2017

## 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:
  - (a) What is the latitude of arctic circle?
  - (b) Write an important property of standard parallel.
  - (c) What is mode?
  - (d) What is the reduced bearing of 237°30'?
  - (e) What is the formula to find out the length of any parallel?

 $1 \times 7 = 7$ 

- (f) Write the difference between the r values of +0.4 and -0.8.
- (g) Write the formula to find out the value of a (intercept) in linear least squares method of time series analysis.
- 2. Answer the following questions in brief: 2×4=8
  - (a) What is triangulation survey?
  - (b) What is meant by spatial resolution in mapping?
  - (c) Mention two important properties of cylindrical projection.
  - (d) Mention two merits of median.
- 3. Answer any three of the following questions:

 $5 \times 3 = 15$ 

- (a) Explain the differences between choropleth and isopleth mapping with examples.
- (b) Describe the procedure of closed traverse surveying with the help of prismatic compass.

(c) Attempt a systematic classification of map projections with examples.

- (d) What is sampling? Briefly highlight its
  utilities in geographical studies. 1+4=5
- (e) What is dispersion? Mention its different measures. Briefly discuss the utilities of any one of such measures.

4. Discuss the trend of development of cartography.

Or

Compare the procedure of carrying out Plane Table Surveying by using Radiation and Intersection methods.

5. What is conical map projection? Describe its basic principles, properties and uses. 1+9=10

Or

What is quantification in geography? Discuss its need and limitations in geographical studies. 2+8=10

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(Continued)

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1+2+2=5

6. What is meant by correlation and regression? Explain the applications of correlation and regression analysis in geographical studies.

2+8=10

Or

What is Time Series Analysis? Discuss its utilities in geographical studies. 2+8=10