

ECAT Mathematics Chapter 5 Matrices and Determinants

Sr	Questions	Answers Choice
1	Question Image	
2	Trivial solution of homogeneous linear equation is	A. (0, 0, 0) B. (1, 2, 3) C. (1, 3, 5) D. a, b and c
3	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
4	Question Image	A. 3K B. K ² C. K ³ D. K
5	Question Image	
6	Question Image	A. 16 B. 256 C. 64 D. 1024
7	Cofactor of an element a_{ij} denoted by A_{ij} is	A. $(-1)^{i+j}$ B. M_{ij} C. $(-1)^{i+j} M_{ij}$ D. None of above
8	Question Image	
9	The transport of a square matrix is a	A. Row matrix B. Column matrix C. Square matrix D. Null matrix
10	A non-homogeneous linear system $AX = B$ has no solution if	A. $ A = 0$ B. $ A \neq 0$ C. Rank (a) = no of variables D. Rank \geq no of variables
11	Question Image	
12	Matrices are represented by	A. Natural numbers B. Real numbers C. Small letters D. Capital letters
13	The square matrix A is skew-symmetric when $A^t =$	A. -B B. -C C. -A D. -D
14	Matrices $A = [a_{ij}] 2 \times 3$ and $B = [b_{ij}] 3 \times 2$ are suitable for	A. BA B. A ² C. AB D. B ²
15	Question Image	
16	Question Image	A. (2x4) B. (2x7) C. (2x3) D. (7x2)
17	Question Image	A. k ³ B. 0 C. 3k D. k ⁶
18	$(ABC)' =$	A. CBA' B. CBA C. C'B'A' D. CBA'

D. $C^*B^*A^*$

19 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

20 

- A. 1
- B. -1
- C. 0
- D. I