ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	Roots of the equation $x^2 - x = 2$ are	A. {2, -1} B. {1, 0} C. {2, 1} D. {-2, 1}
2	Roots of the equation $x^2 + 7x + 12 = 0$ are	A. {3, -4} B. {-3, 4} C. {3, 4} D. {-3, -4}
3	Roots of the equation $x^2 - 7x + 10 = 0$ are	A. {2, 5} B. {-2, 5} C. {2,5} D. {-2,-5}
4	Question Image	
5	Cofactor of an element a_{ij} is defined by	A. $(-1)^{i+j}|A|$ B. $(-1)^{i+j}M_{ij}$ C. $(-1)^{i+j}M^{-1}$ D. None of these
6	Minor of an element a_{ij} is denoted by	A. M_{ij} B. A_{ij} C. $|A|$ D. None of these
7	Question Image	A. 0 B. 1 C. 2 D. 3
8	Question Image	A. 2 B. 4 C. 6 D. 8
9	The additive inverse of a matrix A is	D. None of these
10	The transpose of a zero matrix is a _____	A. Column matrix B. Zero matrix C. Row matrix D. Scalar matrix
11	The transpose of a row matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
12	The transpose of a column matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
13	Question Image	A. Zero matrix B. Diagonal matrix C. Column matrix D. Scalar matrix
14	Question Image	A. 3 x 2 B. 2 x 3 C. 3 x 3 D. 2 x 2
15	Question Image	
16	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. $A^t B$
17	Question Image	A. An upper triangular matrix B. A lower triangular matrix C. A diagonal matrix

C. A diagonal matrix
D. A null matrix

18	Question Image	
19	If order of A is m x n, then order of A^{t}is	A. m x m B. n x n C. m x n D. n x m
20	Matrices are represented by	A. Natural numbers B. Real numbers C. Small letters D. Capital letters
21	Question Image	A. At B. -A C. A D. A-1
22	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
23	If A is a non singular matrix then A^{-1}= _____	
24	Question Image	C. 16 D. None of these
25	If A is singular then |A| = _____	A. 1 B. 0 C. 2 D. None of these
26	Question Image	A. 0 B. 1 C. -2 D. 10
27	Question Image	A. 1, 2, 3 B. 1, 5, 9 C. 2, 5, 8 D. 3, 6, 9
28	Question Image	A. Null matrix B. Triangular matrix C. Unit matrix D. Rectangular matrix
29	Question Image	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
30	Question Image	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix