

GEOGRAPHY (HONS./PG) [CODE -13]

A. Geo-Tectonics:

Earth's Crust (Composition and Layering); Rocks (Origin, Types and Characteristics); Folds and Faults (Types and Landforms); Mountain Building and Plate Tectonics, Continental Drift. Isostasy, Earthquakes (Causes and Effects) and Volcanoes.

B. Geomorphology:

Lithology and Landform; Weathering; Mass Wasting; Evolution of Slope; Hydrological Cycle; Run-off, Landform and Process (Fluvial, Glacial, Wind, Karst and Marine); Cyclic and Non-Cyclic concepts; Landscape Evolution, Geomorphic hazards.

C. Geographical Thoughts:

Approaches to Geographical Studies (Deterministic, Possibilistic, Quantitative Revolution, Welfare, Societal, Behavioral, Radical Schools, Functional, Structural, Materialistic, Ecological, Regional and Systematic); Concept of Space (Points, Distances, Interactions, Organization, Regions), Emergence of welfare geography.

D. Climatology:

Composition of the Atmosphere; Global Warming and possible consequences; Green House Effect, Elements and Factors of Climate; Insolation, Heat Belts; Pressure Belts; Planetary Wind System; Jet Stream; Humidity and precipitation; Cyclones and Anticyclones; Air mass; Monsoon; Thunderstorms; Climatic hazards, Climatic Classification --- Koppen's and Thornthwait's schemes.

E. Biogeography:

Soils (Factors and Processes of Formation, Soil Profiles, Physical and Chemical Properties); World Soil Groups (Zonal, Azonal and Intra-Zonal); Soil Erosion and Conservation; Plants (Factors of Plant Growth, Major Types of Natural Vegetation and Environmental Relations); Forest Conservation, Social forestry, Biodiversity, Animal Communities.

F. Environmental Geography:

Ecosystem (Principles and Components, Energy Flow, Food Chain, Food Web and Bio-geochemical Cycles); Biomes (Concepts, Types and Ecological Adaptation); Environmental Degradation and Hazards, Management and Conservation; Meaning of Natural Environment; Man-Environment Relationship; Natural Regions and Environmental Adaptation of Human Life; Economy and Society.

G. Economic Geography:

Resources (Concept and Theories, Creating Factors and Processes, Classification, Utilization-processes, technology and environment quality); Economic Resources (Classification and Significance); Forms of Economy; Activity Components of Resource Utilization (Lumbering, Dairy Farming, Fishing, Mining, Power Generation; Agriculture and Industry), Models of Economic System; Theories of Location of Economic Activity, Ranking of World Economics, WTO and International trade, Economic disparity and social inequality; Sustainable development and impact of globalization.

H. Human Geography:

Population (Growth, Distribution, Age-Sex Composition, Occupational Resource; Characteristics of World's Human Resource; Theories of population growth, population growth, food security, unemployment, work participation, gender issues, social well being.

I. Regional Geography of India:

Relief; Drainage; Climate; Soil; Forest Resources; Mineral Resources, Power Resources; Irrigation; Agriculture, Industry; Population: Trade and Commerce, Transport, Basis of Regional Divisions of India (Physical and Economic), Concept, nature, type, scale and dimensions.

J. Cartographic Techniques:

Scale; Techniques of Data Representation; Map-Classification and Interpretation, Thematic Mapping, Principles and Methods of Projection, Elementary Surveying and Levelling (Principles and Methods with Chain, Compass, Dumpy Level and Theodolite); Common Statistical Techniques for Geographical Data Analysis, Aerial Photo and Satellite Imagery interpretation; Remote Sensing and GIS.