

2018

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 alidade?
- (b) Which map projection would you select for drawing a map of the whole world?
- (c) What is the whole circle bearing of  $N37^{\circ}30'W$ ?
- (d) Mention one important merit of median.
- (e) What is the use of vertical angle in a theodolite?

(f) Compare the values of mean and mode in positively skewed distribution.

(g) What is variance?

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

(a) What is 'contouring'?

(b) What is 'orthomorphism'?

(c) Define 'coordinate system' with example.

(d) Mention two limitations of quantification in Geography.

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

$5 \times 3 = 15$

(a) What is a map? Mention its basic characteristics.

$1 + 4 = 5$

(b) Explain briefly the principle of levelling with the help of dumpy level.

5

(c) Write a note on choice of map projection with reference to conical and cylindrical groups.

5

- (d) What is meant by 'central tendency'? Briefly discuss the relative utilities of its different measures.  $1+4=5$
- (e) What is 'time series analysis'? Briefly explain about its utilities in geographical study with reference to least squares method.  $1+4=5$
4. (a) What is cartography? Discuss about its importance in Geography with necessary illustrations.  $2+8=10$

Or

- (b) What is closed traverse surveying? Explain the principle and procedure in conducting the same using a prismatic compass.  $2+8=10$
5. (a) Describe the basic properties, uses and limitations of cylindrical group of map projections. 10

Or

- (b) What is 'quantification'? Discuss its need in collection and analysis of sample data.  $2+8=10$

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6. (a) What is meant by 'regression residual'?  
Explain its utilities in geographical studies. 2+8=10

Or

- (b) Discuss the applications of correlation and regression analysis in Human Geography. Give meaningful examples. 10

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