STATE LEVEL ELIGIBILITY TEST
GEOGRAPHY (Syallabus)

SUBJECT CODE : 15

PAPER-II

1. Geomorphology : Fundamental concepts; Endogenetic and Exogenetic forces; Denudation and weathering; Geosynclines, continental drift and plate tectonics; Concept of geomorphic cycles; Landforms associated with fluvial, glacial, arid, coastal and karst cycles.

2. Climatology : Composition and structure of the atmosphere; Heat budget of the earth; Distribution of temperature; Atmospheric pressure and general circulation of winds; Monsoon and jet stream; Tropical and temperate cyclones; Classification of world climates; Koppen's and Thornthwaite's schemes.

3. Oceanography : Ocean deposits; Coral reefs; Temperature and salinity of the oceans; Density of sea water; Tides and ocean currents.

   Bio-Geography : World distribution of plants and animals; Forms and functions of ecosystem; Conservation and management of ecosystems; Problems of pollution.

4. Geographic Thought : General character of Geographic knowledge during the ancient and medieval period; Foundations of Modern Geography; Determinism and possibilism; Areal differentiation and spatial organisation.

5. Population Geography : Patterns of world distribution; Growth and density of population; Patterns and processes of migration; Demographic transition.

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

6. Economic Geography : Sectors of economy : primary, secondary, tertiary and quaternary ; Natural resources : renewable and non-renewable.

   Measurement of agricultural productivity and efficiency ; Crop combination and diversification; Von Thunen's Model.

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

   Models of transportation and transport cost : Accessibility and connectivity.

7. Political Geography : Heartland and Rimland theories ; Boundaries and frontiers; Nature of administrative areas and Geography of public policy and finance.

   Social Geography : Ethnicity; tribe; dialect; language, casteand religion; Concept of social well-being.

   Cultural Geography : Culture-areas and cultural regions; Human races; Habitat, Economy and Society of tribal groups.

8. Regional Planning : Regional concept in Geography; Concept of planning regions; Types of regions; Methods of regional delineation; Regional planning in India; Indicators of development; Regional imbalances; Evolution, nature and scope of town planning with special reference to India, and Fundamentals of Town and Country planning.

9. Geography of India : Physiographic divisions; Climate : its regional variations; Vegetation types and vegetation regions; Major soil types; Irrigation and agriculture; Population distribution and growth : Settlement patterns; Mineral and power resources; major industries and industrial regions.

10. Cartography : Types of maps : Techniques for the study of spatial patterns of distribution; Choropleth; Isopleth and Chorochromatic maps and pie diagrams, Mapping of locations,specific data; Accessibility and flow maps.

Remote sensing and Computer application in mapping; Digital mapping; Geographic information System (GIS).

Statistical Methods : Data sources and types of data; 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 amoung different attributes; Simple and Multiple correlation; Regression.

Nearest-neighbour analysis; Scaling techniques; Rank score; Weighted score; Sampling techniques for Geographical analysis.

PAPER-III
(Part A & B)
(CORE and ELECTIVE/OPTIONAL)

Unit-I.

Geomorphology : Fundamental concepts; Factors controlling landform development; Endogrnetic and Exogenetic forces; Denudation process : weathering 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's 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; Forms 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 problems 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, areal differentiation 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 sttlements; Ecological processes of urban growth, Urban fringe; City-region; Settlement systems; Primatecity; 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 systerms 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 Georgaphy : Nature and scope of social gegraphy ; 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; Dwelling 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 Geographic 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.

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