

Total number of printed pages-4

14 (Sem-3) GGY 3116

2025

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

(Quantitative Methods in Geography)

40 Marks

*Answer question no. 1 and any three from
the rest.*

1. What is quantification? Discuss its significance and underlying limitations in geographical studies. 4+12=16

Or

What is meant by spatial relationship ? With the help of a set of geographical data explain the usefulness of correlation and regression analysis in geography. $4+12=16$

2. What is geographical data ? Citing examples, discuss about different types of geographical data and their characteristics and acquisition techniques. $1+7=8$
3. Distinguish between probability and non-probability sampling with necessary illustrations briefly explain the significance of sampling in geographical data collection. $3+5=8$
4. What is the basic difference between parametric and non-parametric tests ? With a set of hypothetical data pertaining to a geographical phenomenon explain the procedure involved in a parametric test. $3+5=8$
5. What do you mean by spatial distribution and spatial concentration ? Throw light on the relevant quantitative measures associated with spatial distribution and concentration. $2+6=8$

6. Write short explanatory notes on the following : $4 \times 2 = 8$
- (a) Geographic data matrix and its significance
- (b) Significance of point pattern analysis

Unit-II

(Cartographic Methods in Geography)

40 Marks

Answer questions no. 7 and any three from the rest.

7. What do you mean by surveying and levelling ? Distinguish between plane surveying and geodetic surveying. Explain the principle of triangulation and its significance.
- $2+2+12=16$

Or

Compare the zenithal, conical and cylindrical map projections with respect to their basic principles, properties and uses. 16

8. Distinguish between traditional and digital cartography. Briefly discuss the utilities of digital cartography. $3+5=8$

9. Distinguish between qualitative and quantitative thematic maps with examples. Mention the problems associated with preparation of such maps. $6+2=8$
10. With necessary illustrations explain the mapping procedure involved in representing point, line and polygon data. 8
11. Throw light in the cartographic techniques associated with representation of physical and socio-economic data. 8
12. Write short explanatory notes on the following : $4 \times 2 = 8$
- (a) Concept of generalisation in mapping
- (b) Choro-chromatic mapping
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