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 : $1 \times 7 = 7$

   (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

(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