New Syllabus of Entrance Examination for 2019-20 and onwards

M.Sc - Geographical Information System (GIS),
CENTRE FOR GEOINFORMATICS TECHNOLOGY,
DOS in Geography, Manasagangotri Campus, University of Mysore, Mysuru


2. **Physical Geography:** Field, Scope and importance; Distribution of land and water, Wagner’s theory of continental drift, Plate tectonics, Movements of the earth’s crust- Diastrophism; Folds and faults; volcanoes and Earth Quakes; Rocks; Soils; Mountains-Plateau, Plains.

3. **Cartography, Surveying and Mapping:** Definition, Scope and importance of Cartography; Color theory; Types of Maps; Coordinate Systems, Latitude/Longitudes and Projections. Surveying Techniques includes Plane table surveying; Radiation and Intersection; Prismatic compass surveying; Radiation and intersection; Chain surveying.

4. **Environmental Studies:** Definition, principles and scope of environmental science, Interaction of Environment and Ecology; Biodiversity conservation; Forests and Biomass in India, Habitat Diversity; Lakes Ecosystem; Energy Sources, Types of Pollution; Waste Management; Sanitation Problems, Legislations of Environment in India, Polices of Swachh Bharath Mission and Clean India.

5. **Computer Applications:** Basics of Computer; Generations; Types of Computer systems; Software and Hardware; CPU; Memory and Its types; Data and Information; MS Office; Database Management; Internet, Intranet; Types of Networks- LAN,MAN, WAN; Wireless Communications; Artificial Intelligence.

6. **Mathematics and Statistics:** Basic calculations, Number theory; Algebra; Geometry, Axioms and Postulates; Measurement units and unit conversions; Graph Theory and quadrants; Statistics- meaning, importance and limitations; data: primary and secondary; Sampling and its types; Standard Deviations; Distribution of Data; Regressions and Data Analysis.

7. **Geographical Information Systems:** Concepts, History of GI Science, Components and Importance of GIS, Spatial Data-Point, Line and Polygon; Non-Spatial Data and Attribute Management; Data Integration; Commercial and open source software’s;

8. **Remote Sensing:** History, Definition, Concepts of Remote Sensing; Regions in electromagnetic spectrum, wavelength, frequency; Satellites and Orbits; Satellite Sensors; Types of Satellite; Aircraft and Unmanned Aerial Vehicles; Various satellites- KALPANA, INSAT and OCEANSAT.

9. **Indian Constitutions:** Meaning and Preamble of Constitutions; Assembly; Salient features of Indian constitutions; Fundamental Rights and Duties, Directive Principles of State Policy; Governor: Role and Position, CM and Council of ministers.

10. **General Aptitude and Reasoning:** critical reasoning, Inferences, strengthen or weaken the argument, Numerical computation, numerical estimation, numerical reasoning and data interpretation.