ECAT Mathematics Chapter 5 Matrics and Determinants

Sr	Questions	Answers Choice
1	Question Image	
2	An equation of the form ax + by = k is homogeneous linear equation when:	
3	Question Image	A. Orthogonal B. Involutary C. Idempotent D. Nilpotent
4	The square matrix A is skew-symmetric when At =	A. -B B. -C C. -A D. -D
5	Question Image	A. 0 B. 1 C. -A D. -1
6	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
7	If A = |aij| is (m x n) matrix then transpose of A is of the order	A. m x m B. m x n C. n x n D. n x m
8	We also 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
9	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
10	Question Image	A. a = -1/2, b = -1 B. a = 1, b = 2 C. a = 2, b = 3 D. None of above
11	Two matrices A and B are conformable for the product AB if	A. Both A and B are square B. Both A and B are symmetric C. Number of rows of A = number of columns of B D. Number of columns of A = number of rows of B
12	If A is singular then |A| = _____	A. 1 B. 0 C. 2 D. None of these
13	Question Image	A. a = 2, b = 3 B. a = 3, b = 2 C. a = 2, b = 1, 2 D. a = 3, b = 3
14	Every identity matrix is	A. Row-vector B. Scalar C. Column-vector D. All
15	A = [3] is a/an	A. Square matrix B. Scalar matrix C. Diagonal matrix D. Identity matrix
		A. Column matrix

16	The transpose of a zero matrix is a _____	B. Zero matrix C. Row matrix D. Scalar matrix
17	The matrix A = [aij]mxn with m ≠n is always	A. Symmetric B. Hermition C. Skew-symmetric D. None
18	Rank of matrix [1 3 5 0] is	A. 1 B. 3 C. 2 D. 4
19	Question Image	A. Identity matrix B. Diagonal matrix C. Null matrix D. Hermitian matrix
20	Question Image	A. I B. 14 I C. 0 D. None of these