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Total Pages : 3

Roll No.

BBA-102

Bachelor of Business Administration (BBA)

Business Mathematics

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section-A

(Long Answer Type Questions) (2×19=38)

Note :- Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

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(1)

P.T.O.

1. In a survey of 100 consumers, 60 like product A, 40 like product B and 25 like both. Using Venn diagram, find how many like only A and only B.
2. Explain Arithmetic Progression (AP) and its relevance in business.
3. Discuss the business applications of permutations and combinations.
4. Explain differentiation and its applications in business economics.
5. Find the inverse of the matrix :

$$\begin{bmatrix} 2 & 1 \\ 1 & 1 \end{bmatrix}$$

Section–B

(Short Answer Type Questions) (4×8=32)

Note :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Describe the applications of set theory in business decision-making.
2. Define Geometric Progression (GP) and explain its application in finance.

3. Explain linear equation and this urge in business decision-making.
4. Define a matrix and explain the different types of matrices.
5. Let the universal set :

$$U = \{1, 2, 3, 4, 5, 6, 7, 8\} \text{ and } A = (2,4,6,8)$$

Find A' .

6. Find the sum of first 8 terms of a GP where first term = 2 and common ratio = 3.
7. How many ways can 3 items be chosen from 8 different items ?
8. Find the determinant of the matrix :

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