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

Sr	Questions	Answers Choice
1	A matrix in which the number of rows is equal to the number of columns is called a	A. Diagonal matrix B. Rectangular matrix C. Square matrix D. Scalar matrix
2	For trival solution |A| is	A. A B. |A| is non zero C. A = 0 D. None of these
3	If the trace of matrix A is 5, then the trace of the matrix 3A is	A. 3/5 B. 5/3 C. 8 D. 15
4	Which of the following is skew symmetric matrix	
5	Question Image	A. 5 C. -5 D. none
6	Question Image	
7	Trival solution of homogeneous linear equation is	A. (0, 0, 0) B. (1, 2, 3) C. (1, 3, 5) D. a, b and c
8	Question Image	A. (2x+a+b+c) B. (a+b+c) C. (a+b+c+x) D. 0
9	For a square matrix A, if A = At, then A is called	A. Matrix B. Transpose C. Symmetric D. Non-symmetric
10	If there are m rows and n columns in a matrix then its order is	A. m x n B. m x m C. n x n D. n x m
11	Question Image	A. 3, -3, 11 B. 3, 3, 11 C. -3, 3, -11 D. -3, -3, 11
12	Question Image	
13	Rank of matrix [1 3 5 0] is	A. 1 B. 3 C. 2 D. 4
14	Cofactor of an element aij denoted by Aij is	A. (-2)i+j B. Mij C. (-1)i+j Mij D. None of above
15	System of linear equations is inconsistent if	A. System has no solution B. System has one solution C. System has two solution D. None of above
16	Which of the following is an identity matrix?	D. none of these
17	Question Image	
18	Question Image	A. x =0, y =4 B. x = -1, y = 2 C. x = 2, y = 3 D. x = 3, y = 4

19	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
20	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