QP CODE: 24027884

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Reg No : .....

Name : .....

BFM DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

Bachelor of Financial Markets

Core Course - FM3CRT10 - QUANTITATIVE METHODS FOR BUSINESS DATA ANALYSIS I

2020 Admission Only

8E231CCF

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Define Statistics as a method.
2. Define a measure of Central Tendency.
3. Define Mode.
4. What are deciles and percentiles?
5. The following data relates to the distance travelled by 520 villagers to buy their weekly requirements. Calculate the average distance.

Miles travelled:	2	4	6	8	10	12	14	16	18	20
No of Villagers:	38	104	140	78	48	42	28	24	16	2

6. Define the term Dispersion.
7. Absolute Measure of Dispersion-Explain with an Example.
8. Define Kurtosis.
9. Explain the utilities of time series.
10. What are semi average method?
11. What is Retail Price Index Number?
12. What is Weighted Index Number?

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Explain the role of statistics in the field of business and commerce.

14. A bus runs 20kms at a speed of 40km per hour: 10kms at 30 km per hour and 30 kms at 60 km per hour. What is the average speed of the bus?

15. Calculate Median Quartiles, D6 and P40 from the following

Size of Shoe:	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0
No of persons:	20	36	44	50	80	30	20	16	14

16. Explain how median is obtained graphically.

17. For a set of 7 observations, Mean=60 and sum of squared deviation from mean is 184. Find the coefficient of variation.

18. From the following distribution determine kurtosis and comment on the relative nature of the series: 2, 3, 7, 8, 10.

19. Shift the origin to 1) 2013 and 2) 2018, if the trend equation is Y= 45+5X(origin:2015, X-Unit= 1 year.

20. Calculate weighted index number by average of relative method.

Commodity	A	B	C	D	E
Price (2019)	18	32	40	24	45
Price (2020)	36	64	80	48	90
Quantity(2019)	3	5	2	4	3

21. From the following data find Fisher's Ideal index number.

Commodity	A	B	C	D
Price (2019)	10	6	5	2
Total Value	500	36	25	25
Price (2020)	6	7	6	5
Total Value	60	70	36	20

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain in detail the diffrences between descriptive statistics and inferential statistics.

23. Find the missing frequency if arithmetic mean is 28. Also find median

Marks:	0-10	10-20	20-30	30-40	40-50	50-60
Frequency:	12	18	27	?	17	6

24. Calculate Mean Deviation form Mean and Median from the following

Mid Value	*35*	*40*	*45*	*50*	*55*
Frequency	*2*	*5*	*8*	*6*	*4*

25. Find trend values by 4 yearly moving average for the following data. Also find short term fluctuations.

Year	1	2	3	4	5	6	7	8	9	10
Sales	80	85	81	79	86	94	90	108	120	128

(2×15=30)