

0117116



Reg. No. :

Name :



K19U 3336

I Semester B.Sc. Degree CBCSS (OBE)-Regular
Examination, November - 2019
(2019 Admission)
CORE COURSE IN STATISTICS
1B01STA : INTRODUCTORY STATISTICS

Time : 3 Hours

Max. Marks : 48

Instructions: Use of calculators and statistical tables permitted.

PART- A

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

1. Define the term sample.
2. What are the uses of ogives
3. What is the relation between mean, median and mode of a symmetric distribution?
4. What is the interpretation of zero correlation?
5. How will you choose the base period while constructing an index number?
6. What do you meant by link relative?

PART- B

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

7. Distinguish between nominal and ordinal variables.
8. What are the different parts of a table?
9. Describe a frequency curve.
10. A train covered first 5 km of its journey at a speed of 30km/hr and next 15 km at a speed of 48 km/hr. find the average speed of the train.
11. What are the uses of dispersion?
12. How will you measure kurtosis?

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13. Define rank correlation coefficient.
14. What do you mean by base shifting. What is its use?
15. What is cost of living index number.

PART-C

Answer any **four** questions. Each carries **4** marks. (4x4=16)

16. Distinguish between classification and tabulation.
17. Describe the two types of ogives and their uses.
18. The mean and variance of a group of 100 observations are 6.5 and 3 respectively. 55 of these observations have mean 6.6 and standard deviation 1.5 Find mean standard deviation of the remaining 45 observations.
19. Write short notes on Gini's mean difference and Lorenz curve.
20. What is Sheppard's correction? What will be the corrections for first four in moments?
21. The coefficient of rank correlation between marks in Statistics and Mathematics of 10 students was found to be 0.5. It was later discovered that difference in ranks in two subjects obtained by one of the students was wrongly taken as 3 instead of 7. Find the correct value of rank correlation coefficient.

PART - D

Answer any **two** questions. Each carries **6** marks. (2x6=12)

22. Obtain quartile deviation and median from the following data.

Class	20-29	30-39	40-49	50-59	60-69	70-79
frequency	306	182	144	96	42	34
23. Define moments, Establish the relation between raw moments and central moments.
24. What is an index number? Describe briefly the problems involved in the construction of index numbers.
25. Define the following index numbers and discuss their merits and demerits.
 - i) Laspeyres's index number
 - ii) Paasche's index number
 - iii) Fisher's index number