Total number of printed pages-3

14 (GGY-4) 4206 (OP) CART

2022

GEOGRAPHY

(Optional)

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

Discuss the significance of thematic cartography in contemporary mapping efforts. Also with the emerging issues associated with the development of thematic cartography.

- 2. Discuss the techniques of representing point, line and area data in thematic mapping. What may be the effect of scale in the use of these symbols on map? Illustrate with suitable example. 8+8=16
- With suitable example, discuss the characteristics of choropleth and isopleth maps. Considering some hypothetical data discuss the major data grouping methods. 8+8=16
- 4. Discuss the fundamentals of satellite remote sensing procedure. Illustrate different types of satellite data reconcilation that influence the thematic mapping. 8+8=16
- Discuss GIS and its various components with suitable example and illustration to discuss its role on digital cartography.

8+8=16

SECTION-B

Answer any four questions: 8×4=32

6. With suitable illustrations discuss the methods of scale determination of an aerial photograph and height of an object from its shadow as recorded in aerial photograph.

4+4=8

- 7. Discuss the role of remote sensing and GIS in modern cartography. 4+4=8
- 8. With suitable illustrations discuss the different elements or keys of aerial photo interpretation.
- 9. Discuss different types of aerial photographs and their application areas.
- 10. Write in brief: (any two) $4\times2=8$
 - (a) Digital cartography and its development
 - (b) Data analysis in GIS
 - (c) Area/Polygon data