

3 (Sem-5) GGY M 3

2016

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 the formula to find out the surface area of the earth?
 - (b) What is the meaning of orthomorphism?
 - (c) What is an 'alidade'?
 - (d) What is polar coordinate system?
 - (e) What is meant by 'bearing'?

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(Turn Over)

(2)

- (f) If the value of coefficient of correlation between two variables X and Y is 0.6 , what is its coefficient of determination?
- (g) Write the formula to compute mean deviation.
2. Answer the following questions in brief : $2 \times 4 = 8$
- (a) Define geodetic surveying.
- (b) What is base map?
- (c) Mention two properties of arithmetic mean.
- (d) Mention two utilities of conical group of map projections.
3. Answer any *three* of the following questions : $5 \times 3 = 15$
- (a) Briefly explain the techniques of point data representation in thematic maps. 5
- (b) What is levelling? Briefly explain the procedure of levelling with the help of dumpy level. $1 + 4 = 5$
- (c) Write a note on choice of map projection for polar regions. 5

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(Continued)

(3)

- (d) What is time-series analysis? Briefly discuss its application in geographical study. $1 + 4 = 5$
- (e) Highlight the need of quantification in geography. 5
4. With necessary illustrations, discuss the importance of cartography in geography. 10
- Or
- Explain the procedure of contouring with the help of dumpy level. 10
5. What is zenithal map projection? Highlight its basic principles, properties and uses. $1 + 9 = 10$
- Or
- What do you mean by central tendency and dispersion? Discuss their utilities in geographical study with examples. $2 + 8 = 10$
6. What is probability sampling? Discuss four different types of probability sampling with respect to their advantages and disadvantages. $2 + 8 = 10$
- Or
- What is regression residual? Explain its utilities in geographical study. $2 + 8 = 10$

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