DECEMBER 2024 **P/ID 4437/PGE2F**

Time : Three hours Maximum : 80 marks

PART A — (10 × 2 = 20 marks)

Answer any TEN questions in 50 words each.

1. Give a short note on Spatial Data.

2. What is meant by Geoprocessing?

3. Give a brief note on Spatial Entities.

4. What is meant by Sliver Polygons?

5. Define Datum in geography.

6. Distinguish between Data and Information.

7. What is Interpolation?

8. Write a brief note on DTM in spatial analysis.

9. Define Overshoot in mapping.

10. What is a Dangling Node in GIS?

11. Provide a short note on Animated Map.

12. Define Absolute Accuracy in geospatial terms.

PART B — (5 × 6 = 30 marks)

Answer any FIVE questions, in 250 words each.

13. Discuss the main components of a GIS.

14. Explain the concept of topology in spatial data modeling.

15. Discuss the advantages of using an RDBMS in GIS applications.

16. Discuss the challenges associated with using DEMs in GIS analysis.

17. Provide examples of practical applications of network analysis in GIS.

18. What are the prospects of GIS in disaster management and response?

19. Discuss the role of OpenStreetMap in providing open geospatial data.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions, in 500 words each.

20. Describe methods for detecting and rectifying errors in spatial data.

21. Describe methods for establishing and maintaining the linkage between spatial and attribute data in a database.

22. Explain the role of data validation in maintaining high-quality spatial and attribute data.

23. Describe common spatial interpolation methods used in GIS.

24. Give a detailed explain of how GIS can be applied in environmental management.

———————