

509. GEOGRAPHY

1. Interior of the Earth-Isostasy, Continental Drift. Mountain Building, Volcanism and volcanic land forms - Types of land forms and Cycles: (i) Fluvial, (ii) Glacial, (iii) Karst, (iv) Arid.
2. Air masses and fronts - Classification of air masses. - Perturbations in the Atmosphere - Cyclones and anti-Cyclones - Classification of Climates - Basic principles of Koeppen & Thornthwaite.
3. Submarine relief with special reference to the Indian Ocean. - Water Masses, Tides and Ocean currents.
4. World Distribution of population - Birth and Death Rates, Migration, Growth & Density - Major cultural regions of the world. - Concept of social wellbeing and HDI.
5. The concept of central places and growth centers - (Christaller) - Models of distribution - Zipf's rank-size rule - Primate city concept - Functional classification of settlements.
6. Dualism in Geography - Recent trends in Geography - The quantitative revolution. - Systems analysis in Geography.
7. Industrial Location Theories. - Concept of economic region and regional delineation. Resource Base - Major natural resources. - Resource regions and sub-regions.
8. Agricultural regions in India. - Agricultural Typology. - Irrigation potential of Andhra Pradesh. - Globalization & Regional variations in development.
9. Geographical Information system. - Definition, evolution, components and Approaches to the study of GIS - Digital representation of geographic data - Data base management systems, spatial and non spatial data - Raster and vector data models - Data input and errors in GIS - Spatial analysis - GIS as decision support system - Application of GIS in resource management and Urban & regional planning.
10. Remote sensing. - Electro Magnetic Spectrum - Remote sensing platforms and sensors - Visual Image Interpretation - Digital Image processing. - Resolution - IRS & LANDSAT - Principles of aerial photo interpretation & their types.
11. Cartography - Maps - Map scale - Projections - Symbolization - Generalization - Cartographic techniques of representing geographic data - Thematic cartography - Digital cartography.
12. Environment - Environmental components - Ecosystems - Environmental pollution - Global warming and Ozone layer depletion - Environmental Impact Assessment - Environmental problems and policies. - Environmental conventions.