B.Com(CS) DEGREE EXAMINATION,APRIL 2020
II Year III Semester
Statistics - I

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Define Statistics.
2. What is meant by questionnaire?
3. What do you understand by classification?
4. What is histogram?
5. What are the advantages of presenting data through diagrams?
6. What do you understand by "Central Tendency"?
7. Find the Range of weights of 7 students from the following.
   27,30,35,36,38,40,43.
8. Define Standard deviation.
9. What is meant by Skewness?
10. Find out the median from the following.
    57, 58, 61, 42, 38, 65, 72, 66
11. Give the formula for finding Karl Pearson's co efficient of Skewness.
12. If first and third quartiles are 20 and 40 respectively the median will be 30.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Distinguish between Primary and Secondary data.
14. Represent the following data draw a pie diagram.

Items	Expenditure (in Rs.)
Food	87
Clothing	24
Recreation	11
Education	13
Rent	25
Miscellaneous	20

15. Calculate Harmonic mean from the following data.

X	6	7	8	9	10	11
F	4	6	9	5	2	8

16. Calculate Mean deviation about mean from the following data.

Marks	10	15	20	30	40	50
Frequency	8	12	15	10	3	2

17. Calculate Standard Deviation from the following data.

Marks	10	20	30	40	50	60
Frequency	8	12	20	10	7	3

18. There are two branches of a company, employing 100 and 80 persons respectively. If the arithmetic mean of the monthly salaries paid by the two companies are Rs.275 and Rs.225 respectively. Find the arithmetic mean of the salaries of the employees of the companies as a whole.

19. In a frequency distribution the coefficient of skewness based on quartiles is 0.6. If the sum of the upper and lower quartiles is100 and the median is38, find the value of the upper quartiles.

Section C $(2 \times 15 = 30)$ Marks

Answer any **TWO** questions

20. Explain the different types of diagram.

21. Calculate Q.D and its co efficient of Q.D from the following data.

Marks	30-32	32-34	34-36	36-38	38-40	40-42	42-44
No. of students	12	18	16	14	12	8	6

22. Calculate S.D from the following data.

Scores	0-10	10-20	20-30	30-40	40-50	50-60	60-70
Frequency	8	12	17	14	9	7	4

23. Calculate Karl Pearson's Coefficient of skewness from the following distributions.

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	6	12	22	48	56	32	18	6

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