Quiz-15

Q.1 Rank of a zero matrix is _____.

(A) 0   (B) 1   (C) 2   (D) 3

Q.2 Rank of a nonzero matrix is at least _____.

(A) 0   (B) 1   (C) 2   (D) 3

Q.3 Rank of a 2 by 3 matrix is at best _____.

(A) 0   (B) 1   (C) 2   (D) 3

Q.4 Rank of a nonsingular matrix of order n is _____.

(A) n-1   (B) n+1   (C) n   (D)2n

Q.5 For what value of q, the rank of the following matrix is 1.

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 4 & 6 \\ 3 & 6 & q \end{bmatrix}$$

(A) 0   (B) 3   (C) 6   (D) 9

Q.6 For what value of q, the rank of the following matrix is 2.

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 4 & q \end{bmatrix}$$

(A) q is equal to 6   (B) q is not equal to 6   (C) rank is never 2   (D) none of these

Q.7 What is rank of the following matrix?

$$A = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

(A) 0   (B) 1   (C) 2   (D) 3