MGY-005

POST GRADUATE DIPLOMA IN GEOINFORMATICS (PGDGI)

Term-End Examination
December, 2023

MGY-005 : TECHNIQUES IN REMOTE SENSING AND DIGITAL IMAGE PROCESSING

Time : 3 Hours *Maximum Marks : 75*

Note : *(i) All questions are compulsory.*

(ii) Marks for each question are indicated against it.

(iii) Draw well-labelled diagrams, wherever necessary.

1. Write short notes on any *four* of the following :

    4×5=20

    (a) Equipments used for photogrammetical measurements

    (b) Non-imaging radar

    (c) Types of statistical analysis

    (d) Significance of band rationing

    (e) Error matrix

    (f) Generation of image histogram in R

2. (a) Describe application potential of microwave remote sensing.   10

   Or

   (b) Give an account of supervised classification.

3. (a) Discuss principal component analysis and its importance.   10

   Or

   (b) Discuss the basic codes of elements common for programming languages.

4. Give an account of change detection techniques used for remote sensing data.   10

5. Discuss the functions used in data exploration. Also add a note on control structure in R.   10

6. (a) Discuss potential of hyper spectral remote sensing in geological, atmospheric and vegetation related studies.   15

   Or

   (b) Explain radiometric errors and their corrections.