

ECAT Mathematics Chapter 5 Matrices and Determinants Online Test

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
2	If for the matrix $A, A^5 = I$, then $A^{-1} =$	A. A^2 B. A^3 C. A D. None of above
3	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $x=0, y=4$ B. $x=-1, y=2$ C. $x=2, y=3$ D. $x=3, y=4$
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $A^2 - 5A + 7I = 1$ B. $2A^2 - 3A + 7I = 0$ C. $A^2 - 5A + I = 0$ D. $A^2 - 5A + 7I = 0$
5	If A is a non-singular matrix then $\text{adj } A$ is	A. Non-singular B. Symmetric C. Singular D. Non defined
6	If A is a non singular matrix then $A^{-1} =$ _____	
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
8	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. -2 D. 10
9	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 1 B. -1 C. 0 D. I
10	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $a = -1/2, b = -1$ B. $a = 1, b = 2$ C. $a = 2, b = 3$ D. None of above
11	The matrix $A = [a_{ij}]_{m \times n}$ with $m \neq n$ is always	A. Symmetric B. Hermition C. Skew-symmetric D. None
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. 2 D. 4
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
14	Every identity matrix is	A. Row-vector B. Scalar C. Column-vector D. All
15	System of linear equations is inconsistent if	A. System has no solution B. System has one solution C. System has two solution D. None of above
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $3K$ B. K^2 C. K^3 D. K
17	Trivial solution of homogeneous linear equation is	A. $(0, 0, 0)$ B. $(1, 2, 3)$ C. $(1, 3, 5)$ D. a, b and c

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Question Image

- A. 2
- B. 4
- C. 6
- D. 8

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Question Image

- A. A(α - A(β))
- B. A(α) - A(β)
- C. A(α) - β
- D. A(α) + β

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Question Image

- A. Symmetric
- B. Skew-symmetric
- C. Hermitian
- D. Skew hermitian