2024

GEOGRAPHY — HONOURS

Paper: CC-12

(Remote Sensing, GIS and GNSS)

Full Marks: 50

The figures in the margin indicate full marks.

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

Group - A

Answer any five of the following questions (each within 50 words).

 2×5

- 1. What is EMR?
- 2. What is atmospheric window?
- 3. What do you mean by spectral reflectance curve?
- 4. What is orthorectification in remote sensing?
- 5. State the significance of overlay analysis.
- 6. What is ephemeris data used for?
- 7. What is GDOP?

Group - B

Answer any four of the following questions (each within 150 words).

 5×4

- 8. Differentiate between spectral and radiometric resolutions of satellite data with examples.
- 9. How do different regions of the electromagnetic spectrum contribute to various remote sensing applications?
- 10. What are the applications of SRTM data in geographical studies?
- 11. Explain the vector data structure in GIS and its advantages.
- 12. What is the significance of attribute tables in GIS-based data analysis and representation?
- 13. What are the advantages and disadvantages of GNSS-based survey over conventional surveys?

Please Turn Over

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Group - C

Answer any two of the following questions (each within 500 words).

10×2

- 14. State the characteristics and uses of the Landsat OLI sensor.
- 15. Discuss the roles of tone, texture, pattern and association in interpretation of remote sensing imagery with examples.
- 16. Discuss in which ways GIS can be utilised as a decision support system.
- 17. Describe the functional segments of a GNSS.