Ph. D. (GEOLOGY) (PHDGY)

Term-End Examination December, 2024

RGYE-112 : GEOLOGICAL APPLICATIONS OF REMOTE SENSING AND GIS

Time: 3 Hours Maximum Marks: 100

Note: (i) Answer any **five** questions.

(ii) All questions carry equal marks.

1. Discuss in detail image classification methods.

20

- Give a detailed account of principles of GPS operation.
- 3. What is data quality? Explain the components of data quality.
- 4. Discuss the role of remote sensing and GIS in delineation of potential mineral zones. 20
- 5. Give a detailed account of data integration. 20

- 6. Discuss the role of remote sensing and GIS in engineering geological investigation.
- 7. Write short notes on any *two* of the following:

 $2 \times 10 = 20$

- (a) Accuracy assessment
- (b) Elements of a map
- (c) Map projection
- (d) Data visualisation
- 8. Write short notes on any *two* of the following:

 $2 \times 10 = 20$

- (a) Application of DEM in identification of different types of landforms
- (b) Topology
- (c) Data quality issues
- (d) Advances in GIS