14 (GGY-4) 4206 (CG) (OP)

## 2023

## **GEOGRAPHY**

Paper: GGY-4206

(Cartography)

Full Marks: 80

Time: Three hours

The figures in the margin indicate full marks for the questions.

## SECTION-A

Answer *any three* questions from the following: 16×3=48

1. Discuss the significance of thematic cartography in contemporary period and discuss its trend of development in brief. Also discuss the regional are information approach adopted in the field of thematic cartography.

8+8=16

2. With appropriate illustration discuss the application of point, line and area concept in thematic cartography. Discuss the scale factor in application of the concept.

8+8=16

3. Discuss the data grouping method by using a set of hypothetical data and illustrate the significance of the method in presenting data through choropleth and isopleth maps.

8+8=16

- 4. State the types of air photos and their characteristics. Also state the significance of time (forward) and side cap (overlap) in 'serpentine pattern' air photo flight technique.

  8+8=16
- 5. Discuss the 'geographic information system' technology and illastute its role in spatial data management, analysis and mapping.

  8+8=16

## SECTION-B

Answer any four questions.

 $8 \times 4 = 32$ 

6. With suitable illustrations analyse the method of scale determination of an aerial photograph, when focal length and flight light is available to you and when these parameters are not available to you. In case of an uneven terrain condition how you are going to determine the scale of the air photo?

4+4=8

- 7. With suitable illustrations discuss the element of aerial photo interpretation.
- 8. Discuss the problem and prospects of thematic cartography.
- Discuss the fundamentals of satellite remote sensing technique with suitable example.
   Discuss how resolution of satellite data determine the nature of information that you can acquire for preparing thematic map.
   4+4=8
- 10. Write in brief: (any two)

 $4 \times 2 = 8$ 

- (a) Indian remote sensing satellite and their data products
- (b) Emergency issues in thematic cartography
- (c) Components of GIS