

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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