

Total number of printed pages-4

14 (GGY-3) 3116

2021

(Held in 2022)

GEOGRAPHY

Paper : GGY-3116

**(Quantitative and Cartographic Methods in
Geography)**

Full Marks : 80

Time : Three hours

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

UNIT — I

Marks : 40

Answer Question No.1 and **any three** from the rest.

1. With necessary illustrations, discuss the significance of quantification in geographical studies. 16

Contd.

Or

What is regional pattern analysis ? Explain the applications of meaningful statistical techniques in regional pattern analysis.

2+14=16

2. With examples, discuss, about the types of geographical data and levels of measurement. 8
3. What is the need of hypothesis testing and significance level ? With illustrations, explain the steps involved in *Z*-test or *F*-test relating to an appropriate geographical phenomenon. 3+5=8
4. Distinguish between probability sampling and non-probability sampling. Throw some light on the techniques of sample data analysis. 2+6=8
5. What is meant by spatial relationship ? Explain the applications of correlation and regression analysis in this respect. 2+6=8
6. Write short explanatory notes on the following : 4×2=8
 - (a) Limitations of quantitative techniques in geographical studies
 - (b) Cluster sampling and its utility.

UNIT — II

Marks : 40

Answer Question No.7 and **any three** from the rest.

7. Distinguish between plane surveying and geodetic surveying. Discuss the principles and procedures of triangulation in this respect. 4+12=16

Or

Write the definition and classification of thematic map. Discuss the principles and problems of thematic mapping with examples. 4+12=16

8. Discuss the nature of digital cartography and its developments. 5+3=8
9. What is Zenithal map projection ? Give a brief outline of its classification and characteristics. 2+6=8
10. Explain the principle and procedure of area data representation. 8

11. What do you mean by point, line and area data in mapping? Discuss briefly about the principles and techniques of point and line data representation. $2+6=8$

12. Write short explanatory notes on the following : $4 \times 2 = 8$

(a) Conical group of map projection and its usefulness

(b) Chorochromatic mapping.