QP CODE: 24027025

24027025

Reg No : .....

Name : .....

B.COM DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

Core Course - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

(Common to all B.Com Degree Programmes)

2017 Admission Onwards

F92203B2

Time: 3 Hours Max. Marks : 80

Instructions to Private candidates only: 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

Part A

*Answer any **ten** questions.*

Each question carries 2 marks.

1. Define statistics.
2. Discuss on multi-stage sampling.
3. Write a note on source note.
4. List the various measures of Central Tendency.
5. The mean of 20 values is 45. If one of these values is to be taken 64 instead of 46. Find the corrected mean.
6. Calculate median: 17,18,25,12,10.
7. Find out the harmonic mean of 2, 3 , 4 and 5.
8. Calculate mean deviation 3,8,9,12.
9. If n= 10, Σx= 60, Σx^2 =1,000. Calculate standard deviation.
10. What do you mean by asymmetrical distribution?
11. Write a short note on Interpolation.
12. Define Extrapolation.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Explain the functions of statistics.

14. Draft a questionnaire for collecting socio-demographic details of women workers in a factory.

15. Explain the parts of a table.

16. The mean age of a group of 100 children was 9.35 years. The mean age of 25 of them was 8.75 years and that of another 65 was 10.51 years.What was the mean age for the remainder?

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. Find geometric mean of 3,6,24, and 48.

19. What is co-efficient of variation? What is its use?

20. Calculate quartile deviation and it's relative measure .

Variable	20-29	30-39	40-49	50-59	60-69	70-79
F	306	182	144	96	42	24

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. Calculate mode from the following.

Marks (Above)	0	10	20	30	40	50	60	70	80
No of students	122	118	112	92	60	27	10	2	0

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	$\sqrt{90}$	$\sqrt{120}$

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?

24. Calculate mean deviation from mean from the following data:

Age (Years)	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No of Persons	6	5	8	15	7	6	3

25. The following data gives the profits of a firm (in lakh rupees). Interpolate the missing figures.

Year	2000	2005	2010	2015	2020	2025
Profits (in lakhs Rs)	7	?	13	15	?	25

(2×15=30)