

2025

M.Sc. 3rd Semester Examination

REMOTE SENSING AND GIS

Paper : RSG - 302

**(Spatial Data Science and SDSS :
Spatial Decision Support System)**

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Illustrate the answers wherever necessary.

Group - A

1. Answer any *two* questions : 2×2=4
- (a) What is the difference between data science and spatial data science?
 - (b) Name two popular clustering algorithms used in Unsupervised Machine Learning.
 - (c) What are the phases involved in decision making process?
 - (d) What is Big Data?

P.T.O.

(2)

Group - B

2. Answer any *two* questions : 4×2=8

- (a) Explain the key elements of Spatial Data Science.
- (b) What are the potentialities of Big Data in GIS?
- (c) Elucidate the framework of Spatial Decision Support System (SDSS).
- (d) Briefly explain the three types of decision problems and mention the roles of manpower and computers in solving these problems with a neat sketch.

Group - C

3. Answer any *one* question : 8×1=8

- (a) Briefly explain the key elements of machine learning. What are the major types of machine learning techniques used in the Geospatial domain? 6+2
- (b) Discuss the process of Criterion Weighting through Pairwise Comparison method. How can you assess the consistency of the weights derived using the method? 4+4

Internal Assessment : 5 marks
