K22U 3435

Reg. No. : .....

Name : .....

I Semester B.Sc. Degree (C.B.C.S.S.– O.B.E.–Regular/Supplementary/ Improvement) Examination, November 2022
(2019 Admission Onwards)
CORE COURSE IN STATISTICS
1B01STA : Introductory Statistics

Time : 3 Hours Max. Marks : 48

Instruction : *Use of calculators and statistical tables are* ***permitted.***

PART – A

Answer **all** questions. Each carries **1** mark. **(6×1=6)**

1. Define population.
2. Write any 2 characteristics of statistics.
3. Define geometric mean.
4. Write down the measures of Kurtosis.
5. Define relative measure of dispersion.
6. Define base year and current year.

PART – B

Answer **any 7** questions. **Each** carries **2** marks. **(7×2=14)**

7. Differentiate primary and secondary data.
8. Write any 4 advantages of tabulation.
9. Write any two merits of Harmonic mean.
10. Calculate coefficient of MD about means of 20, 23, 30, 32, 46, 51, 56, 57, 57, 78.
11. Write two merits and demerits of SD.
12. The first four moments of a distribution are 1, 4, 10 and 46 respectively. Find first four central moments.

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13. Define skewness.
14. Write any two uses and limitations of index numbers.
15. What is the difference between simple and weighted index number ?

PART – C

Answer **any 4** questions. **Each** carries **4** marks. **(4×4=16)**

16. Explain different types of classification with example.
17. Define partition values. Also explain quartiles and deciles.
18. Define row moment and central moment. State and prove relation between them.
19. Derive the formula for the rank correlation coefficient.
20. Write an essay on any two diagrammatic representation of data.
21. State and prove any two properties of standard deviation.

PART – D

Answer **any 2** questions. **Each** carries **6** marks. **(2×6=12)**

22. Explain Lorenz curve. Draw Lorenz curve for the following data :

No. of persons(x) :	15	12	6	5	2
Wealth in 000's :	78	100	70	80	22

23. Define index number. Explain the problems in the construction of index number.
24. Calculate the coefficient of correlation for the following data.

X :	28	45	40	38	35	33	40	32	36	33
Y :	23	34	33	34	30	26	28	31	36	35

25. The first four row moments of a distribution are 1, 2.5, 5.3, 16 respectively. Compute the first four central moments and beta constants. Comment upon the nature of the distribution.

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