

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

Sr	Questions	Answers Choice
1	If A and B are two matrices such that $AB = B$ and $BA = A$, then $A^2 + B^2 =$	A. $2AB$ B. $2BA$ C. $A + B$ D. AB
2	Question Image	A. 3, -3, 11 B. 3, 3, 11 C. -3, 3, -11 D. -3, -3, 11
3	The order of the matrix A is 3×2 and that of B is 2×3 . The order of the matrix BA is	A. 3×3 B. 3×2 C. 2×5 D. 5×2
4	Question Image	A. An upper triangular matrix B. A lower triangular matrix C. A diagonal matrix D. A null matrix
5	Question Image	A. 1 B. 0 C. -1 D. 2
6	Question Image	
7	A matrix with a single row is called a	A. Column matrix B. Row matrix C. Null matrix D. Identity matrix
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	Question Image	A. $(2x+a+b+c)$ B. $(a+b+c)$ C. $(a+b+c+x)$ D. 0
10	Question Image	D. all are correct
11	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
12	A square matrix $A = [a_{ij}]$ is upper triangular when	A. $c_{ij} = 0$ B. $b_{ij} = 0$ C. $a_{ij} = 0$ for all $i > j$ D. $d_{ij} = 0$
13	Question Image	A. Diagonal matrix B. Scalar matrix C. Triangular matrix D. Identity matrix
14	Question Image	A. -a -b -c B. 1 C. 0 D. -1
15	If A is any matrix then its additive inverse is	A. A B. A^{-1} C. A^t D. $-A$
16	The order of the matrix $[1 \ 2 \ 3]$ is	A. 1×1 B. 3×3 C. 3×1 D. 1×3

17 $(ABC)' =$

- A. CBA'
- B. CBA
- C. $C'B'A$
- D. $C'B'A'$

18 Minor of an element a_{ij} is denoted by

- A. M_{ij}
- B. A_{ij}
- C. $|A|$
- D. None of these

19 If for the matrix $A, A_5 = 1$, then $A^{-1} =$

- A. A^2
- B. A^3
- C. A
- D. None of above

20 The additive inverse of a matrix A is

- D. None of these