63/1 (SEM-3) SEC1/GEOSE3012

2023

GEOGRAPHY

Paper: GEOSE3012

(Statistical Methods in Geography)

Full Marks: 40
Pass Marks: 16

Time: 2 hours

The figures in the margin indicate full marks for the questions

- 1. Choose the correct answer (any five): $1 \times 5=5$
 - (a) Cross-tabulation is divided in
 - (i) two
 - (ii) three
 - (iii) six
 - (iv) eight

- (b) The positive square root of the average of squares of deviation is
 - (i) quartile deviation
 - (ii) mean deviation
 - (iii) standard deviation
 - (iv) coefficient of variation
- (c) The maximum frequency is known as
 - (i) mean
 - (ii) mode
 - (iii) decile
 - (iv) percentile
- (d) In graphical form normal distribution appears a
 - (i) frequency curve
 - (ii) cumulative frequency curve
 - (iii) Bell curve
 - (iv) histogram

- (e) The range of values for correlation coefficeent is
 - (i) 1.0 to 2.0
 - (ii) -2.0 to 2.0
 - (iii) -1.0 to 1.0
 - (iv) -2.0 to 3.0
- (f) The sampling widely used in qualitative research is
 - (i) systematic sampling
 - (ii) random sampling
 - (iii) stratified sampling
 - (iv) purposive sampling
- (g) The 5th decile represent for
 - (i) mean
 - (ii) median
 - (iii) mean deviation
 - (iv) quartile deviation

| (<i>(h)</i> : The p | rimary | source | of | data | is | collected |
|----------------------|--------|--------|----|------|----|-----------|
| IJy | | | | | | |

- (i) books
- (ii) interviews
- (iii) journals
- (iv) megazines
- (i) Quartile deviation for 1, 3, 4, 6, 6, 10 is

Int Section

- (i) 3
- (ii) 2·5
- (iii) 2
- (iv) 1.5
- (j) A map scale is a ratio of ____ on a map to the actual ground.
 - (i) elevation
 - (ii) height
 - (iii) distance
 - (iv) distortion

- 2. Answers any five of the following questions: 2×5=10
 - (a) What do you mean by mean?
 - (b) What is ordinal data?
 - (c) What are two uses of probability?
 - (d) Write two advantages of quartile deviation.
 - (e) What is geographic data?
 - (f) Name two sources of secondary data.
 - (g) What do you mean by purposive sampling?
 - 3. Answer the following questions (any three): 5×3=15
 - (a) What is descriptive statistics? Write its uses in geography. 2+3=5
 - (b) Write a short note on regression analysis.
 - (c) Calculate the following data with the help of Karl Pearson's correlation method:

| X | 7 | 9 | 12 | 8 | 10 |
|---|---|---|----|---|----|
| Y | 6 | 9 | 8 | 5 | 6 |

- (d) Write in short the use of sampling techniques in geography.
- (e) Explain the significance of statistical method in geography.
- (f) Write the advantage and disadvantage of measures of central tendency.
- 4. Answer any one of the following questions: 10
 - (a) What do you mean by measures of dispersion? Discuss the relative measures of dispersion in geographical analysis with example. 2+8=10
 - (b) What do you mean by regression?

 Discuss its application in geographical analysis.

 2+8=10
 - (c) Calculate the following data with the coefficient of variation and interpret the result.

District-wise rainfall variations of Dibrugarh and Kamrup district of Assam:

| District | 2006 | 2007 | 2008 | 2009 | 2010 |
|-----------|-------|-------|-------|-------|-------|
| Dibrugarh | 220cm | 237cm | 244cm | 218cm | 263cm |
| Kamrup | 118cm | 189cm | 160cm | 144cm | 212cm |