

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

Sr	Questions	Answers Choice
1	Trivial solution of homogeneous linear equation is	A. (0, 0, 0) B. (1, 2, 3) C. (1, 3, 5) D. a, b and c
2	If the matrices A and B are conformable for multiplication then $(AB)^t =$ _____	A. AB B. $A^t B^t$ C. $B^t A^t$ D. $A^t B$
3	The transpose of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
4	Matrix multiplication is	A. Commutative B. Not commutative C. Not associative D. Not distributive
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $2s^2$ B. $2s^3$ C. s^3 D. $3s^3$
6	The order of the matrix A is 3 x 5 and that of B is 2 x 3. The order of the matrix BA is	A. 2 x 3 B. 3 x 2 C. 2 x 5 D. 5 x 2
7	If $A = [a_{ij}]$ is (m x 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
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. K/6 B. 2K C. 3K D. 6K
9	The matrix A is Hermitian when $(A)^t =$	A. A B. -A C. A D. A'
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
12	We solve the system of non-homogeneous linear equations by	A. a and b B. b and c C. c and a D. a, b and c
13	The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is always	A. Symmetric B. Hermitian C. Skew-symmetric D. None
14	A square matrix A for which $A^t = -A$ is called a	A. Column matrix B. Symmetric matrix C. Skew-symmetric matrix D. Row matrix
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 5 B. 15 C. 10 D. 20
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 3 x 1 B. 1 x 3 C. 3 x 3 D. 3 x 3

D. 1×1

18 The transpose of a square matrix is a

- A. Row matrix
- B. Column matrix
- C. Square matrix
- D. Null matrix

19 If A is a non-singular matrix then $\text{adj } A$ is

- A. Non-singular
- B. Symmetric
- C. Singular
- D. Non defined

20 The square matrix A is skew-symmetric when $A^t =$

- A. $-B$
- B. $-C$
- C. $-A$
- D. $-D$