

BBAQMM-SN101

B.B.A. DEGREE EXAMINATION, FEBRUARY - 2023

(FIRST SEMESTER) (CBCS Pattern) (Regular)

Business Administration

QUANTITATIVE METHODS FOR MANAGERS

(w.e.f. 2020-2021 Admitted Batch)

(W.E.F. 2021-22 ADMITTED BATCH)

STUDENTS MUST ANSWER THE

QUESTIONS IN ENGLISH MEDIUM ONLY)

Time : 3 Hours

Max. Marks : 75

SECTION - A

[5 × 5 = 25]

I) Write short answer for any Five of the following.

1. Write about Arithmetic Progressions.

2. Find Quartile Deviation from the following data.

X : 30 40 50 60 70 80 90

f : 2 7 6 4 8 13 3

3. Functions of statistics.

4. Define Harmonic Mean & Write its properties.

5. Types of matrices.

6. Write about minors & cofactors in Matrix.

7. Find the P_{10} for the following data.

X: 10 20 30 40 50 60 70

F: 2 7 8 2 1 6 4

8. Difference between correlation & Regression.

S - 16

[1]

[P.T.O.]

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SECTION - B

[5 × 10 = 50]

II) Answer the following questions.

9. a) From the following data, find out karlpearson's correlation.

X: 40 45 50 32 25 39 43

Y: 25 32 43 24 36 40 31

OR

b) Find the regression equation of X on Y.

X: 1 2 3 4 5 6 7

Y: 9 8 10 12 11 13 14

10. a) Find out Regression equation Y on X.

X: 20 25 30 35 40 45 50

Y: 12 17 28 32 40 30 25

OR

b) Find out Spearman's Rank correlation.

I: 25 30 20 25 17 35 15

II: 12 17 15 15 15 30 20

11. a) Find out Median & Mode for the following data.

Marks :	less	less	less	less	less	less
	than	than	than	than	than	than
	10	20	30	40	50	60
No of						
Students	5	10	8	6	7	3

OR

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- b) Find out standard deviation and co-variance.
C.I: 100-120 120-140 140-160 160-180 180-200
F: 4 7 11 8 6

12. a) Find out Inverse of the matrix.

$$\begin{bmatrix} 3 & 2 & 4 \\ 2 & 1 & 1 \\ 1 & 3 & 5 \end{bmatrix}$$

OR

- b) Solve the following equations by Cramer's rule.
 $2x - 3y + 4z = -4$, $x + z = 0$, $-y + 4z = 2$.

13. a) Draw ogive curve for the following data.
C.I: 0-10 10-20 20-30 30-40 40-50
F : 21 13 7 18 9

OR

- b) Draw frequency distribution curve for the following data.

C.I:	0-9	10-19	20-29	30-39	40-49
F :	2	5	10	3	10

