

0119132



K19U 3338

Reg. No. : .....

Name : .....

I Semester B.Sc. Degree CBCSS (OBE) - Regular  
Examination, November - 2019  
(2019 Admission)  
COMPLEMENTARY ELECTIVE COURSE IN STATISTICS  
1C01STA (G&P) : DESCRIPTIVE STATISTICS

Time : 3 Hours

Max. Marks : 40

**Instructions :** Use of calculator and statistical tables are permitted.

**PART-A**

**(Short Answer)**

Answer All 6 questions.

**(6×1=6)**

1. What is secondary Data?
2. What is an average?
3. Define Weighted mean.
4. Define mean deviation.
5. Mean and variance of a set of observations are 15 and 25 respectively. Find the coefficient of variation.
6. Define sampling frame.

**PART-B**

**(Short Essay)**

Answer any 6 questions.

**(6×2=12)**

7. Distinguish between inclusive class interval and exclusive class interval.
8. Briefly explain line diagram.
9. What are the requisites of a satisfactory average?
10. A car travels 25 miles at 25 mph, 25 miles at 50 mph and 25 miles at 75 mph. Find out the average speed.
11. Find the lower quartile and upper quartile of the following observations.  
13, 18, 6, 20, 25, 11, 9, 18, 3, 30, 16, 9, 8, 23, 26, 17

P.T.O.



12. Distinguish between absolute and relative measures of dispersion.
13. Define skewness. If mean, Mode and standard deviation of a distribution are 62.80, 63.00 and 6.47 respectively, then find the Karl Pearson's coefficient of skewness.
14. Explain Sampling error.

**PART-C****(Essay)**

Answer any 4 questions.

(4×3=12)

15. Construct a frequency distribution for the following 40 observations.  
138 164 150 132 144 125 149 157  
146 158 140 147 136 148 152 144  
168 126 138 176 163 119 154 165  
14 173 142 147 135 153 140 135  
161 145 135 142 150 156 145 128
16. The first four moments of a distribution about 4 are 1,4,10 and 45. Find the mean variance, third and fourth central moments.
17. Find the mean deviation about the mean for the following data:  
12, 3, 18, 17, 4, 9, 17, 19, 20, 15, 8, 17, 2, 3, 16, 11, 3, 1, 0, 5

18. Find the quartile deviation for the following data:

Class	50-55	55-60	60-65	65-70	70-75	75-80
Frequency	12	16	25	19	10	2

19. Explain probability sampling and non-probability sampling.
20. Distinguish between census and sampling? What are the advantages of sampling over census?



**PART-D**  
**(Long Essay)**

Answer any 2 questions.

(2×5=10)

21. The following table shows frequency distribution for the number of minutes per week spent watching TV by 400 students. Construct a histogram and frequency polygon.

Viewing time (minutes)	Number of students
300-399	14
400-499	46
500-599	58
600-699	76
700-799	68
800-899	62
900-999	48
1000-1099	22
1100-1199	6

22. Find the mean, Median and mode of the data

Class	150-154	155-159	160-164	165-169	170-174	175-179	180-184	185-189
Frequency	5	2	6	8	9	11	6	3

23. The runs taken by two cricket players A and B in 10 innings are as follows:

A	30	44	66	62	60	34	80	46	20	38
B	34	46	70	38	55	48	60	34	45	30

Which players is more consistent?

24. Explain the following sampling schemes. Give the situations where they are used?
- Simple random sampling
  - Systematic sampling
  - Stratified sampling
-