

**Syllabus for the Recruitment Test for the post of  
Assistant Professor (College Cadre) in the subject of  
Geography.**

**Unit – I**

**Geomorphology** : Fundamental concepts ; Factors controlling landform development; Endogenetic and Exdgenetic forces; Denudation process: weamering. and erosion, Geosynclines, mountain building, continental drift and plate tectonics; Concept of Geomorphic Cycle; Landforms associated with fluvial, glacial, arid, coastal and karst cycles, Slope forms and processes; Environmental and Applied Geomorphology.

**Unit – II**

**Climatology** : Composition and structure of the atmosphere; Insolation ; Heat budget of the earth; Distribution of temperature, atmospheric pressure and general circulation of winds; Monsoons and jet streams ; Stability and instability of the atmosphere; Air-masses; Fronts, temperate and tropical cyclones ; *Types* and distribution of precipitation; Classification of world climates ; Koppen's and Thornthwaite'si schemes; Hydrological Cycle; Global warming.

**Unit – III**

**Oceanography** : Origin of ocean basins; Bottom relief of Indian, Atlantic and Pacific Oceans; Ocean deposits; Coral reefs; Temperature and salinity of the Oceans; Density of sea water; Tides and ocean currents; Sea-level changes.

**Bio-Geography** : Physical factors influencing world distribution of plants and animals; Fbrms and functions of ecosystem: Forest, grassland, marine and mountain ecosystem; Bio-diversity and its depletion through natural and man induced causes? Conservation and management of ecosystems; Environmental hazards and problem® of pollution; Ozone depletion.

**Unit – IV**

**History of Geographic Thought** : General character of Geographic knowledge during the ancient and medieval period; Foundations of Modern Geography : Contribution of German, French, British and American schools; Conceptual and methodological developments during the 20th century; Changing paradigms; Man and Environment, determinism and possibilism, area! dinerentiation and spatial organisation; Quantitative revolution; Impact of positivism, humanism, radicalism and behaviouralism in Geography.

**Unit – V**

**Population Geography** : Nature, scope, subject matter and recent trends; Patterns of world distribution, growth and density of population; Policy issues; Patterns and processes of migration; Demographic transition; Population-resource regions.

**Settlement Geography** : Site, situation, types, size, spacing and internal morphology of rural and urban settlements; Ecological processes of urban growth; Urban fringe; City – region; Settlement systems; Primate city; Rank-Size rule; Settlement hierarchy; Christaller's Central Place theory; August Losch's theory of market centres.

## **Unit – VI**

**Economic Geography** : Location of economic activities and spatial organization of economies; Classification of economies; Sectors of Economy: primary, secondary, tertiary and quaternary; Natural resources : Renewable and non – renewable; Conservation of resources.

**Agricultural Geography** : Concept and techniques of delimitation of agricultural regions; Measurement of agricultural productivity and efficiency; Crop combinations and diversification; Von Thunen's Model; Agricultural systems of the world.

**Industrial Geography** : Classification of industries : Weber's and Losch's approaches; Resource based and footloose industries.

**Geography of Transport and Trade** : Models of transportation and transport cost; Accessibility and connectivity: Inter-regional and Intra-regional: Comparative cost advantages.

## **Unit – VII**

**Political Geography** : Definition and scope of Political Geography ; Geopolitics; Global strategic views (Heartland and Rimland theories );-Concept of nation, state and Nation-State; Boundaries and frontiers; Politics of world resources; Geography and Federalism.

**Social Geography** : Nature and scope of social geography ; Social structure and social processes; Elements of Social Geography—ethnicity, tribe, dialect, language, caste and religion; Concept of Social well – being.

**Cultural Geography** : Nature and scope of Cultural Geography; Environment and culture; Concept of culture-areas and cultural regions; Theories of tribal groups; I )welling places as cultural expressions.

## **Unit – VIII**

**Regional Planning** : Regional concept in Geography; its application to planning; Concept of planning region; Regional hierarchy; Types of regions and methods of regional delineation; Conceptual and theoretical framework of regional planning; Regional planning in India: Concept of development; Indicators of development; Regional imbalances.

## **Unit – IX**

**Geography of India** : Physiographic divisions; Climate : Its regional variations ; Vegetation types and vegetation regions; Major soil types ; Coastal and Marine resources; Water resources; Irrigation; Agriculture; Agroclimatic regions; Mineral and power resources; Major industries and industrial regions ; Population distribution and growth; Settlement patterns; Regional disparities in social and economic development.

## **Unit – X**

**Cartography** : Map as a tool in Geographical studies ; Types of maps: Techniques for the study of spatial patterns of distribution; Single purpose and composite maps; Choropleth, Isopleth and Chorochromatic maps and pie diagrams; Mapping of location specific data; Accessibility and flow maps.

Remote sensing and computer application in mapping; Digital mapping; Geographical Information System ( GIS ) : Thematic maps.

**Statistical Methods** : Data sources and types of data; Statistical diagrams; study of frequency distribution and cumulative frequency; Measures of central tendency; Selection of class intervals for mapping; Measures of dispersion and concentration; Standard deviation; Lorenz curve; Methods of measuring association among different attributes; Simple and multiple correlation; Regression.

Measurement of spatial patterns of distribution; Nearest-neighbour analysis; Scaling techniques, rank score, weighted score; Sampling techniques for geographical analysis.