

ECAT Pre General Science Mathematics Chapter 5 Matrices and Determinants Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 9/4 B. 4/9 C. 1 D. None of these
2	Question Image	A. $2s^2$ B. $2s^3$ C. s^3 D. $3s^3$
3	Question Image	A. K/6 B. 2K C. 3K D. 6K
4	Let A is a 3×3 matrix and B is its adjoint matrix. If $ B = 64$, then $ A =$	A. 0 B. Independent of a C. Independent of b D. Independent of c
5	Question Image	A. 0 B. abc C. 1/abc D. None of these
6	Question Image	A. 0 B. abc C. 1/abc D. None of these
7	Question Image	
8	Question Image	A. Orthogonal B. Involuntary C. Idempotent D. Nilpotent
9	Question Image	A. $a = 4, b = 1$ B. $a = 1, b = -4$ C. $a = 0, b = 4$ D. $a = 2, b = 4$
10	Question Image	
11	Question Image	A. Symmetric B. Skew-symmetric C. Hermitian D. Skew hermitian
12	Question Image	A. $4A - 3I$ B. $3A - 4I$ C. $A - I$ D. None of these
13	Question Image	A. $A(\text{color: rgb(34, 34, 34); font-family: Times New Roman; font-size: 24px; text-align: center; background-color: rgb(255, 255, 224); } \alpha) - A(\text{color: rgb(34, 34, 34); font-family: Times New Roman; font-size: 24px; text-align: center; background-color: rgb(255, 255, 224); } \beta)$ B. $A(\text{font-family: Times New Roman; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); } \alpha) + A(\text{font-family: Times New Roman; font-size: 24px; color: rgb(34, 34, 34); text-align: center; background-color: rgb(255, 255, 224); } \beta)$ C. $A(\text{text-align: center; background-color: rgb(255, 255, 224); } \alpha) + A(\text{text-align: center; background-color: rgb(255, 255, 224); } \beta)$

- center; > α </i>-<i style="text-align: center; "> β </i>) D. A(<i style="text-align: center;"> α </i>+<i style="text-align: center;"> β </i>)
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- 14 Question Image A. 6, -12, -18
B. -6, 4, 9
C. -6, -4, -9
D. -6, 12, 18
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- 15 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
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- 16 Question Image A. 0
B. 1
C. 2
D. 4
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- 17 If the trace of matrix A is 5, then the trace of the matrix $3A$ is A. $3/5$
B. $5/3$
C. 8
D. 15
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- 18 If for the matrix A, $A^5 = I$, then $A^{-1} =$ A. A^2
B. A^3
C. A
D. None of above
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- 19 Question Image A. I
B. $|A|$
C. $|A|I$
D. None of these
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- 20 For a square matrix A, if $A = A^t$, then A is called A. matrix
B. Transpose
C. Symmetric
D. Non-symmetric
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- 21 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. $n \times m$
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- 22 We also solve 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
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- 23 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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- 24 For non-trivial solution $|A|$ is A. $A = 0$
B. $A^t = 0$
C. $|A| = 0$
D. None of these
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- 25 For trivial solution $|A|$ is A. A
B. $|A|$ is non zero
C. $A = 0$
D. None of these
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- 26 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
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- 27 An equation of the form $ax + by = k$ is homogeneous linear equation when: A. A
B. -A
C. A^t
D. A^2
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- 28 Question Image
-
- 29 Question Image A. A
B. -A
C. A^t
D. A^2
-
- 30 Question Image A. A^2
B. A^t
C. -A
D. A