19102079

QP CODE: 19102079

Reg No : .....

Name : .....

B.Com. DEGREE (CBCS) EXAMINATION, OCTOBER 2019

Third Semester

CORE COURSE - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

(Common to all B.Com Degree Programmes)

2017 Admission Onwards

D31C3060

Maximum Marks: 80 Time: 3 Hours

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. All facts numerically expressed are statistics. Indicate with reason whether the statement is correct.
2. Write short note on univariate data.
3. Write a note on stratified sampling.
4. Show how foot note appears in a statistical table.
5. Define mode.
6. Find median from the following;

Size	5	8	10	15
Frequency	15	8	14	13

7. Find the Geometric mean of 3, 8 and 9
8. Find the range and co-efficient of range of 2, 24, 21, 45, 37, 40 and 38.
9. Compute Standard Deviation; 15,18,22,26,30
10. What is kurtosis?
11. Define Interpolation
12. What is Extrapolation?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Statistics is a rainbow of lies- An ounce of truth can produce tons of Statistics"- Comment on these statements?

14. Explain various errors in statistics.

15. Form a frequency distributionfrom the following data by exclusive method taking 5 as the magnitude of class intervals:
10,17,15,22,11,16,19,24,29,18,25,26,32,14,17,20,23,27,30,12,
15,18,24,36,18,15,21,28,33,38,34,13,10,16,20,22,29,19,23,31

16. From the following data compute arithmetic mean by direct method:

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No of Students	5	10	25	30	20	10

17. Compute median from the following data.

Mid-Value	115	125	135	145	155	165	175	185	195
F	6	25	48	72	116	60	38	22	3

18. Determine mode from the following data

Weekly salary (Rs.)	15	16	17	18	19	20
No of workers	6	12	23	30	90	1

19. Determine quartile deviation and co-efficient of quartile deviation for the following distribution

Weight(kg)	30-34	35-39	40-44	45-49	50-54
No of Boys	5	11	26	10	8

20. Explain relative measures of dispersion along with its formula.

21. Interpolate the missing figures.

Year	1931	1941	1951	1961	1971
Production	360	?	425	450	465

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Determine quartiles from the following distribution

Marks	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45
No. of Students	5	6	15	10	5	4	2	2

23. The following data gives the weekly wages of workers in a firm, their total working hours and the average working hours per worker.

Calculate the average weekly wage per worker.

Wages group(Rs)	80- 100	100- 120	120-140	140- 160	160-180	180-200
Total Hours Worked	168	170	225	272	126	91
Average No. of Hours worked per worker	12	10	9	8.5	7	6.5

24. Calculate Karl Pearson's Co efficient of skewness and explain its significance.

Wages	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No of persons	12	18	35	42	50	45	20	8

25. An analysis of monthly wages paid to workers in two firms A and B belonging to the same industry gives the following data:

	Firm A	Firm B
No of workers	550	650
Average Monthly wages	50	45
Standard Deviation	$\sqrt{90}$	$\sqrt{120}$

1. Which Firm A or B pays larger amount as monthly wages?
2. What are the monthly wages and S.D in the distribution of individuals' wages of workers in the two firms taken together?
3. In which firm there is greater variability in individual wages?

(2×15=30)