M. SC. (GEOINFORMATICS) (MSCGI)

Term-End Examination June, 2025

MGY-011 : GEOENVIRONMENTAL APPLICATIONS OF GEOINFORMATICS

Time: 2 Hours Maximum Marks: 50

Note: All questions are compulsory. The marks for each question are indicated against it.

- 1. Write short notes on any four of the following: $4\times5=20$
 - (a) Mangrove Ecosystem
 - (b) Urban Heat Islands (UHIs)
 - (c) Mapping and monitoring urban sprawl
 - (d) Coastal Regulation Zone (CRZ)
 - (e) Landform mapping using remote sensing data
 - (f) Mapping geological structures
 - (g) Marine Protected Areas (MPAs)

2. (a) Discuss the data and methods useful for mapping potential groundwater zones.

10

Or

- (b) Explain the various water quality parameters that can be derived using remote sensing data.
- (a) Discuss the recent developments in the field of ecological applications of geoinformatics giving suitable examples.

Or

- (b) Give an overview of various vulnerabilities associated with coastal areas. Discuss the major steps involved in a coastal vulnerability assessment study.

 5+5
- 4. (a) Discuss the recent developments in the field of atmospheric applications. 10

Or

(b) Explain the methodologies used for mapping lakes and wetlands giving suitable examples.

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