HOLDER WIND A HITOTAL No. of Pages: 3

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 $[5 \times 5 = 25]$

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

1. Write about Arithmetic Progressions.

Find Quartile Deviation from the following data. 2.

X:3040 50 60 70 80~ 90.

Functions of statistics. 3.

4. Define Harmonic Mean & Write its properties.

Types of matrices. 5.

Write about minors & cofactors in Matrix. 6.

Find the P₁₀, for the following data. 7.

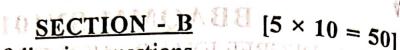
X: 10 30 20 40 50 60

F: 2 7 8

Difference between correlation & Regression. 8.

S - 16[1]

BBAQMM-SN101



- 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

: whalY: ...9 8 10 12 11 13 21141 2

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.

NO CONTRACTOR & Regarded

BBAQMM-SN101

- 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: $0-\bar{9}$ 10-19 20-29 30-39 40-49 F: 2 5 10 3 10

