach of the Man-Environment relationship.
4. They will have comprehensive knowledge of the paradigm shift and debates in geographical thought.

CO-02: Practical (Evolution of Geographical thought)

1. Through this lesson the students will learn how to assess the plausibility of hypothesis by using sample data.

Paper-DSE3A & B

CO-01: Applied Geomorphology

1. At the end of the course students will understand the concept of anthropogenic geomorphology.
2. They will have an enhanced understanding of human impact on Landscape
3. Through the lesson the students will have in-depth knowledge of the societal problems and benefits associated with river.
4. They will have better understanding of geomorphic impacts on urbanisation, resource concentration and cropping practice

CO-01: Applied Geomorphology

1. They will learn to measure Hypsometric curve and represent long profile.
2. Morphometric analysis from Top sheet.

Paper-DSE3A & B

CO-01: Human Geography

1. Through this lesson students will understand the concept, nature and recent trends of human geography.
2. The lesson will enable to understand the evolution of human societies and human adaptation to environment
3. They will gain knowledge of Population resource region
4. They will learn about Human development and environment conflict

CO-01: Practical (Human Geography)

1. The students will learn to measure mean centre of Population.
2. They will also know how to compute of HDI.

DP4 Field report

CO-04:

1. The students will gain exposure to new geographical location.
2. They learn to prepare schedules for surveying and develop an in-depth knowledge of data collection techniques
3. The students learn Tabulation, analysis and synthesis of data
4. They can prepare report using cartographic techniques and diagrams.

Paper-SEC2

CO-01: Climate Change-Vulnerability and Adaptations

1. The lesson provides better understanding of climate changes with reference to Geological time scale.
2. The students will know in detail about the evidences and factors of Climate change.
3. They will be aware of the impact of climate change on all forms of life on the earth and global initiatives taken to mitigate climate change.
4. They will be familiar with different vulnerability assessment and adaptive strategies on climate change.