

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

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Hermitian matrix B. Skew-hermitian matrix C. Symmetric matrix D. Identity matrix
2	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. 0 C. -1 D. 2
4	The matrix A is Hermitian when $(A)' =$	A. A B. -A C. A D. A'
5	If A and B are two matrices such that $AB = B$ and $BA = A$, then $A^2 + B^2 =$	A. 2 AB B. 2 BA C. A + B D. AB
6	Every identity matrix is	A. Row-vector B. Scalar C. Column-vector D. All
7	Cofactor of an element a_{ij} is defined by	A. $(-1)^{i+j} A $ B. $(-1)^{i+j}M_{ij}$ C. $(-1)^{i+j}M_{sup-i, sup-j}$ D. None of these
8	If there are m rows and n columns in a matrix then its order is	A. m x n B. m x m C. n x n D. n x m
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	A matrix with a single row is called a	A. Column matrix B. Row matrix C. Null matrix D. Identity matrix
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. Independent of a C. Independent of b D. Independent of c
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	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
14	The order of the matrix $\begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ is	A. 1 x 1 B. 3 x 3 C. 3 x 1 D. 1 x 3
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	Matrices $A = [a_{ij}]_{2 \times 3}$ and $B = [b_{ij}]_{3 \times 2}$ are suitable for	A. BA B. $A^{sup>2}$ C. AB D. $B^{sup>2}$

17	A matrix with a single column is called	A. Column matrix B. Row matrix C. Identity matrix D. Null matrix
18	The order of the matrix A is 3×2 and that of B is 2×3 . The order of the matrix BA is	A. 3×3 B. 3×2 C. 2×5 D. 5×2
19	<input type="text" value="Question Image"/>	D. all
20	Matrix multiplication is	A. Commutative B. Not commutative C. Not associative D. Not distributive
