P.G. Semester-II Examination, 2023
GEO-INFORMATICS

Course ID : 23152   **Course Code : GI202T**

Course Title : Introduction to Geographical Information System & Spatial Modelling

Time : 2 Hours   Full Marks : 40

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any **four** questions selecting at least **one** from each Unit.

UNIT-1

(History and Principle of Geographical Information System)

1. What is DTM? Explain the methods of acquiring digital terrain data in GIS. Illustrate the operations and methods of overlay analysis in GIS.   2+4+4

2. Give an account on the types of raster data in GIS. Highlight the techniques of compressing raster data.   6+4=10

UNIT-2

(Data Management in GIS)

3. Mention the major sources of GIS data. Briefly discuss the different processes of vector editing.   3+7=10

4. Define spatial interpolation. Elaborate the local methods of spatial interpolation. How are these different from the global methods?   2+6+2=10

UNIT-3

(GIS Modelling for Decision Support)

5. Define Hypermaps. Briefly discuss the 'Conceptual Data Model' as an important types of spatial data model.   2+8=10

6. What do you mean by digital cartography? Mention different Linear and Angular Parameters of Map Projection.   3+7=10

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