

Syllabus of Geography Paper - I

PRINCIPLES OF GEOGRAPHY

Physical Geography

Climatology

- Temperature and pressure belts of the world
- Atmospheric stability and instability
- Planetary and local winds
- Monsoons and jet streams
- Air masses and fronts
- Temperate and tropical cyclones
- Heat budget of the earth
- Atmospheric circulation
- Types and distribution of precipitation
- Weather and Climate
- Koppen's Thorn thwaite'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.

Oceanography

- Bottom topography of the Atlantic, Indian, and Pacific Oceans
- Temperature and salinity of the oceans
- Waves, currents, and tides
- Marine resources; biotic, mineral, and energy resources
- Coral reef's coral bleaching
- Sea-level changes
- The law of the sea and marine Pollution Heat and salt budgets
- Ocean deposits

Geomorphology

- Origin and evolution of the Earth's crusts
- Fundamentals of geomagnetism
- Physical conditions of the earth's interior
- Geosynclines
- Continental drift

- Isostasy
- Plate tectonics
- Recent views on mountain building
- Volcanicity
- Earthquakes and Tsunamis
- Concepts of geomorphic cycles and Landscape development
- Denudation chronology
- Channel morphology
- Erosion surfaces
- Slope development
- Applied Geomorphology
- Geomorphology
- Economic geology and environment
- Factors controlling landform development
- Endogenetic and exogenetic forces.

Environmental Geography

- Human ecological adaptations
- Influence of man on ecology and environment
- Global and regional ecological changes and imbalances
- Ecosystem management and conservation
- Environmental degradation, management, and conservation
- Biodiversity and sustainable development
- Environmental policy
- Environmental hazards and remedial measures
- Environmental education and legislation
- Principles of ecology

Biogeography

- Genesis of soils
- Classification and distribution of soils
- Soil profile
- Soil erosion, Degradation, and Conservation
- Factors influencing the global distribution of plants and animals
- Problems of deforestation and conservation measures
- Social forestry, agro-forestry
- Wildlife
- Major gene pool centres.

Human Geography

Perspectives in Human Geography

- Areal differentiation
- Regional synthesis
- Dichotomy and dualism
- Cultural regions of the world
- Human development index
- Environmentalism
- Quantitative revolution and locational analysis
- Radical, behavioural, human, and welfare approaches
- Languages, religions, and secularisation.

Population and Settlement Geography

- Growth and distribution of world population
- Demographic attributes
- Causes and consequences of migration
- Concepts of the over-under-and optimum population
- Satellite towns
- Problems and remedies of urbanisation
- 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
- Concept of primate city and rank-size rule
- Functional classification of towns
- Sphere of urban influence
- Rural-urban fringe
- Sustainable development of cities.

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.

Regional Planning

- Concept of a region
- Types of regions and methods of regionalization
- Growth centres and growth poles
- Regional imbalances
- Regional development strategies
- Environmental issues in regional planning
- Planning for sustainable development.

Models, Theories, and Laws in Human Geography

- System analysis in Human geography
- Malthusian, Marxian, and demographic transition models
- Central Place theories of Christaller and Losch
- Perroux and Boudeville
- Von Thunen's model of agricultural location
- Weber's model of industrial location
- Ostov's model of stages of growth
- Heartland and Rimland theories
- Laws of international boundaries and frontiers.





