23U129 (Pages: 2) Name: .....

Reg.No: .....

FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U STA1 C02 - DESCRIPTIVE STATISTICS

(Statistics - Complementary Course)

(2019 Admission onwards)

Time : 2.00 Hours Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 2 marks.

1. Explain the uses of statistics.
2. Distinguish between population and sample.
3. Distinguish between primary data and secondary data.
4. Define Bar diagram.
5. Explain ogives.
6. Let the average mark of 40 students of class A is 38, the average mark of 60 students of another class B is 42. What is the average mark of combined groupof 100 students?
7. Find the mode of 3, 6, 3, 9, 15, 15, 15, 7, 27, 27, 48.
8. Discuss the merits of Harmonic mean.
9. Define range and coefficient of range.
10. What are the advantages of using the mean deviation?
11. Compare deciles and percentiles.
12. Briefly explain kurtosis.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer ***all*** questions. Each question carries 5 marks.

13. Explain the steps involved in planning a statistical survey.
14. What are the different kinds of classification of data?

15. Draw the histogram for the following data:

Monthly wages '000 Rs	11-13	13-15	15-17	17-19	19-21	21-23	23-25
No. of workers	6	53	85	56	21	16	8

16. Compute the median from the following data

Age last birth day	15-19	20-24	25-29	30-34	35-39	40-44
No. of Persons	4	20	38	24	10	4

17. The marks obtained by 25 students are given below. Find their GM and HM.

Marks	11	12	13	14	15
No.of Students	3	7	8	5	2

18. Differentiate absolute and relative measures of dispersion.

19. Calculate Bowley's measure of skewness for the following data.

x	16	22	23	24	30	31	44
f	4	8	9	15	10	5	4

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

20. Explain different methods of measuring central tendancy and discuss its merits and demerits.

21. Calculate standard deviation and its corresponding relative measure for the following data.

Class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
Frequency	8	4	3	12	15	6	8	1	3

(1 × 10 = 10 Marks)

****