

QP CODE: E05036

Reg No :

Name :

B.COM DEGREE CBCS PRIVATE EXAMINATION, JANUARY 2021

Third Semester

B.COM

CORE - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

2017 ADMISSION ONWARDS

261EE8BF

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. List the limitations of statistics.
2. Write a short note on purposive sampling.
3. Write a short note on tabulation.
4. List the various measures 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: 17,18,25,12,10
7. Calculate Mode
5,10,12,10,11,12,10,13,11,10,21,30
8. Calculate range and its coefficient from the following data:
Price of gold per 10 gm. From Monday to Saturday .
Monday Tuesday Wednesday Thursday Friday Saturday
160 158 170 142 176 187
9. Compute Standard Deviation; 65,58,42,46
10. Calculate Kurtosis , if μ_4 is 32 and μ_2 is 6
11. Give the formula for 'Lagrange's method.

12. Write a short note on Extrapolation.

(10×2=20)

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. Describe simple random sampling technique.
15. Form a frequency distribution from the following data by inclusive method taking 4 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. The mean of 100 items was 46. Later it was found out that one item was misread as 61 instead of 16 and another item 43 was misread as 34. The number of items was also wrongly taken as 90 instead of 100. what is the correct mean ?
17. Calculate median from following data,

Class	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89
Frequency	12	23	30	37	48	28	16	18	8

18. Describe the requisites of a good Measure of Central Tendency.
19. Distinguish between absolute and relative measure of dispersion.
20. The following table gives the height of students. Find the quartile deviation:
Height (inches) 52-53 53-56 56-59 59-62 62-65 65-68
No. of students 2 7 24 27 13 3
21. Using the suitable method, interpolate the business for April 2007.

Month	January	February	March	May	June
Business(000 - Rs)	150	235	365	525	780

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Find out mean from the following

Size(Below)	5	10	15	20	25	30	35
Frequency	1	3	13	17	27	36	38

23. With median as the base calculate the mean deviation and compare the variability of the two series A and B:

Series A 3484 4572 4124 3682 5624 4388 3680 4308

Series B 487 508 620 382 408 266 186 218

24. Lives of two models of refrigerators in a recent survey are shown in the table. What is the average age of these refrigerators model wise and also taken together? Which model is more consistent?

Life in Years	0-2	02-04	04-06	06-08	08-10	10-12	
Model A	5	16	13	7	5	4	
Model B	2	7	12	19	9	1	

25. Estimate the missing figures.

X	40	45	50	55	60	65	70
Y	200	220	260	?	350	?	430

(2×15=30)