

ECAT Mathematics Chapter 5 Matrices and Determinants Online Test

Sr	Questions	Answers Choice
1	If $A = [a_{ij}]$ is $(m \times n)$ matrix then transpose of A is of the order	A. $m \times m$ B. $m \times n$ C. $n \times n$ D. $n \times m$
2	A and B be two square matrices and if their inverse exist the $(AB)^{-1} =$	A. $A^{-1} B^{-1}$ B. AB^{-1} C. $A^{-1}B$ D. $B^{-1}A^{-1}$
3	System of linear equation is inconsistent if	A. System has no solution B. System has one solution C. System has two solution D. None of above
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Null matrix B. Triangular matrix C. Unit matrix D. Rectangular matrix
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A^t B. $-A$ C. A D. A^{-1}
6	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. $-A$ C. $A^{^t}$ D. $A^{⁻}$
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	If for the matrix A, $A^5 = I$, then $A^{-1} =$	A. A^2 B. A^3 C. A D. None of above
9	If for the matrix A, $A^5 = I$, then $A^{-1} =$	A. $A^{²}$ B. $A^{³}$ C. A D. None of above
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 16 B. 256 C. 64 D. 1024
11	The square matrix A is skew-symmetric when $A^t =$	A. $-B$ B. $-C$ C. $-A$ D. $-D$
12	Rank of matrix $[1 \ 3 \ 5 \ 0]$ is	A. 1 B. 3 C. 2 D. 4
13	The square matrix A is skew-symmetric when $A^t =$	A. $-B$ B. $-C$ C. $-A$ D. $-D$
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $a = 2, b = 3$ B. $a = 3, b = 2$ C. $a = 2, b = 1, 2$ D. $a = 3, b = 3$
15	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
16	The square matrix A is skew Hermitian when $(A)^t =$	A. A B. A' C. $-A$ D. A
17	Question Image <input style="width: 500px; height: 20px;" type="text"/>	

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- A. 0
- B. 1
- C. 2
- D. 3

19 If A and B are two matrices such that $AB = B$ and $BA = A$ then $A^2 + B^2 =$

- A. $2 AB$
- B. $2 BA$
- C. $A + B$
- D. AB

20 

- A. $x=0, y=4$
- B. $x=-1, y=2$
- C. $x=2, y=3$
- D. $x=3, y=4$