Total number of printed pages–4

14 (SEM–3) GGY 3116

2024

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. What do you mean by qualitative and quantitative analysis ? Discuss with illustration their utilities in geographical studies. 4+12=16

Or

What is spatial interaction ? Explain with hypothetical data the procedure for computing intensity of spatial interaction and population potential.   2+14=16

2.   Explain the concept of geographical data with respect to their nature, types and level of measurement.   8

3.   Discuss with examples the application of probability in sample selection and sample data analysis.   8

4.   Distinguish between parametric and non-parametric tests in hypothesis testing. With a hypothetical set of geographical data explain the application of a non parametric test for testing a hypothesis.

                                           3+5=8

5.   What do you mean by spatial pattern ? Discuss with examples the procedure of analysing the pattern of spatial distribution and concentration of geographical phenomena in an area.   2+6=8

6. Write short explanatory notes on the following : 4×2=8

(a) Geographic data matrix

(b) Non-Probability sampling

UNIT–II

(Marks : 40)

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

7. What is map projection ? Discuss its major categories and their principles of construction and associated properties.

2+2+8+4=16

Or

With necessary illustration discuss the principles and procedure of representing physical geographic data. 16

8. What is map ? Explain its role in geographical studies. 2+6=8

9. Distinguish between plane surveying and geodetic surveying. Explain the principle of triangulation in geodetic surveying. 3+5=8

10. What is thematic mapping ? Classify thematic maps with respect to their principles and characteristics. 2+6=8

11. Discuss the importance of digital cartography in present day context.

12. Write short explanatory notes on the following : 4×2=8

    (a) Concept of 3-D mapping

    (b) Traverse surveying

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