

SYLLABUS**GEOGRAPHY****Topic 1: Geography as a discipline :**

Geographical ideas in ancient, medieval & modern periods: the contributions of Varenus, Kant, Reine, Humboldt, and Ritter. Influence of Richthofen and Darwin. Vidal de la Blache, F. Ratzel, etc.

Contemporary geography: Post Second World War, environmentalism, areal differentiation, spatial organization, and behavioral and perceptual geography. Positivism in Geography. Humanistic Geography, Marxist Geography, Critical Social Theory, and Development in Indian Geography.

Topic-2 Origin and Evolution of the Earth

Introduction to the solar system, Motions of Earth: rotation, revolution, occurrence of day and night, change of seasons, latitudes and longitudes, and finding time.

Carr's Interior: Origin of Continents and Ocean Basins Wegener's Continental Drift Theory, Theory of Plate Tectonics, Earthquakes and Volcanoes, Folding, and Faulting

Origin of the Earth: Nebular hypothesis (old theory) and Big Bang theory. Evolution of continents, atmosphere, and oceans,

Topic 3: Interior of the Earth and Distribution of Oceans and Continents

Constitution of Earth's interior (based on seismic evidence), origin of the continents, and ocean basins. Wegner's theory of continental drift and plate tectonics. Plate movements and interactions: volcanism and seismicity.

Topic 4: Landforms

Minerals and rocks: classification of rocks, rock cycle. Important minerals: geomorphic process of denudation Endogenic and exogenic processes, mass wasting, and landslides. Work of river, glacier wind, sea waves, etc., processes of soil formation.

Topic 5: Climate

Atmosphere: Composition and structure. Insolation and temperature, atmospheric pressure and winds, atmospheric moisture, cyclones, and classification of climate (Koeppen and Thornthwaite Schemes classification). Global climatic changes: Causes and effects.

Topic 6: Water (Ocean)

Geomorphology of the ocean floor, submarine relief features of the Atlantic, Pacific, and Indian Ocean. Movement of ocean water: Currents, tides, and waves. Marine deposits and coral reefs.

Topic 7: Life on the Earth

Approaches in environmental geography, landscape, ecosystem, and perception approaches, Man and the Biosphere: An interactive and dynamic relationship. Human impact on biogeochemical cycles.

Topic 8: India

Geographical basis of Indian state-territory: location, extent, shape, and size.

Topic 9: Physiography

Structure, physiographic divisions, drainage system, and its evolution.

Topic 10: Climate, Vegetation, and Soil

Climate: factors controlling the climate of India Origin and mechanism of Indian monsoon; Seasons of India, Classification of climate of India (Koeppen's, Thornthwaite, Triwartha).

Soils: Type and distribution (I.C.A.R.), Soil problems, conservation of soil

Vegetation- Types & Distribution; conservation

Wild Life- Its conservation.

Topic-11 Natural Hazards and disasters.

Causes, Consequences and management In India Environmental Hazards: Floods, droughts, cyclones, earthquakes and landslides; human adjustment to hazards; hazards perception and mitigation; environmental institutions and legislation in India.

Topic-12 Human Geography: Nature and Scope.

Nature and scope of Human Geography, Approaches to the Human Geography, Determinism, Environmental Determinism, Possibilism, Neo-determinism, ecological and Behaviouralism.

Topic -13 People (World and India)

Trends and patterns of population growth: determinants and patterns of population distribution; theories, demographic transition; Human migration, Patterns of human development.

Topic-14 Human Activities: (World and India)

Primary: -Hunting, gathering, Herding (Nomadic & Commercial) Lumbering fishing, mining and agriculture; Agricultural practices; some major crops.

Secondary: Industries: Classification, Theories of localization, major Industries, recent trends in Industries, world comparisons.

Tertiary:-(Services)

Quaternary-Quinary activities

Planning in India: target area planning, Idea of sustainable development

Topic-15 Transport, Communication and Trade (World and India)

Transport and communication Roads, railways, waterways and airways; oil and gas pipelines, national electric grids. Communication networking-radio, television, satellite and Internet. International Trade-Basis and components, trade balance, major trading organizations, changing pattern of India's foreign trade, sea-routes, Inland water-ways, sea ports and their hinter-land.

Topic-16 Human settlements (World and India)

Unstable and stable settlements, rural settlements: origin, types and patterns; Urban settlements: Origin and growth of towns; functional classification of towns. Problems of urbanization in the world; urbanization in India; Urban slums and squatters. Morphology of cities; distribution of Mega-cities, problems of human settlements In Developing countries.

Topic-17 Geographical perspective on selected issues and problems

Environmental pollution-Land, Water, Air, Noise, Global Warning, Poverty, Food Security; Sustainable Development.

Topic -18 General Cartography (Practicals)

Elements and classification of maps, scales, map-projections, finding directions, latitudes, longitudes and calculation of local & standard time, Identification & Analysis of relief forms: Topographical Maps and interpretation. Weather-instruments and Interpretation of weather maps. Digital mapping, Remote sensing, Visual interpretation. Processing of Data, Thematic mapping, representing statistical data by various diagrams-Bar, Histogram, Pie etc.

Spatial Information technology: GIS, GPS, Computers-Software and Hardware components, Data format, Raster and Vector, editing and topology etc. Spatial Analysis; Overlay, Buffer and Proximity analysis.

- Geomorphology Climatology
- Regional Development Urban Geography Cultural Geography Geography of India
- Remote Sensing and GIS Biogeography Social Geography Hydrology
- Geographical Thought Water Resource and
- Management
- Population Geography
- Agricultural Geography

Teaching Education and Methodology

- 1. Learning & Teaching
- 2. Language across the curriculum
- 3. Understanding discipline and subject
- 4. Gender school and Society
- 5. Pedagogy of a school subject
- 6. Knowledge and curriculum
- 7. Assessment for learning
- 8. Creating an inclusive school
- 9. Childhood and growing up
- 10. Drama and Art in Education