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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 ?

Contd.

- (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

- (a) What are geographical data ? Write briefly about the nature of such data.
2+3=5
- (b) What is stratified sampling ? Mention its merits over random sampling.
2+3=5
- (c) Distinguish between central tendency and dispersion. Mention in this context the limitations of arithmetic mean.
3+2=5

- (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. 10

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. 10

6. What is meant by correlation ? Compute the value of correlation coefficient for the following data set by using Spearman's Rank Correlation formula and interpret the result : $2+8=10$

Village Name	Female Literacy Rate (%)	Infant Mortality Rate (per thousand)
A	50	95
B	64	90
C	80	70
D	48	120
E	60	92
F	90	40
G	95	38
H	64	85
I	55	95
J	64	87

Or

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