21100519

QP CODE: 21100519

Reg No : .....

Name : .....

B.Com DEGREE (CBCS)EXAMINATION, MARCH 2021

Third Semester

Core Course - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

(Common to all B.Com Degree Programmes)

2017 Admission Onwards

5EB782D4

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Write a short note on distrust of statistics.
2. Describe primary data.
3. Write a note on source note.
4. What do you mean by measure of central tendency?
5. The mean wages of 40 male workers in a factory is Rs. 100 and that of 60 female workers in the same factory is Rs. 80. Find the combined mean wages of 100 workers of the factory.
6. Calculate median: - 12, 19, 8, 14, 3, 21, 13.
7. Calculate Q3 and P75 from the following,
   24,33,42,38,45,62,50,26,70,15,40,35,20,20,17,31
8. Write the formula for calculating Quartile deviation and its co-efficient.
9. Compute Standard Deviation; 6,5,4,8,10
10. Write a short note on co-efficient of variation.
11. Give the formula for Newton's method of advancing differences.
12. Write a short note on Extrapolation.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Write a short note on orign and growth of statistics.

14. Draft a questionnaire for collecting socio-ecomonic details of students seeking admission for a diploma course.

15. Compare and contrast cluster sampling with stratified random sampling.

16. An aero plane covered a distance of 1000 km with four different speeds 100,200,300 and 400 km/hr for the first, second, third and fourth quarter of the distance. Find the average speed in km/hr

17. Find arithmethic mean from the following distribution

Age(Year)	20	19	18	17	16	15	14	13	12	11
No. of students	1	2	4	8	11	10	7	4	2	1

18. Locate median graphically

Marks	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of Students	4	8	11	15	12	6	3

19. Explain the objectives of measuring dispersion.

20. The following table give the distribution of monthly wages of 1000 workers of a factory:

Wages (Rs)	20	40	60	80	100	120	140	160	180	200	220	240
No. of workers	3	13	43	102	175	220	204	139	69	25	6	1

21. Given f(-1)= -1, f(-2)= -9. f(2)=-11 and f(4)=69, what is f(0) ?

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Find the missing frequency from the data given below,if the arithmetic mean is 28

Profits per shop	0-10	10-20	20-30	30-40	40-50	50-60
No of shops	12	18	27	?	17	6

23. Calculate moments and also find out moment based skewness and kurtosis

Weight in grams	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of mangoes	8	12	20	30	15	10	5

24. Calculate Karl Pearson's Measure of Skewness on the basis of Mean, Mode and Standard Deviation.

X	14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5
F	35	40	48	100	125	87	43	22

25. The values of X and Y are given below:

X	5	6	9	11
Y	12	10	14	16

Find the value of Y when X=10 by using Lagrange's method.

(2×15=30)