

Class – 12<sup>th</sup>

Chapter-3

Subject Maths

*Worksheet-04*

Matrix

1. Construct a  $3 \times 2$  matrix whose elements are given by  $a_{ij} = \frac{1}{2}|i - 3j|$
2. Construct a  $2 \times 2$  matrix whose elements are given by  $a_{ij} = 2i + 3j$ .
3. Construct a  $2 \times 3$  matrix whose elements are given by  $a_{ij} = 3i - \frac{3}{2}j$ .
4. Make two different matrix for each of following types of matrix and also mention their order:
  - a. Column matrix
  - b. Row matrix
  - c. Diagonal matrix
  - d. Scalar matrix
5. Find the value of  $a, b, c$  and  $d$  from the equation:

$$\begin{bmatrix} a - b & 2a + c \\ 2a - b & 3c + d \end{bmatrix} = \begin{bmatrix} -1 & 5 \\ 0 & 13 \end{bmatrix}$$