

- Notes for lecture. (concept to remember)

Matrix) A Matrix is a rectangular array

- The elements of array are called as the entries of underlying matrix.

• Row Matrix) A matrix with just one row is called Row matrix.

A row matrix will be the order $1 \times n$.

• Column matrix) A matrix with just one column is called a Column matrix

The order of a Column matrix will be $n \times 1$

• Diagonal Matrix \rightarrow A square matrix is called a diagonal matrix if all the entries except the diagonal entries are zero.

• Scalar matrix \rightarrow A diagonal matrix is called a scalar matrix if all the diagonal entries are obtained by multiplying a unique scalar to 1.

• Identity Matrix \rightarrow A diagonal matrix in which all the diagonal elements are unity. Unit matrix of order n is denoted by I_n .

• Upper triangular matrix \rightarrow $A = [a_{ij}]_{m \times n}$ is said to be a upper triangular matrix, if $a_{ij} = 0$ for $i > j$.