

ECAT Mathematics Chapter 5 Matrices and Determinants

Sr	Questions	Answers Choice
1	Question Image	A. 6, -12, -18 B. -6, 4, 9 C. -6, -4, -9 D. -6, 12, 18
2	If A is any matrix then its additive inverse is	A. A B. A^{-1} C. A^{-t} D. -A
3	Question Image	A. 9/4 B. 4/9 C. 1 D. None of these
4	Question Image	
5	The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is	A. Rectangular B. Symmetric C. Square D. None
6	Question Image	A. 1 B. 0 C. -1 D. 2
7	If A is a non singular matrix then $A^{-1} =$ _____	
8	Question Image	
9	The square matrix A is skew-symmetric when $A^t =$	A. -B B. -C C. -A D. -D
10	For any positive integer n	A. $AB^n = B^n A \Leftrightarrow AB = BA$ B. $AB^n = B^n A \Leftrightarrow A, B$ are square matrices and $AB = BA$ C. $AB^n = B^n A \Leftrightarrow A + B$ D. $AB^n = B^n A \Leftrightarrow A$ and B are square matrices
11	The matrix $A = [a_{ij}]_{1 \times n}$ is a	A. Vector B. Rectangular matrix C. Column vector D. Square matrix
12	A non-homogeneous linear system $AX = B$ has no solution if	A. $ A = 0$ B. $ A \neq 0$ C. Rank (a) = no of variables D. Rank \geq no of variables
13	Matrices $A = [a_{ij}]_{2 \times 3}$ and $B = [b_{ij}]_{3 \times 2}$ are suitable for	A. BA B. A^2 C. AB D. B^2
14	For a square matrix A, if $A = A^t$, then A is called	A. matrix B. Transpose C. Symmetric D. Non-symmetric
15	Question Image	
16	Question Image	A. 5 C. -5 D. none
17	Question Image	A. 1, 2, 3 B. 1, 5, 9 C. 2, 5, 8 D. 3, 6, 9

18	Matrices $A = [a_{ij}]_{2 \times 3}$ and $B = [b_{ij}]_{3 \times 2}$ are suitable for	A. BA B. A^2 C. AB D. B^2
19	The number of non zero rows in echelon form of a matrix is called	A. Order of matrix B. Rank of matrix C. Row operation D. None of these
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