

M. SC. IN GEOINFORMATICS

(MSCGI)

Term-End Examination

December, 2025

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

Time : 2 Hours

Maximum Marks : 50

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

1. Write short notes on any *four* of the following : 4×5=20
 - (a) Advanced methods in Microwave Data Analysis
 - (b) LiDAR Data Processing
 - (c) Expert System
 - (d) Recent trends in Web GIS and IoT
 - (e) Location-based Services and its scope

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- (f) Canadian Geospatial Ecosystem
- (g) Geospatial Standards and its need
- 2. (a) Discuss in detail the steps in OBIA. 10

Or

- (b) Discuss hyperspectral data processing and its major steps. 10
- 3. (a) What is cloud-based data processing ? Discuss Bhuvan as a platform for cloud-based data processing. 10

Or

- (b) Explain the role of Artificial Intelligence in geospatial applications. 10
- 4. (a) What do you understand by Advanced Spatial Analysis ? Discuss spatial visualization and its types in detail. 3+7

Or

- (b) What is Spatial Data Infrastructure ? Discuss Indian NSDI and its major initiatives. 3+7

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