

11th Class ICS Mathematics Chapter 3 Test Online

Sr	Questions	Answers Choice
1	If A is a square matrix, then $A + A^t$ is:	A. singular B. non-singular C. rectangular D. null
2	Question Image	A. X and Y are of same order B. Their corresponding elements are equal C. Both a and b D. None of these
3	Two matrices X and Y are equal if and only if:	A. $k A $ B. $k^{>2} A $ C. $k^{>3} A $ D. $k^{>4} A $
4	If A is a square matrix order 3×3 the $ kA $ equals:	A. $A = 0$ B. $B = 0$ C. either $A = 0$ or $B = 0$ D. A & B not necessarily zero
5	If $A = [a_{ij}]$, $B = [b_{ij}]$ and $AB = 0$ then:	A. $r - s$ B. $r \times s$ C. $r + s$ D. none of these
6	If $A = [a_{ij}]$ and $B = [b_{ij}]$ are two matrices of same order $r \times s$, then order of $A - B$ is:	A. 3×1 B. 1×3 C. 3×3 D. 1×1
7	Question Image	A. singular B. nonsingular C. symmetric D. none
8	If A is non singular matrix then A^t is:	A. row matrix B. column matrix C. identity matrix D. scalar matrix
9	Question Image	B. diagonal matrix
10	A matrix of order $m \times 1$ is called:	A. X and Y are of same order B. Their corresponding elements are equal C. Both a and b D. None of these

- 11 If A is a square matrix, then $A - A^t$ is:
- 12 If each element of a 3×3 matrix A is multiplied by 3, then the determinant of the resulting matrix is:
- 13 If a matrix A is symmetric as well as skew symmetric, then:
- 14 Question Image
- 15 Question Image
- 16 Question Image
- 17 Question Image
- 18 A matrix in which each element is 0 is called:
- 19 Question Image
- 20 If each element in any row or each element in any column of a square matrix is zero, then value of the determinant is:
- 21 Question Image
- 22 If any two rows of a square matrix are interchanged, the determinant of the resulting matrix:
- 23 The additive inverse of a matrix A is:
- 24 If A is a matrix of order $m \times n$ and B is a matrix of order $n \times p$ then the order of AB is:
- 25 Question Image
- 26 Question Image
- 27 Minors and co-factors of the elements in a determinant are equal in magnitude but they may differ in:
- 28 A^{-1} exists if A is:
- 29 For a square matrix A, $|A|$ equals:
- 30 Question Image
- 31 Question Image

- 32 Question Image A. $ab - cd = 0$
B. $ac - bd = 0$
C. $ad - bc = 1$
D. $ad - bc = 0$
- 33 Question Image A. 40
B. -40
C. 26
D. -26
- 34 If $AB = BA = I$, then A and B are:
A. equal to each other
B. multiplicative inverse of each other
C. additive inverse of each other
D. both singular
- 35 Question Image A. scalar matrix
B. diagonal matrix
C. lower triangular matrix
D. upper triangular matrix
- 36 Question Image A. 5
B. -5
C. -4
D. 4
- 37 The order of a matrix is shown by:
A. number of columns + number of rows
B. number of rows × number of columns
C. number of columns - number of rows
- 38 If A is a matrix of order $m \times n$, then the number of elements in each row of A is:
A. m
B. n
C. $m + n$
D. $m - n$
- 39 If A and B are two matrices, then:
A. $A B = O$
B. $AB = BA$
C. $AB = I$
D. AB may not be defined
- 40 The trivial solution of the homogeneous linear equations is:
A. $(1, 0, 0)$
B. $(0, 1, 0)$
C. $(0, 0, 1)$
D. $(0, 0, 0)$
- 41 Question Image A. 5
B. 14
C. 20
D. 6
- 42 If the matrices A & B have the orders 2×3 and 5×2 then order BA is:
A. 3×5
B. 5×2
C. 2×2
D. none
- 43 Question Image A. scalar matrix
B. diagonal matrix
C. lower triangular matrix
D. upper triangular matrix
- 44 Question Image A. 3
B. -3
C. $1/3$
D. $-1/3$
- 45 Question Image A. 3×2
B. 2×3
C. 2×2
D. 3×3
- 46 If two rows (or two columns) in a square matrix are identical (i.e. corresponding elements are equal), the value of the determinant is:
A. 0
B. 1
C. -1
D. ± 1
- 47 Question Image A. 1
B. -5
C. -1
D. none
- 48 $[0]$ is a:
- 49 Question Image
- 50 Question Image A. 3×3
B. 3×2
C. 2×1
D. 2×3

52 If A is a square matrix, then:

- A. $|A^t| = A$
- B. $|A^t| = -A$
- C. $|A^t| = |A|$
- D. $A^t = A$