23104249

QP CODE: 23104249

Reg No   :   ....

Name   :   ....

B.COM DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, JANUARY 2023

Third Semester

Core Course - CO3CRT08 - QUANTITATIVE TECHNIQUES FOR BUSINESS- 1

(Common to all B.Com Degree Programmes)

For Regular Candidates : 2017 Admission Onwards

For Private Candidates : 2021 Admission Only

1252ED7B

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***

SECTION I

Part A

*Answer any **ten** questions.*

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

1. Write a note on inferential statistics.

2. Define Sampling.

3. Write a short note on body of the table.

4. Write a note on Geometric mean.

5. Calculate artihmetic average of the heights of five students: 155,148,167,172,125

6. Calculate median: 27,18,25,32,40

7. Calculate Mode
   15,10,12,10,15,12,10,15,12,10,15,13

8. Write a short note on variance.

9. Calculate mean deviation.
   3,8,9,12

10. Compute Standard Deviation; 15,18,22,26,30

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. List out the applications of statistics.

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

15. Describe simple random sampling technique.

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. 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

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

19. Distinguish between Mean Deviation and Standard Deviation.

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. How many students have obtained marks in between 40 and 45. Apply interpolation.

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

(6×5=30)

Part C

Answer any two questions.

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. Calculate co-efficient of variation from the following data.

Class	90-99	80-89	70-79	60-69	50-59	40-49	30-39
Frequency	2	12	22	20	14	4	1

24. Calculate standard deviation of the distribution of wages mentioned below:

Monthly wages	130-150	150-170	170-190	190-210	210-230
No of Persons	8	26	59	43	14

25. The observed values of a function are respectively 168, 120, 72 and 63 at the four positions 3,7,9 and 10 of the independent variable. What is the best estimate you can give for the value of the function at the position 6 of the independent variable?

$(2×15=30)$