SYLLABUS

GEOGRAPHY

Note :

There are Three Papers for each of the subjects. Paper-I on Teaching and Research aptitude, Paper -II and Paper-III based on the syllabus of concerned subjects. Details are furnished below :

PAPER -I

Subject : General Paper on Teaching & Research Aptitude

The test is intended to assess the teaching/research aptitude of the candidate. They are supposed to possess and exhibit cognitive abilities like comprehension, analysis, evaluation, understanding the structure of arguments, evaluating and distinguishing deductive and inductive reasoning, weighing the evidence with special reference to analogical arguments and inductive generalization, evaluating, classification and definition, avoiding logical inconsistency arising out of failure to see logical relevance due to ambiguity and vagueness in language. The candidates are also supposed to have a general acquaintance with the nature of a concept, meaning and criteria of truth, and the source of knowledge.

There will be 60 questions, out of which the candidates can attempt any 50. In the event of the candidate attempting more than 50 questions, the first 50 questions attempted by the candidate will only be evaluated.

1. The Test will be conducted in objective mode from SET 2012 onwards. The Test will consist of three papers. All the three papers will consists of only objective type questions and will be held on the day of Test in two separate sessions as

under :

Session	Paper	Number of Questions	Marks	Duration
First	I	60 out of which 50 questions are to be attempted	50×2=100	1¼ Hours
First	II	50 questions all ofwhich are compulsory	50×2=100	1¼ Hours
Second	III	75 questions all of which are compulsory	75×2=150	2½ Hours

2. The candidates are required to obtain minimum marks separately in Paper-II and Paper -III as given below

Minimum marks (%) to be obtained			
Category	Paper-I	Paper-II	Paper-III
General	40 (40%)	40 (40%)	75 (50%)
OBC	35 (35%)	35 (35%)	67.5 (45%) rounded off to 68
PH/VH/ SC/ST	35 (35%)	35 (35%)	60 (40%)

Only such candidates who obtain the minimum required marks in each Paper, separately, as mentioned above, will be considered for final preparation of result.

However, the final qualifying criteria for eligibility for Lectureship shall be decided by Steering Committee before declaring of result.

3. The syllabus of Paper-I, Paper-II and Paper-III will remain the same.

GEOGRAPHY

PAPER-II

1. Geomorphology :

Fundamental concepts : Endogenetic and Exogenetic forces : Denudation and weathering; Geosynclines, continental drift and plate tectonics; Concept of geomorphic cycle; 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 amimals; 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.

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 Thonen'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.

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, caste and religion; Concept of social well-being.

Cultural Geography :

Culture-areas and cultural regions; human races; Habital, Economy and Society of tribal groups.

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.

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.

Cartography :

Types of maps : Techniques for the study of spatial patterns of distribution; 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).

Statistical Methods :

Data sources and types of data; Frequency distribution and cumulative frequency; Measures of central tendency; Selection of class intervals for mapping; Meaures of dispersion and concentration; Standard deviation; Lorenz Curve; Methods of measuring association among 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; Endogenetic 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 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 economics; 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 delimitaton 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; 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 region; Population distribution and growth; Settlement patterns; Regional disparities in social and econocmic 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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