3 (Sem-3/CBCS) GGY HC 3

2021

(Held in 2022)

GEOGRAPHY

(Honours)

Paper: GGY-HC-3036

(Quantitative Methods in Geography)

Full Marks: 60

Time: Three hours

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

- 1. Answer the following questions very objectively: 1×7=7
 - (a) Give an example of interval data.
 - (b) Among mean, standard deviation and coefficient of variation, which one gives a unitless value?
 - (c) What is sampling?
 - (d) What is the meaning of range?

- (e) When are the values of mean, median and mode equal?
- (f) What is the meaning of $Y-Y_c$ in regression analysis?
- (g) Write the formula for mean deviation.
- 2. Answer the following questions very briefly: 2×4=8
 - (a) Distinguish between qualitative data and quantitative data.
 - (b) Write one property of arithmetic mean.
 - (c) What is meant by random sampling?
 - (d) What is the meaning of perfect correlation?
- 3. Answer **any three** of the following questions in brief: 5×3=15
 - briefly about the nature of such data.
 - (b) What is stratified sampling? Mention its merits over random sampling.
 - (c) Distinguish between central tendency and dispersion. Mention in this context the limitations of arithmetic mean.

(d) What is quantification? Mention its advantages in geographical studies.

2+3=5

- (e) Write briefly about the sources of various geographical data. 5
- 4. What are the measures of dispersion? With necessary illustrations, discuss their usefulness in geographical studies.

2+8=10

Or

Explain with illustrations about the applications of mean in spatial analysis of geographical phenomena.

5. What are time series data? Explain the least squares method of time series data analysis of a geographical phenomenon.

2+8=10

Or

With necessary examples, discuss about sample, sampling and need of sampling in geographical studies.

What is meant by correlation? Compute 6. the value of correlation coefficient for the following data set by using Spearman's Rank Correlation formula and interpret the result:

| Village Name | Female Literacy | Infant Mortality |
|--------------|-------------------|---------------------|
| | Rate (%) | Rate (per thousand) |
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Or

With necessary illustrations, discuss the usefulness of correlation analysis in geographical studies. 10