2022

GEOGRAPHY — HONOURS

Paper : CC-2

(Cartographic Techniques)

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.

[Use of Calculator allowed]

Category - A

Answer *any five* questions (each within **50** words).   2×5

1. What do you understand by scale factor?

2. What are the three main means of representing scale?

3. What is meant by plane of projection?

4. Convert the coordinates (5, 40°) of a point A to rectangular coordinates.

5. Give the full form of WGS 84 stating the significance of the number 84.

6. Explain clearly the utility of comparative scales giving a clear example.

7. Why are spheres used to show urban population?

Category - B

Answer *any four* questions (each within **150** words).

8. Find the whole circle bearings for the following reduced bearings :   5

   (a) N 20°20′E   (b) S 50°28′E

   (c) S 26°22′W   (d) N 45°18′W.

9. Explain the concept of a Rhumbline.   5

10. Explain the cartographic uses of geoid and spheroid.   5

11. What are the information given at the margins of topographical sheets?   5

12. Differentiate between true and geographical north with the help of a diagram. What is the difference between these two called?   4+1

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13. What is the full form of the term UTM? How many zones can be identified on the UTM world? How many degrees of longitude does each zone span?   1+3+1

Category - C

Answer *any two* questions (each within **500** words).

14. Distinguish between angular and rectangular grid measurement systems with diagrams.   10

15. Describe the different components of a map with the help of a diagram.   10

16. Distinguish and define the characteristics of Isopleth, Choropleth and Chorochromatic maps. How does the index of the isopleth and the choropleth map differ? Use explanatory sketches.   6+4

17. What are the essential elements of a cadastral map? Convert the scale 16 inches to a mile to its metric equivalents. Give the conventional signs to show a river with tidal flow and an unmetalled road.   5+3+2

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