

## Types of Matrix:

- Triangular Matrix :

(i) Upper Triangular Matrix

A matrix in which all the elements below the principal diagonal are zero is called an upper triangular matrix.

$$P = [a_{ij}]_n \text{ such that } a_{ij} = 0, \forall i > j$$

Example:

$$A = \begin{pmatrix} 1 & 3 & 0 \\ 0 & -4 & 9 \\ 0 & 0 & -5 \end{pmatrix} \quad B = \begin{pmatrix} 2 & -3 & 5 & 1 \\ 0 & 3 & 6 & -9 \\ 0 & 0 & -5 & 10 \end{pmatrix}$$