



K25U 3380

Reg. No. :

Name :

First Semester B.Sc. Degree (CBCSS – OBE – Supplementary)
Examination, November 2025
(2019 to 2023 Admissions)
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 sample.
2. Write any 2 functions of statistics.
3. Define Harmonic mean.
4. What is Gini coefficient ?
5. Define Coefficient of variation.
6. What is price relative ?

PART – B

Answer **any 7** questions. **Each** carries **2** marks.

(7×2=14)

7. Differentiate nominal and ordinal data.
8. What is the difference between questionnaire and schedule ?
9. Write any two merits of Geometric mean.

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10. Calculate MD about means of 8, 24, 12, 16, 10, 20.
11. Compare absolute and relative measure of dispersion.
12. Define skewness.
13. Define row moment and central moment.
14. Write any two limitations of index numbers.
15. What is time reversal test ?

PART – C

Answer **any 4** questions. **Each** carries **4** marks.

(4×4=16)

16. What is Sampling ? Explain any two methods of sampling.
17. Explain quartiles and deciles.
18. Find combined mean and standard deviations for the following data :

	Size	Mean	Standard Deviation
Group I	25	12	3
Group II	35	15	4

19. Derive the formula for the rank correlation coefficient.
20. Explain scatter diagram and Karl Pearson's coefficient of correlation.
21. Define index numbers. Explain their uses and the concept of cost of living index number.

PART – D

Answer **any 2** questions. **Each** carries **6** marks.

(2×6=12)

22. Write a short note on Kurtosis. The first four row moments of a distribution are 1, 4, 10, and 46 respectively. Comment on the Kurtosis of the distribution.



23. Compute :

- 1) Laspeyres
- 2) Paasche's
- 3) Fisher's index number to the following data :

Year	Price		Quantity	
	Base Year	Current Year	Base Year	Current Year
A	6	10	50	30
B	2	2	100	120
C	4	6	60	60
D	10	12	30	25

24. From the data given below, find which series is more consistent.

Classes	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Series A	10	16	30	40	26	18
Series B	22	18	32	34	18	16

25. Draw less than and more than ogive for the following data and also find median using ogives.

Class	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	5	12	28	40	20	10	4
