

MULTIPLE CHOICE

Choose the correct answer from the following choices:

i. The order of matrix $\begin{bmatrix} 2 & 1 \end{bmatrix}$ is:

- 2-by-1
- 1-by-2
- 1-by-1
- 2-by-2

ii. $\begin{bmatrix} \sqrt{2} & 0 \\ 0 & \sqrt{2} \end{bmatrix}$

- zero
- unit
- scalar
- singular

iii. Which is order of a square matrix:

- 2-by-2
- 1-by-2
- 2-by-1
- 3-by-2

iv. Order of transpose of $\begin{bmatrix} 2 & 1 \\ 0 & 1 \\ 3 & 2 \end{bmatrix}$ is:

- 3-by-2
- 2-by-3
- 1-by-3
- 3-by-1

v. Adjoint of $\begin{bmatrix} 1 & 2 \\ 0 & -1 \end{bmatrix}$ is:

$$\begin{bmatrix} -1 & -2 \\ 0 & 1 \end{bmatrix}$$

$$\begin{bmatrix} 1 & -2 \\ 0 & -1 \end{bmatrix}$$

$$\begin{bmatrix} -1 & 2 \\ 0 & -1 \end{bmatrix}$$

$$\begin{bmatrix} -1 & 0 \\ 2 & 1 \end{bmatrix}$$

vi. Product of $\begin{bmatrix} x & y \end{bmatrix}$ $\begin{bmatrix} 2 \\ -1 \end{bmatrix}$ is:

$$[2x + y]$$

$$[x - 2y]$$

$$[2x - y]$$

$$[x + 2y]$$

vii. If $\begin{vmatrix} 2 & 6 \\ 3 & x \end{vmatrix} = 0$, then x is equal to:

$$9$$

$$-6$$

$$6$$

$$-9$$