

20U126

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Name: .....

Reg.No: .....

**FIRST SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2020**

(CBCSS - UG)

(Regular/Supplementary/Improvement)

**CC19U STA1 C01 - INTRODUCTORY 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. What are the major divisions of CSO?
2. Define cumulative frequency distribution.
3. Calculate Geometric mean of 8, 24, 12, 16,.
4. Define standard deviation
5. What is Box plot?
6. What is Skewness?
7. What is a scatter diagram ?
8. State any two properties of regression coefficient.
9. What do you understand by secular trend?
10. What are the merits and demerits of Median?
11. Write a short note on Correlation.
12. Compare between Laspeyer's and Paasche's Index numbers.

**(Ceiling: 20 Marks)**

**Part B** (Short essay questions)

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

13. Write a short note on Indian Statistical System.

14. Distinguish between quantitative and qualitative data. Give examples for each.
15. Distinguish between correlation and regression.
16. Fit a straight line of the form  $y = ax + b$  to the following data.

x	1	2	3	4	5	6	7	8	9
y	2	6	7	8	10	11	11	10	9

17. Explain the method of moving averages.
18. Explain the different methods used for the construction of Price index Numbers?
19. From the following data compute price index by applying weighted average of price relative method using:

(a) Arithmetic mean

(b) Geometric mean

Commodity	$p_0$ (Rs.)	$q_0$	$p_1$ (Rs.)
Sugar	4.0	3.0	20kg
Flour	1.6	1.5	40kg
Milk	1.5	1.0	10lt

(Ceiling: 30 Marks)

### Part C (Essay questions)

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

20. Calculate Mean, Median and Mode:

Class	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	5	12	18	24	17	15	9

21. Find the rank correlation coefficient for the following data.

x	92	89	87	86	84	77	71	63	53	50
y	86	83	91	77	68	85	52	82	37	57

(1 × 10 = 10 Marks)

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