

## ECAT Mathematics Chapter 5 Matrices and Determinants

Sr	Questions	Answers Choice
1	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
2	Question Image	
3	Question Image	A. $I_3$ B. $rI_3$ C. r D. none
4	Question Image	
5	Question Image	
6	Question Image	A. 1 B. 0 C. 3 D. -1
7	Question Image	
8	Question Image	A. $2 \times 2$ B. $2 \times 3$ C. $3 \times 2$ D. $3 \times 3$
9	Question Image	A. 0 B. 1 C. 2 D. 4
10	Question Image	A. $a = 4, b = 1$ B. $a = 1, b = -4$ C. $a = 0, b = 4$ D. $a = 2, b = 4$
11	Question Image	A. An upper triangular matrix B. A lower triangular matrix C. A diagonal matrix D. A null matrix
12	For a square matrix A, if $A = A^t$ , then A is called	A. Matrix B. Transpose C. Symmetric D. Non-symmetric
13	Rank of matrix $[1 \ 3 \ 5 \ 0]$ is	A. 1 B. 3 C. 2 D. 4
14	Cofactor of an element $a_{ij}$ denoted by $A_{ij}$ is	A. $(-2)^{i+j}$ B. $M_{ij}$ C. $(-1)^{i+j} M_{ij}$ D. None of above
15	The transport of a null matrix is	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
16	Question Image	A. 5 B. 15 C. 10 D. 20
17	An equation of the form $ax + by = k$ is homogeneous linear equation when:	
18	Question Image	D. all

19 Every identity matrix is

- A. Row-vector
- B. Scalar
- C. Column-vector
- D. All

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20 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