## WEST BENGAL STATE UNIVERSITY


B.A./B.Sc. Honours 3rd Semester Examination, 2022-23

## GEOACOR07T-GEOGRAPHY (CC7)

Time Allotted: 2 Hours

Full Marks: 40

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

## FOR REGULAR SYLLABUS

## GROUP-A

Answer any one question from the following $\quad 10 \times 1=10$

1. What is correlation coefficient? Determine the rank correlation coefficient $2+8$ between $X$ and $Y$.

| $X:$ | 250 | 310 | 250 | 280 | 390 | 250 | 420 | 280 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $Y:$ | 65 | 95 | 80 | 95 | 100 | 55 | 85 | 75 |

2. Compare the relative advantages and disadvantages of arithmetic mean, $7+3$ geometric mean and harmonic mean. In which type of situation it is better to use median or mode rather than mean? Why?

## GROUP-B

## Answer any four questions from the following

3. In what respect secondary data is different from primary data? Describe the various sources of secondary data.
4. Mention the importance of statistical table formation.
5. Differentiate between simple random sampling and systematic sampling.
6. Find the fitting line equation through the least square method of the following $4+1$ table using $X$ as the independent variable. Also find the value of $Y$ when $X=16$

$$
\begin{array}{ccccccc}
X & 5 & 10 & 15 & 20 & 25 & 30 \\
Y & 15 & 17 & 22 & 24 & 30 & 34
\end{array}
$$

## CBCS/B.A./B.Sc./Hons./3rd Sem./GEOACOR07T/Regular \& Truncated/2022-23

7. From the following data determine in which firm $A$ or $B$, there is greater variability in individual wages.

|  | Firm A | Firm B |
| :--- | :---: | :---: |
| Average daily wage | Rs. 52.50 | Rs. 47.50 |
| Variance of distribution of wages | 100 | 121 |

8. Using a suitable formula calculate median value from the following data:

| Mid Value | 135 | 145 | 155 | 165 | 175 | 185 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency | 48 | 72 | 116 | 60 | 38 | 22 |

9. What is cumulative frequency? Mention uses of cumulative frequency.

## GROUP-C

Answer any five questions from the following
10. What is semi quartile range?
11. Define 'population' in statistics.
12. Why do we analyse time series data?
13. Differentiate between interval and ratio data with examples.
14. What is relative frequency?
15. Define sampling frame.
16. The weight (in kilogram) of a group of boxes are $9,10,11,14$. What is the mean deviation?
17. Why do we use relative measures of dispersion insteat of absolute measures?
18. What are the components of a statistical table?

## FOR TRUNCATED SYLLABUS

## GROUP-A

Answer any one question from the following
$10 \times 1=10$
$4+6$
Discuss the sources of geographic data for statistical analysis. Explain the significance of quantitative analysis in geography.
2. What are the advantages of rank correlation? Explain the uses of regression $4+6$ analysis in geographical study with suitable examples.

## GROUP-B

## Answer any four questions from the following

$5 \times 4=20$
3. Distinguish between absolute and relative measures of dispersion.
4. What is stratified sampling? In which situation is it considered suitable?
5. Distinguish between primary and secondary data with suitable examples.
6. Differentiate between measures of central tendency and measures of dispersion.
7. Highlight the differences between nominal and ordinal forms of data with suitable examples.
8. Using a suitable formula calculate median value from the following data:

| Mid value | 135 | 145 | 155 | 165 | 175 | 185 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\begin{array}{lllllll}\text { Frequency } & 48 & 72 & 116 & 60 & 38 & 22\end{array}$

## GROUP-C

Answer any five questions from the following
9. What is a variable?
10. Mention two uses of cumulative frequency.
11. Differentiate between class boundary and class limit.
12. What are the disadvantages of random sampling?
13. What is quartile deviation?
14. Mention the demerits of median.
15. Define 'population' in statistics.
16. What is time series data?
17. What are the components of a statistical table?
18. What do you understand by bimodal distribution? Give examples.

