

Business Mathematics - 11th Class Business Math Chapter 5 Short Questions Preparation

Q1. Define identity matrix.

Ans 1: The unit of multiplicative identity of matrices are defined as. A scalar matrix in which principal diagonal elements are equal to "1" is called a unit or identity matrix"

Q2. Name any three types of matrix.

Ans 1: Types of matrices are:

Ans 2: i) Row matrix

Ans 3: ii) Column matrix

Ans 4: iii) Rectangular matrix

Ans 5: iv) Square matrix

Q3. What is the condition for two matrices to be conformable for multiplication.

Ans 1: Two matrices A and B are conformable for multiplication. AB, if number of columns of A is equal to number of rows of B. The new matrix AB will contain the number of rows as in A and number of columns as in B.

Q4. What is square matrix.

Ans 1: Square Matrix: A matrix having equal number of rows and column is called square matrix.

Q5. Define null matrix

Ans 1: Null Matrix: If each every element of a matrix is zero then that matrix is called null matrix. Null matrix is also called zero matrix and denoted by "0"

Q6. What is the condition for two matrices to be conformable for multiplication?

Ans 1: Two matrices A and B are conformable for multiplication AB, if number of columns of A is equal to number of rows of B. The new matrix AB will contain the number of rows as in A and number of columns as in B.

Q7. Define scalar matrix.

Ans 1: Scalar Matrix: A diagonal matrix in which each element of the principal diagonal is same but not equal to 1 is called scalar matrix.

Q8. Define row matrix and give one example.

Ans 1: Row Matrix: A matrix having single row but having any number of columns is called row matrix.
Example: $A = [3 \ 4 \ 5 \ 6]$
a row matrix, Row matrix is also called row vector.

Q9. Define matrix.

Ans 1: Matrix: Matrix is a block presentation of two-way classified set of information arranged in rectangular form of rows and columns.

Q10. Define diagonal matrix.

Ans 1: Diagonal matrix: A square matrix in which all other elements except the principal diagonal elements are zero and there is at least one element in the principal diagonal which is non-zero is called diagonal matrix.
