

## **PGQP26 (Geoinformatics): Syllabus for CUCET**

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Remote sensing systems, remote sensing sensors, Electromagnetic Radiation, Interaction of EMR with atmosphere & Earth's Surface, Spectral properties of major elements, Photographic System, Cameras, Filters & Films, Resolutions, Earth Resource Satellite, Satellite missions (Indian and Foreign), Major Remote Sensing Agencies, Fundamental of Digital Image Processing, Geographic Information System (GIS) & its components, Global Positioning System (GPS) technology, Major navigational satellite missions, Application of Geoinformatics.

Origin of Earth, Hypothesis, Components of Earth System, Internal Structure of Earth, Lithosphere, Biosphere, Hydrosphere & Atmosphere, Plate Tectonics Theory and Its Relationship to Earthquakes and Volcanic Activity, rock types and structures, weathering and erosion, landforms of Fluvial, Eolian, Glacial and Marine origin.

Environment, Sustainable development, Global warming, Climate change, GHGs, Disaster Management, Recent disaster events, Major disaster management agencies and their responses, Geography and Geology of India.

Water resources, Hydrological Cycle, Watershed and Watershed management, Groundwater, Aquifers, Agro-climatic regions, Forestry and ecology

Cartography, Scale, Projections, Map elements, Topographical sheet, Conventional signs and symbols, Graph and its representation

Components of Computer, Advantages and Scope, Computer peripherals, Operating System, Databases, Internet and Web technologies, Microsoft package, Digital file type

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