QP CODE: 21006039

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Reg No : .....

Name : .....

B.COM DEGREE CBCS PRIVATE EXAMINATION, OCTOBER 2021

Third Semester

B.COM

CORE - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

2017 ADMISSION ONWARDS

AFC828CA

Time: 3 Hours

Max. Marks : 80

Instructions:*This question paper contains* ***two sections****.Answer* ***Section I*** *questions in the answer book provided.* ***Section II Internal Examination*** *questions must be answered in the* ***question paper itself****.Follow the detailed instructions given under* ***Section II.***

Section I

Part A

Answer any ***ten*** *questions.*

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

1. Write a note on inferential statistics.
2. Describe secondary data.
3. Write a short note on tabulation.
4. Define geometric mean.
5. Compute the artihmetic average of the weights of 10 persons: 67,78,87,72,65,53,89,82,74,77
6. If the mean and median of a moderately asymmetrical series are 26.8 and 27.9 respectively. What would be its most probable mode?
7. Calculate harmonic mean,2574, 475, 75, 5, 8, 0.8, 0.005, 0.0009.
8. Prepare a short note on Quartile deviation.
9. The following are the prices of shares of AB Company Ltd from Monday to Saturday:

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Price (Rs.)	200	210	208	160	220	250

Calculate range and its coefficient.

10. Compute Standard Deviation; 65,58,42,46

11. Write a short note on Interpolation.

12. Write a short note on Extrapolation.

(10×2=

Part B

*Answer any **six** questions.*

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

13. "Statistics is like clay of which one can make a God or devil as he likes", Comment.

14. Distinguish between primary data and secondary data.

15. Secondary data can be used only after certain precautionary measures. Comment.

16. The following table gives weekly wages in rupees of workers in certain commercial organization. The frequency of the class interval 49-52 is missing. It is known that the mean of the above frequency distribution is 47.2

Weekly wages	40-43	43-46	46-49	49-52	52-55
No of workers	31	58	60	?	27

17. An economy grows at the rate of 2 % in the first year,2.5% in the second year, 3 % in the third year, 4 % in the fourth year, 5 % in the fifth year, 6 % in the sixth year, 7 % in the seventh year, 8% in the eight year, 9% in the ninth year and 10% in the tenth year. What is the average rate of growth?

18. Describe the requisites of a good Measure of Central Tendency.

19. Calculate the value of co-efficient of mean deviation (from median) of the following data:

Marks	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. of Students	2	6	12	18	25	20	10	7

20. Calculate Karl Pearson's Coefficient of Skewness from the following:

Class	130-134	135-139	140-144	145-149	150-154	155-159	160-164
Frequency	3	12	21	28	19	12	5

21. If log 654= 2.8156, log 658= 2.8182, log 659= 2.8189 and log 661= 2.8202, calculate the value of log 656 using suitable interpolation formula.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. 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

23. 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	$\sqrt{90}$	$\sqrt{120}$

a. Which Firm A or B pays larger amount as monthly wages?

b. What are the monthly wages and S.D in the distribution of individuals' wages of workers in the two firms taken together?

c. In which firm there is greater variability in individual wages?

24. Explain the various measures of dispersion along with the merits and demerits of each measure.

25. From the following table find the number of students who obtained less than 45 marks.

Marks	30-40	40-50	50-60	60-70	70-80
No. of students	31	42	51	35	31

(2×15=30)