

Reg. No. : Name :

I Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/ Improvement) Examination, November 2023 (2019 Admission Onwards) Complementary Elective Course in Statistics 1C01STA (G & P) : DESCRIPTIVE STATISTICS

Time : 3 Hours

Max. Marks: 40

Instruction : Use of calculators and statistical tables are permitted.

PART – A (Short Answer)

Answer all 6 questions.

- 1. What is primary data ?
- 2. Define arithmetic mean of frequency data.
- 3. How will you find range of a data ?
- 4. What is meant by measure of kurtosis ?
- 5. Define population.
- 6. What is judgment sampling ?

PART – B

(Short Essay)

Answer any 6 questions.

- 7. What are the methods of collecting primary data ?
- The mean weight of 25 boys is 78.4. Later it was found that the weight of one boy was misread as 60 instead of the correct value 96. Calculate the correct average.

P.T.O.

(6×1=6)

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(6×2=12)

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- 9. Find the harmonic mean of 11, 14, 8, 9.
- 10. What are relative measures of dispersion ? Explain.
- 11. Define skewness. Write any one measure of skewness.
- 12. Calculate standard deviation of 2, 3, 6, 8.
- 13. Write short note on pie diagram.
- 14. What is the difference between frequency curve and frequency polygon ?

PART - C

(Essay)

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Answer any 4 questions.

 $(4 \times 3 = 12)$

- 15. What are discrete and continuous frequency distributions ?
- 16. Healthcare expenditure per month of four families A, B, C, D are given in rupees as 220, 390, 320 and 240. Draw line diagram.
- 17. The mean of 5 observations is 4.4 and variance is 8,24. If three of 5 observations are 1, 2 and 6. Find the other two.
- 18. Define mean deviation about mean. What are the merits and demerits ?
- 19. Two workers A and B doing same job in company. Mean time of completing the job (in minutes) is 40, 42 and standard deviation (minutes) 8, 6 respectively. Which worker is more consistent ?
- 20. Write the difference between Census and sample survey.

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PART – D

(Long Essay)

Answer any 2 questions.

21. What is meant by ogive ? Draw a less than cumulative ogive using the following data. Estimate the number of persons between age 27 and 42.

Age (in years)	22.5	27.5	32.5	37.5	42.5	47.5	52.5	57.5
Number of 50	50	70	100	180	150	120	- 70	59

- 22. Explain different measures of central tendency.
- 23. Calculate coefficient of variation of the data given

X	5 – 10	10 - 15	15 - 20	20 - 25	25 – 30
F	6	5	9	7 0	8

24. What is sampling ? What are the advantages ? Explain different types of sampling.

(5×2=10)