

GEOGRAPHY SYLLABUS FOR LECTURER CADRE RECRUITMENT

Physical Geography

1. Geomorphology:

landform development: concept and factors; Forces (endogenetic and exogenetic forces), Earth Crust: Origin and evolution, Fundamentals of geomagnetism; Physical conditions of the earth's interior; Plate tectonics, Geosynclines; Continental drift; Isostasy; Recent views on mountain building; Volcanicity; Earthquakes and Tsunamis; Geomorphic cycles: concept and Landscape development; Denudation chronology; Channel morphology; Erosion surfaces; Slope development; Applied Geomorphology, economic geology, and environment.

2. Climatology:

Temperature and pressure: Concepts and pressure belts of the world; Earth: Heat budget, Atmospheric circulation; Atmospheric stability and instability. Winds: Planetary, local winds, Monsoons and jet streams; Air masses and fronts; Cyclones: Concept and types Tropical and Temperate), distribution of precipitation; Weather and Climate; Koppen's, Thornthwaite's, and Trewartha's classification of world climate; Hydrological cycle; Global climatic change, and role and response of man in climatic changes; Applied climatology and Urban climate.

3. Oceanography:

Topography of the Oceans: Atlantic, Indian, and Pacific, Temperature, salinity, Heat and salt budgets. Ocean deposits, Oceanic: Waves, currents, and tides; Marine resources; biotic, mineral, and energy resources; Coral reefs, coral bleaching; Sea-level changes; Law of the sea and marine pollution.

4. Biogeography:

Soils: Genesis, Classification and distribution, Soil profile; Soil erosion, Degradation, and conservation; Factors effecting world distribution of plants and animals; Problems of deforestation and conservation measures; forestry: Social and agro. Wildlife; Major gene pool centres.

5. Environmental Geography:

Principle of ecology; Human ecological adaptations; Influence of man on ecology and environment; Global and regional ecological changes and imbalances; Ecosystems: their management and conservation; Environmental degradation, management, and conservation; Biodiversity and sustainable development; Environmental policy; Environmental hazards and remedial measures; Environmental education and legislation.

Human Geography

1. Human Geography: Areal differentiation; regional synthesis; Dichotomy and dualism; Environmentalism; Quantitative revolution and locational analysis; Radical, behavioral, human, and welfare approaches; Languages, religions, and secularisation; Cultural regions of the world; Human development index.
2. Population and Settlement Geography: Growth and distribution of population (With reference to India and Punjab). Demographic attributes; Causes and consequences of migration; Concepts of the over-under-and optimum population; Population theories, world population problems and policies, social well-being and quality of life; Population as social capital. Types and patterns of rural settlements; Environmental issues in rural settlements; Hierarchy of urban settlements; Urban morphology; Problems and remedies of urbanization; Sustainable development of cities.
3. Models, Theories and Laws in Human Geography: System analysis in Human geography; Malthusian, Marxian and demographic transition models; —Heartland and Rimland theories; Laws of international boundaries and frontiers.
4. Economic Geography:

World economic development: measurement and problems; World resources and their distribution; Energy crisis; the limits to growth; World agriculture: a typology of agricultural regions; Agricultural inputs and productivity; Food and nutrition problems; Food security; famine: causes, effects, and remedies; World industries: location patterns and problems; Patterns of world trade.
5. Regional Planning: Concept of a region; Types of regions and methods of regionalization; Growth centers and growth poles; Regional imbalances; regional development strategies; environmental issues in regional planning; Planning for sustainable development.

GEOGRAPHY OF INDIA

1. Physical Setting: Space relationship of India with neighboring countries; Structure and relief; Drainage system and watersheds; Physiographic regions; Mechanism of Indian monsoons and rainfall patterns; Tropical cyclones and western disturbances; Floods and droughts; Climatic regions; Natural vegetation, Soil types and their distributions. Physical Geography of Punjab; Topography, drainage, forests, soils.
2. Agriculture: Infrastructure: irrigation, seeds, fertilizers, power; Institutional factors; land holdings, land tenure and land reforms; Cropping pattern, agricultural productivity, agricultural intensity, crop combination, land capability; Agro and social-forestry; Green revolution and its socio-economic and ecological implications; Significance of dry farming; Livestock resources and white revolution; Aquaculture; Sericulture, Agriculture and poultry; Agricultural regionalisation; Agro-climatic zones; Agroecological regions.
3. Resources: Land, surface and ground water, energy, minerals, biotic and marine resources, Forest and wildlife resources and their conservation; Energy crisis.
4. Transport, Communication, and Trade: Road, railway, waterway, airway, and pipeline networks and their complementary roles in regional development; Growing importance of ports on national and foreign trade; Trade balance; Trade Policy; Export processing zones; Developments in communication and information technology and their impacts on economy and society; Indian space programme.
5. Cultural Setting: Historical Perspective of Indian Society; Racial linguistic and ethnic diversities; religious minorities; Major tribes, tribal areas, and their problems; Cultural regions; Growth, distribution, and density of population; Demographic attributes: sex-ratio, age structure, literacy rate, work-force, dependency ratio, longevity; migration (inter-regional, intraregional and international) and associated problems; Population problems and policies; Health indicators.
6. Industry: Evolution of industries; Locational factors of cotton, jute, textile, iron and steel, aluminum, chemical and pharmaceutical, automobile, cottage, and agro-based industries; Industrial houses and complexes including public sector undertakings;

Industrial regionalisation; New industrial policy; Multinationals and liberalisation; Special Economic Zones; Tourism including ecotourism.

7. Political Aspects: Geographical basis of Indian federalism; State reorganization; Emergence of new states; Regional consciousness and inter-state issues; International boundary of India and related issues; Cross-border terrorism; India's role in world affairs; Geopolitics of South Asia and Indian Ocean realm.
8. Contemporary Issues: Ecological issues: Environmental hazards: landslides, earthquakes, Tsunamis, floods and droughts, epidemics; Issues related to environmental pollution; Changes in patterns of land use; Principles of environmental impact assessment and environmental management; Population explosion and food security; Environmental degradation; Deforestation, desertification, and soil erosion; Problems of agrarian and industrial unrest; Regional disparities in economic development; Concept of sustainable growth and development; Environmental awareness; Linkage of rivers; Globalisation and Indian economy.
9. Settlements: Types, patterns, and morphology of rural settlements; Urban developments; Morphology of Indian cities; Functional classification of Indian cities; Conurbations and metropolitan regions; Urban sprawl; Slums and associated problems; Town planning; Problems of urbanisation and remedies