ECAT Mathematics Chapter 5 Matrices and Detarminants

Sr	Questions	Answers Choice
1	The matrix A is Hermitian when (A)' =	A. A B. -A C. A D. A'
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. 0 B. Independent of a C. Independent of b D. Independent of c
4	The transpose of a column matrix is a _____	A. Zero matrix B. Diagonal matrix C. Column matrix D. Row matrix
5	A and B be two square matrices and if their inverse exist, the $(AB)^{-1}$=	A. A⁻¹B⁻¹ B. AB⁻¹ C. A⁻¹B D. B⁻¹A⁻¹
6	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
7	Question Image	A. 3, -3, 11 B. 3, 3, 11 C. -3, 3, -11 D. -3, -3, 11
8	A square matrix A = [aij] is lower triangular matrix when	A. aij = 0 for all i<j B. bij = 0 C. cij = 0 D. dij = 0
9	Question Image	
10	Question Image	
11	An equation of the form ax + by = k is homogeneous linear equation when:	
12	The matrix A = [aij]mxn with m≠n is	A. Rectangular B. Symmetric C. Square D. None
13	Question Image	A. 1, 2, 3 B. 1, 5, 9 C. 2, 5, 8 D. 3, 6, 9
14	The square matrix A is skew Hermitian when (A)'=	A. A B. A' C. -A D. A
15	Question Image	
16	Question Image	
17	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
18	Matrix multiplication is	A. Commutative B. Not commutative

		C. Not associative D. Not distributive
19	Question Image	A. 4A - 3I B. 3A - 4I C. A - I D. None of these
20	Question Image	A. 5 C. -5 D. none