

M. SC. (GEOINFORMATICS)

(MSCGI)

Term-End Examination

June, 2025

**MGY-009 : ADVANCES IN REMOTE SENSING
AND GIS**

Time : 2 Hours

Maximum Marks : 50

Note : *All questions are compulsory. Questions have internal choices. The marks of each question are indicated against it.*

1. Write short notes on any *four* of the following : 4×5=20
 - (a) Radiometric calibration and atmospheric correction of multispectral images
 - (b) K-nearest neighbours

- (c) Object based image analysis and its types
 - (d) Indian geospatial standards
 - (e) Components of SDI
 - (f) Applications of LiDAR data
 - (g) Components of location based services
2. (a) Discuss in detail trends in microwave data preprocessing. Add a note on limitations of microwave data. 8+2

Or

- (b) What is hyperspectral cube ? Describe the steps involved in hyperspectral data processing. 2+8
3. (a) What is cloud based data processing ? Explain software as a service. 2+8

Or

- (b) What is National Geospatial Policy, 2022 ? Discuss its components. 2+8

[3]

4. (a) What are Web GIS and IoT ? Explain their integration giving examples. 10

Or

- (b) Give an overview of role of programming languages in geospatial analysis. 10

× × × × ×