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N – 4038

Reg. No. :

Name :

First Semester B.Sc. Degree Examination, June 2022

First Degree Programme Under CBCSS

STATISTICS

Core Course I

ST 1141 : STATISTICAL METHODS I

(2018 & 2019 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer all question. Each carries 1 mark.

1. A histogram generally represents a for _____ type of data.
2. For any discrete distribution _____ will not be less than the Mean deviation from Mean.
3. Sum of absolute deviation is minimum when taken from _____
4. Representative part of the population is called _____
5. Sheppard's correction for second central moment is _____
6. What is the Median of 8,3,0,9,6.
7. State true or false "histogram is a one-dimensional diagram".
8. The algebraic sum of the deviation of observation of a set value from their arithmetic mean is _____
9. Find the Range of 20,10,5,8,2.
10. Define Harmonic mean.

(10 × 1 = 10 Marks)

P.T.O.

SECTION – B

Answer any eight questions. Each carries 2 marks.

11. Explain Skewness with the help of figure.
12. Explain Nominal scale and ordinal scale.
13. Find the numbers whose arithmetic mean is 12.5 and geometric mean 10.
14. Define two way classification. Give Example.
15. Write any four method for collecting primary data
16. List out any four properties for Arithmetic mean.
17. What are the merits of mode.
18. Compare Questionnaire and Schedule.
19. Define Deciles.
20. Explain pictogram.
21. Find Q3 and D9 for the data: 282, 754, 125, 765, 875, 645, 985, 235, 175, 895, 905, 112 and 155.
22. How statistics can be misused.

(8 × 2 = 16 Marks)

SECTION – C

Answer any six questions. Each carries 4 marks.

23. The mean of a group of 100 observations is known to be 50. Later it was discovered that two observations were misread as 92 and 8 instead of 192 and 88. Find the correct mean.
24. How will you compute Median for the frequency distribution.
25. Calculate Standard deviation for the following data

class	0-4	4-8	8-12	12-16	16-20
f	3	8	17	10	2

26. Calculate Geometric mean of 4,6,9,11 and 15.
27. For a certain distribution upper and lower quartiles are 56 and 44 respectively. If median for the same data is 55 then identify the nature of skewness.
28. What are the points to be remembered while taking secondary data?
29. Explain the construction of a pie chart.
30. Explain desirable properties of a good average.
31. Draw a percentage bar diagram for the following data.

Year	Computer	Arts	Law
2014	1100	1600	700
2015	1200	1405	800
2016	1050	1130	739

(6 × 4 = 24 Marks)

SECTION – D

Answer any two questions. Each carries 15 marks.

32. Draw a less than frequency curve and greater than frequency curve and find median for the following data

Age	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of patients	7	10	21	27	22	9	4

33. (a) Write down the general guidelines helpful in drafting a questionnaire.
(b) Explain the importance of Statistics in various sectors and disciplines.
34. Which is more consistent:

A	25	50	45	30	70
B	10	70	50	20	95

35. For the following data calculate coefficient of Skewness and coefficient of Kurtosis and Comment on it

Data	2	3	7	8	10
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(2 × 15 = 30 Marks)