

M.Sc. 2nd Semester Examination, 2025

REMOTE SENSING AND GIS

(Digital Image Processing)

PAPER — RSG-201

Full Marks : 25

Time : 1 hour

Answer all questions

The figures in the right hand margin indicate marks

*Candidates are required to give their answers in
their own words as far as practicable*

Illustrate the answers wherever necessary

GROUP—A

Answer any two questions : 2 × 2

- 1. Define image rectification ?**

(Turn Over)

2. Mention two sources of errors in image data.
3. What is spatial fequency ?
4. What is meant by image resampling ?

GROUP-B

Answer any two questions : 4×2

5. Compare the effects of 'Max-Min' linear contrast stretches and 'Histogram Equalization' on an image.
6. Describe radiometric correction and give one example.
7. Discuss principal component analysis in the context of remote sensing data.
8. Describe the concept of statistical evaluation of image quality.

(3)

GROUP – C

Answer any one question : 8 × 1

9. Discuss image fusion technique. Briefly
Mention its advantages in remote sensing ?
5 + 3
10. What is spatial filtering ? Why spatial filtering
is very much important for information
extraction from an image ? 8

[Internal Assessment – 5 Marks]

