



WEST BENGAL STATE UNIVERSITY
B.A./B.Sc. Honours 3rd Semester Examination, 2023-24

GEOACOR07T-GEOGRAPHY (CC7)

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.*

GROUP-A

Answer any one question from the following (within 600 words) 10×1 = 10

1. Define sampling with a suitable example. Discuss the various methods of random sampling. 2+8
2. Define Correlation. How does rank correlation differ from Pearson's product moment correlation? State the properties of bivariate linear regression. 2+3+5

GROUP-B

Answer any four questions from the following (within 150 words each) 5×4 = 20

3. Discuss the scales of measurement of data with suitable examples for each.
4. Mention two merits and two demerits of arithmetic mean. Why is the median suitable for open-ended data sets?
5. Distinguish between class limit and class boundary with suitable examples. Why do we draw frequency curve?
6. Differentiate between probability and non-probability sampling.
7. What is time series data? Production of fire wood (in cubic metre) from forest of West Bengal is given below. Calculate the trend values using 3-year moving average.

| Year | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 | 2003-2004 |
|---------------------------|---------|---------|---------|---------|-----------|-----------|-----------|-----------|-----------|
| Production in cubic metre | 208589 | 196595 | 87589 | 152800 | 299563 | 250399 | 275514 | 218469 | 306279 |

8. What are the advantages and disadvantages of using mean deviation?

9. Calculate 6th decile and 55th percentile from the following data.

| | | | | | | |
|---------------------|-----|-----|-----|-----|------|------|
| Wages per day in Rs | 200 | 250 | 300 | 550 | 1050 | 1850 |
| Number of worker | 30 | 50 | 60 | 80 | 40 | 5 |

GROUP-C

Answer any *five* questions from the following (within 50 words each)

2×5 = 10

10. Differentiate between variable and attribute.

11. In equation $y = a + bx$, what do 'a' and 'b' stand for?

12. What are Sampling errors?

13. Differentiate between prefatory note and footnote of a table.

14. If the record of amount of daily spent by a family on a food gives a coefficient of variation of 50 percent and a standard deviation of Rs. 400. What was the average expenditure on food of that family?

15. If each item is reduced by 20, what effect would this be on the standard deviation? Why?

16. What is relative frequency?

17. Mention two differences between linear and non-linear regression.