MOHANLAL SUKHADIA UNIVERSITY UDAIPUR-313039

SYLLABUS FOR SCREENING TEST FOR THE POST OF ASSISTANT PROFESSOR

Subject: GEOGRAPHY

Note: There shall be 100 questions with multiple Choices carrying 100 marks to be completed in 3 hrs duration.

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

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- **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:** Type 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; Measures 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.

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