QP CODE: 25020279



Reg No	:	
Name	:	

BFM DEGREE (CBCS)) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Fourth Semester

Bachelor of Financial Markets

Core Course - FM4CRT15 - QUANTITATIVE METHODS FOR BUSINESS DATA ANALYSIS-II

2017 Admission Onwards

5F342BD6

Time: 3 Hours

Max. Marks : 80

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Describe partial correlation.
- 2. Calculate coefficient of correlation.
- X
 1
 3
 5

 Y
 10
 6
 4
- 3. What is standard error of the correlation coefficient?
- 4. Write a note on regression lines?
- 5. Construct the regression equations of X on Y and Y on X from the following information. Arithmetic mean of X and Y is 6 and 8 respectively, bxy is -1.3 and byx is -0.65.
- 6. Write any major two sources of secondary data.
- 7. What is a sample?
- 8. What are the two methods of collecting data through simple random sampling?
- 9. What is a variable?
- 10. When can we apply Binomial Expansion method of interpolation?
- 11. Describe uncertain event with an example.
- 12. A card is drawn from a pck of 52 cards. Find the probability that the card drawn is either a spade or a heart.

(10×2=20)

Part B

Answer any six questions.

Each question carries 5 marks.

13. From the following, draw up a scatter diagram and comment on it.

Х	1	2	3	4	5	6	7	8	9
Y	8	5	1	7	3	2	9	6	4

14 Study the correlation between the marks obtained by five students for the subjects

Statistics and Accounts using graphic method.

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Statistics	48	55	60	62	75
Accounts	61	68	73	75	88

- 15. Distinguish between correlation and regression.
- 16. What are primary data? Explain its merits and demerits.
- 17. What is a questionnaire? What are the qualities of a good questionnaire.
- 18. What is Tabulation of Data? What are the objectives of tabulation?
- 19. Calculate the likely minimum temperature for a maximum temperature of 35 degree. Apply Newton's Method

Max.	36	34	32	30	28
temperature					
Min.	21	19	16	12	11
temperature					

- 20. There are 3 economists, 4 Engineers, 2 statisticians and 1 doctor. A committee of 4 from among them is to be formed. Find the probability that the committee consists of one of each kind.
- 21. If it is 8 to 5 against a person who is now 40 years old, living till he is 70 and 4 to 3 against a person now 50, living till he is 80. Find the probability that atleast one of these persons would be alive 30 years hence.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries 15 marks.

22. Calculate Spearman's correlation coefficient for the following data:

Х	50	98	93	80	70	60	58	55
Υ	45	22	32	37	30	40	39	43

 $_{23}$ Obtain the equations of the two lines of regression for the data given below:

X	1	2	3	4	5	6	7	8	9
Y	9	8	10	12	11	13	14	16	15

24. What percentage of students have scored a first class mark?

Marks above	25	36	45	55	70
No of students	65	63	40	18	7

25. An insurance company insured 2000 scooter drivers, 4000 car drivers and 6000 truck drivers. The probability of accident is 0.01, 0.03 and 0.15 respectively. One of the insured person meets with an accident. What is the probability that he is a scooter driver?

(2×15=30)

