

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

(0613)

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.
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