

(No additional sheet will be supplied)

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PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Aerial photography.
2. Atmospheric windows.
3. Active remote sensing.
4. Advantage of thermal imagery.
5. Digital image processing.
6. Unsupervised classification.
7. Components of GIS.
8. Comparison between spatial and non spatial data.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Explain in detail basic elements of aerial photo/image interpretation.

Or

10. Explain energy interaction with earth surface features. Sketch the spectral reflectance of vegetation, soil and water.

11. Write an essay on the various scanning mechanisms in remote sensing.

Or

12. Discuss the factors affecting microwave measurement.

13. Explain in detail about the map projection in GIS.

Or

14. List various image enhancement techniques and explain each in detail.

15. What are raster data models and vector data models? Write the basic differences between raster and vector data models.

Or

16. Explain data collection, data input, data manipulation and data output modules in GIS.

