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

Sr	Questions	Answers Choice
1	Question Image	A. a = 4, b = 1 B. a = 1, b = -4 C. a = 0, b = 4 D. a = 2, b = 4
2	The matrix A = [aij]mxn with m≠n is	A. Rectangular B. Symmetric C. Square D. None
3	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
4	For trival solution |A| is	A. A B. |A| = 0 C. A = 0 D. |A|≠ 0
5	The transpose of a row matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
6	Question Image	A. Hermitian matrix B. Skew-hermitian matrix C. Symmetric matrix D. Identity matrix
7	Question Image	
8	The matrix A = [aij]1xn is a	A. Vector B. Rectangular matrix C. Column vector D. Square matrix
9	A square matrix A = [aij] is upper triangular when	A. cij = 0 B. bij = 0 C. aij = 0 for all i > j D. dij = 0
10	Question Image	A. 3 x 2 B. 2 x 3 C. 3 x 3 D. 2 x 2
11	Question Image	A. Symmetric B. Skew-symmetric C. Hermitian D. Skew hermitian
12	Question Image	A. A B. -A C. A^t D. A⁻
13	Question Image	
14	Question Image	A. 4A - 3I B. 3A - 4I C. A - I D. None of these
15	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
16	Which of the following is an identity matrix?	D. none of these
17	Question Image	A. Diagonal matrix B. Scalar matrix

		C. Triangular matrix D. Identity matrix
18	Rank of matrix [1 3 5 0] is	A. 1 B. 3 C. 2 D. 4
19	For any positive integer n	A. ABn = Bn A ⇔ AB = BA B. ABn = Bn A⇔ A,B are square matrices and AB = BA C. ABn = BnA⇔ A + B D. ABn = BnA ⇔ A and B are square matries
20	The square matrix A is skew-symmetric when At =	A. -B B. -C C. -A D. -D