M. SC. GEOINFORMATICS (MSCGI)

Term-End Examination June, 2024

MGY-006: SPATIAL ANALYSIS AND MODELLING

Time: 2 Hours Maximum Marks: 50

Note: (i) All questions are compulsory.

- (ii) The marks for each question are indicated against it.
- 1. Write short notes on any *four* of the following:

 $4 \times 5 = 20$

- (a) Applications of Network Analysis in GIS
- (b) Surface Modelling
- (c) Feature Manipulation
- (d) Spatial Distance Measurement
- (e) GIS Project Management
- (f) GIS programming

2. (a) What is Data Mining? Discuss the steps involved in data mining process.

Or

- (b) Discuss the stages and methods of remote sensing and GIS data integration.
- 3. (a) Discuss the methods of neighbourhood operations in raster analysis and its applications.

Or

- (b) What is spatial interpolation? Describe the techniques of spatial interpolation.
- 4. (a) Write a note on viewshed analysis. Also discuss the various applications of viewshed analysis.

Or

(b) Discuss the different vector overlay analysis methods with the help of neat diagrams.