

## **66. GEOINFORMATICS**

### **Part - A (40 Marks)**

Interior of the Earth, Weathering, Erosional & Depositional Landforms - Cycle of Erosion, Atmospheric Pressure & Winds, Insolation & Temperature distribution, forms of condensation, Cyclones & Anticyclones, Classification of climates, submarine relief, Oceanic Circulation, Oceanic resources; World population-distribution pattern, growth trends and density of population, Patterns and processes of population migration, Concept of region, Industrial location, Environmental Pollution, Urbanization Environmental Impact Assessment. Man Environment relations, Primary, Secondary & Tertiary activities, Resource – Types & Distribution, Conservation of Resources.

### **Part - B (60 Marks)**

Map Scales, Types of Maps, Sampling, Relief Profiles, Graphic means of communication, Projections, Digital Cartography, Data base management. GIS-Spatial Data Structures – Raster & Vector, Non-Spatial Data structures-Hierarchical, Network, Relational and object oriented models. Spatial Data Analysis-overlay, Buffering proximity. Aerial Photographs & satellite imageries – High and Medium Resolution data, Utility of Aerial photographs, comparison of Aerial photograph & Map, Digital image processing-supervised and unsupervised classification, Image Rectification, ground truth location on satellite imagery, Remote sensing platforms & sensors, Geo referencing, GPS concepts. Integration of GIS, RS & GPS-Their applications. Data base connectivity in visual Basic. Fundamentals of C-Language, Internet Mapping.