19103106

QP CODE: 19103106

Reg No : .....

Name : .....

B Sc. DEGREE (CBCS)EXAMINATION, NOVEMBER 2019

First Semester

Complementary Course - ST1CMT01 - STATISTICS - DESCRIPTIVE STATISTICS

(Common for B.Sc. Mathematics Model I , Physics Model I, and B.Sc Computer Applications Model III Triple Main)

2017 Admission Onwards

483A42C1

Time: 3 Hours

Maximum Marks :80

Part A

*Answer any **ten** questions.*

Each question carries 2 marks.

1. State any two advantages of secondary data over primary data.
2. Mention any two disadvantages of a frequency table.
3. Define relative frequency of a class.
4. What is the need of scaling techniques in the statistical investigation?
5. Define geometric mean.
6. Find the range of the data.

Marks	5	18	25	30	38
Frequency	5	7	10	9	2

7. Define quartile deviation and give the formula for obtaining quartile deviation from a grouped frequency table.
8. Give any two advantages of standard deviation.
9. Define central moments.
10. In a certain distribution, the first four moments about origin are -1.5, 17, -30 and 108 respectively. Examine whether the distribution is leptokurtic or platykurtic.
11. Define any two simple index numbers.

12. Define factor reversal test. Is it satisfied by Paasche's index number?

(10×2=20)

Part B

*Answer any **six** questions.*

Each question carries 5 marks.

13. What are the limitations of Statistics?

14. What are the different types of data classification?

15. What are the advantages of sampling over census?

16. Calculate geometric mean from the following data.

Class	0-10	10-20	20-30	30-40	40-50
Frequency	5	7	15	25	8

17. Calculate mean deviation from the median for the following data.

X	5	8	13	20	25
Frequency	2	10	9	5	3

18. Explain box plot.

19. Obtain moment measure of skewness for the following data:

X	5	10	15	20
Frequency	4	8	5	3

20. Construct Laspeyer's and Paasche's index numbers for the following data.

p_0	4	5	3	8
p_k	6	6	5	9
q_0	3	2	3	4
q_k	4	6	5	4

21. Define cost of living index numbers. Mention its uses.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the different types of probability sampling.

23. From the following data on prices of two commodities A and B during six weeks, find out which commodity has more stable price.

A	5	8	10	12	19	20
B	3	10	15	20	8	7

24. Find the percentile measure of kurtosis .

Class	1-3	3-5	5-7	7-9	9-11	11-13	13-15	15-17
Freq.	2	5	6	8	5	4	3	2

25. (a) Define index number. Mention its uses and limitations.
(b) What are the main steps in the construction of an index number?

(2×15=30)