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

Sr	Questions	Answers Choice
1	Question Image	A. Null matrix B. Triangular matrix C. Unit matrix D. Rectangular matrix
2	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
3	Question Image	A. Hermitian matrix B. Skew-hermitian matrix C. Symmetric matrix D. Identity matrix
4	Matrix multiplication is	A. Commutative B. Not commutative C. Not associative D. Not distributive
5	If A = [aij]mxpand B =[aij]pxnthen order of BA is	A. m x n B. p x n C. n x m D. None of these
6	Question Image	
7	If for the matrix A,A5 = 1,then A-1=	A. A2 B. A3 C. A D. None of above
8	For non-trival solution |A| is	A. non zero B. A = 0 C. |A| = 0 D. At = 0
9	Question Image	
10	If A is a skew-symmetric matrix of order n and P, any square matrix of order n, prove that P' AP is	A. Skew-symmetric B. Symmetric C. Null D. Diagonal
11	Question Image	
12	A square matrix all of whose elements except the main diagonal are zeros is called a	A. Null matrix B. Singular matrix C. Symmetric matrix D. Diagonal matrix
13	Question Image	A. Scalar matrix B. Identity matrix C. Null matrix D. Symmetric matrix
14	Question Image	A. A B. -A C. A^t D. A⁻
15	A non-homogeneous linear system AX = B has no solution if	A. |A| = 0 B. |A|≠ 0 C. Rank (a) = no of variables D. Rank > no of variables
16	Question Image	A. 0 B. 1 C. -2 D. 10
		A. Column matrix

17	A matrix with a single row is called a	B. Row matrix C. Null matrix D. Identity matrix
18	Question Image	
19	Question Image	A. 0 B. 1 C. 2 D. 4
20	Question Image	A. a = 2, b = 3 B. a = 3, b = 2 C. a = 2, b = 1, 2 D. a = 3, b = 3