MATRICES

INTRODUCTION OF MATRIX

EXERCISE

Q.1 If A is a 3×4 matrix, then each row of A possesses

(A) 3 elements (B) 4 elements

(C) 12 elements (D) 7 elements

Q.2 What defines the order of a matrix?

(A) The product of the number of rows and the number of columns

(B) The product of the number of columns and the number of rows

(C) The product of the number of rows and the number of rows

(D) The product of the number of columns and the number of columns

Q.3 A matrix consists of 16 elements. Which of the following could be the matrix's order?

(A) 1×16 (B) 2×8

(C) 4×4 (D) All of these

Q.4 If a matrix comprises 13 elements, then the possible orders of the matrix are

(A) 1×13 or 13×1 (B) 1×26 or 26×1

(C) 2×13 or 13×2 (D) None of these

Q.5 If A is a 2×3, matrix and B is a 3×5 matrix, then what is the order of matrix (AB) or $(AB)^t$?

Q.6 What are the potential orders of a matrix that contains 6 elements?

Q.7 If A is matrix or order m × n and B is a matrix such that AB′ and B′A are both defined, then what is the order of matrix B ?

(A) m × m (B) n × n

(C)n × m (D) m × n

ANSWER KEY

1. (B) 4 elements

2. (A) The product of the number of rows and the number of columns

3. (D) All of these

4. (A) 1 × 13 or 13 × 1

5. $(AB)^T = 5 \times 2$.

6. 1×6, 6 × 1, 2 × 3 , 3 × 2

7. (D) m × n