

2019

GEOGRAPHY

(Major)

Paper : 5.3

(Cartographic and Quantitative Methods)

Full Marks : 60

Time : 3 hours

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

1. Answer the following questions :

1×7=7

- (a) What is meant by bearing?
- (b) Which map projection is useful for showing equatorial region?
- (c) Mention two important functions of a theodolite.
- (d) Mention one limitation of arithmetic mean.
- (e) What is Dumpy level?

(2)

- (f) What is meant by 'measure of dispersion'?
- (g) What is coefficient of determination?

2. Answer the following questions in brief : $2 \times 4 = 8$

- (a) What is surveying?
- (b) Mention two limitations of Zenithal Polar Gnomonic Projection.
- (c) Mention the shape and size of the earth.
- (d) Define random sampling with an example.

3. Answer any *three* of the following questions :

$5 \times 3 = 15$

- (a) What is a map? Classify maps with examples. $1 + 4 = 5$
- (b) With necessary illustrations, distinguish between plane surveying and geodetic surveying. 5
- (c) Explain with appropriate diagrams the principles of constructing any Zenithal group of map projection. 5
- (d) Briefly discuss the applications of correlation and regression analysis in geographical study. 5

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(Continued)

(3)

- (e) What is 'Quantification in Geography'? Briefly explain its need in geographical study with examples. $1 + 4 = 5$

4. (a) What is thematic map? Describe its different types with examples. $1 + 9 = 10$

Or

- (b) What is levelling? Explain the principles and procedure of profile levelling with Dumpy level. $2 + 8 = 10$

5. (a) Describe the basic properties, uses and limitations of conical group of map projections. 10

Or

- (b) Distinguish between 'central tendency' and 'dispersion'. Explain the application of the measures of dispersion with examples. $3 + 7 = 10$

6. (a) What is meant by probability sampling? Discuss about the utilities of three different probability sampling techniques in geographical data collection. $2 + 8 = 10$

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(Turn Over)

(4)

Or

- (b) What is 'Time Series Data'? Explain the techniques of analysing such data relating to geographical phenomena.

2+8=10

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