B.Sc./3rd Sem (G)/GEO/22(CBCS)

2022

3rd Semester Examination

GEOGRAPHY (General)

Paper : SEC 1-T

[CBCS]

Full Marks : 40　　　　　　　　　　Time : Two Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.

[Remote Sensing]

Group - A

Answer any *five* of the following questions :　2×5=10

1. Define Remote Sensing.

2. What is electromagnetic radiation?

3. What do you mean by scattering?

4. What is a pixel?

5. Define the atmospheric window.

6. Mention the importance of False Colour Composites (FCC).

P.T.O.

7. What is a DN value?

8. Differentiate land use with land cover.

Group - B

Answer any *four* of the following questions : 5×4=20

9. Schematically describe the remote sensing processes.

10. Describe the elements of visual image interpretation in a very brief.

11. Mention the principles of Standard False Colour Composites (FCC).

12. Differentiate geostationary from sun-synchronous satellites.

13. What is a spectral signature curve? Mention the utilities of the spectral signature curve.   2+3

14. Mention the spectral response of visible and infra-red channels for remote sensing of vegetation.

Group - C

Answer any *one* of the following questions : 10×1=10

15. What is resolution? Discuss the various types of sensor resolutions.   2+8

16. What is a digital image classification? Describe, in brief, the various methods of land use land cover classification.

    2+8

(5)

OR

[Geographic Information System]

Group - A

Answer any *five* of the following questions :   2×5=10

1. Define GIS.

2. What do you mean by Buffer?

3. What is spatial data?

4. What do you understand by digitization?

5. What is Datum?

6. What do you mean by Referencing?

7. What is GUI?

8. What is topology?

Group - B

Answer any *four* of the following questions :   5×4=20

9. Distinguish between spatial data and attribute data.

10. What are the major data sources of GIS?

11. Write down the various applications of GIS?

12. Write a conceptual note on the Data Modelling in GIS.

P.T.O.

13. Distinguish between raster data and vector data model.

14. What are the major components of a good map layout?

Group - C

Answer any *one* of the following questions : 10×1=10

15. Write a detailed accounts on the components of GIS.

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

বঙ্গানুবাদ

বিভাগ - ক

যেকোনো *পাঁচটি* প্রশ্নের উত্তর দাও। ২×৫=১০

১। GIS বা ভৌগোলিক তথ্য ব্যবস্থা বলতে কি বোঝ?

২। Buffer বলতে কি বোঝ?

৩। Spatial Data কি?

৪। Digitization বলতে কি বোঝ?

৫। Datum কি?

৬। Referencing বলতে কি বোঝ?

৭। GUI কি?

৮। টোপোলজি (Topology) কি?