

## ECAT (Pre-Eng) Mathematics Chapter 5 Matrices and Determinants

Sr	Questions	Answers Choice
1	The matrix A is Hermitian when (A)' =	A. A BA C. A D. A'
2	Question Image	A. Scalar matrix B. Identity matrix C. Null matrix D. Symmetric matrix
3	If the matrices A and B have the order 1 x 10 and 10 x 1 then order of AB is	A. 1 x 1 B. 1 x 10 C. 10 x 10 D. 10 x 1
4	If A is a non singular matrix then A <sup>-1</sup> =	
5	Question Image	A. 2 B. 4 C. 6 D. 8
6	The matrix $A = [aij]1xn$ is a	A. Vector B. Rectangular matrix C. Column vector D. Square matrix
7	Question Image	A. A <sup>2</sup> - 5A + 7I = 1 B. 2A <sup>2</sup> - 3A + 7I = 0 C. A <sup>2</sup> - 5A + I = 0 D. A <sup>2</sup> - 5A + 7I = 0
8	Question Image	A. 5 B. 15 C. 10 D. 20
9	If A is a skew-symmetric matrix of order n and P, any square matrix of order n, prove that P' AP is	A. Skew-symmetric B. Symmetric C. Null D. Diagonal
10	Question Image	
11	Question Image	A. 1 B. 0 C. 3 D1
12	Question Image	
13	Question Image	A. An upper triangular matrix B. A lower triangular matrix C. A diagonal matrix D. A null matrix
14	If $A = [a_{ij}]$ is $(m \times n)$ matrix, then transpose of A is of the order	A. m x m B. m x n C. n x n D. n x m
15	Question Image	A. 1, 2, 3 B. 1, 5, 9 C. 2, 5, 8 D. 3, 6, 9
16	Question Image	
17	Two matrices A and B are conformable for the product AB if	A. Both A and B are square B. Both A and B are symmetric C. Number of rows of A = number of columns of B D. Number of columns of A = number of rows of B

8	System of linear equation is inconsistent if	A. System has no solution B. System has one solution C. System has two solution D. None of above
9	Question Image	A. 5 C5 D. none
0	For non-trival solution  A  is	A. non zero B. A = 0 C.  A  = 0 D. At = 0