2021

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. Define Swath.

2. What is passive remote sensing?

3. Define topology.

4. What are the advantages of ALOS DEM data?

5. What is the purpose of georeferencing?

6. What is radiometric resolution?

7. Define GNSS.

Group – B

Answer *any four* of the following questions (each within **150** words). 5×4

8. What is the spectral reflectance characteristics of water and vegetation in blue, green, and NIR bands?

9. Discuss the different forms of scattering.

10. Differentiate between whisk-broom and push-broom scanners with examples.

11. Discuss the role of tone and texture in visual image interpretation with examples.

12. Write a short note on query and its use in GIS.

13. How does a GNSS satellite communicate with a ground-based receiver unit?

Please Turn Over

(2)

Group – B

Answer *any two* of the following questions (each within **500** words). 10×2

14. Compare the advantages and disadvantages of digital vis-a-vis visual image interpretation.

15. What are the advantages and disadvantages of using GIS?

16. Explain the various applications of buffer generation in GIS.

17. What steps are involved in transferring GNSS waypoint data to GIS?

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