

11th Class FSC Mathematics Chapter 3 Test Online

Sr	Questions	Answers Choice
1	If A and B are two matrices, then:	A. $A B = O$ B. $AB = BA$ C. $AB = I$ D. AB may not be defined
2	If A is a square matrix, then $A + A^t$ is:	A. A B. A^{-1} C. -A D. A^2
3	The additive inverse of a matrix A is:	A. A^t B. $ A $ C. -A D. A^2
4	For a square matrix A, $ A $ equals:	A. A^t B. $ A $ C. $- A^t $ D. $- A^t $
5	A matrix of order $m \times 1$ is called:	A. row matrix B. column matrix C. identity matrix D. scalar matrix
6	If A is a square matrix, then $A - A^t$ is:	A. scalar matrix B. diagonal matrix C. lower triangular matrix D. upper triangular matrix
7	Question Image	A. $A = 0$ B. $B = 0$ C. either $A = 0$ or $B = 0$ D. A & B not necessarily zero
8	If $A = [a_{ij}]$, $B = [b_{ij}]$ and $AB = 0$ then:	A. $k A $ B. $k^2 A $ C. $k^3 A $ D. $k^4 A $
9	If A is a square matrix order 3×3 the $ kA $ equals:	A. m B. n C. m + n D. m - n
10	If A is a matrix of order $m \times n$, then the number of elements in each row of A is:	A. scalar matrix B. diagonal matrix C. triangular matrix D. none of these
11	Question Image	D. diagonal matrix
12	Question Image	D. None
13	Question Image	A. zero B. non-singular C. singular D. none of these
14	Question Image	A. 1 B. -5 C. -1 D. none
15	Question Image	A. 1 B. -5 C. -1 D. none
16	If each element in any row or each element in any column of a square matrix is zero, then value of the determinant is:	A. 0 B. 1 C. -1 D. none of these
17	Question Image	A. 2 B. -2 C. 5 D. -5

- 18 If A is non singular matrix then A^t is:
A. singular
B. nonsingular
C. symmetric
D. none
- 19 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
- 20 Question Image D. diagonal matrix
- 21 If a matrix A is symmetric as well as skew symmetric, then:
A. A is null matrix
B. A is unit matrix
C. A is triangular matrix
D. A is diagonal matrix
- 22 A^{-1} exists if A is:
A. singular
B. nonsingular
C. symmetric
D. none
- 23 The order of a matrix is shown by:
B. number of columns + number of rows
C. number of rows \times number of columns
D. number of columns - number of rows
- 24 Question Image
- 25 Question Image A. 3×2
B. 2×3
C. 2×2
D. 3×3
- 26 If $A = [a_{ij}]$ and $B = [b_{ij}]$ are two matrices of same order $r \times s$, then order of $A - B$ is:
A. $r - s$
B. $r \times s$
C. $r + s$
D. none of these
- 27 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
- 28 Question Image A. 5
B. -5
C. -4
D. 4
- 29 Question Image A. singular
B. non-singular
C. rectangular
D. null
- 30 Question Image
- 31 Question Image A. 9
B. -9
C. -6
D. none
- 32 A matrix in which each element is 0 is called:
- 33 If each element of a 3×3 matrix A is multiplied by 3, then the determinant of the resulting matrix is:
A. $|A|^3$
B. $27|A|$
C. $3|A|$
D. $9|A|$
- 34 Question Image A. 5
B. 14
C. 20
D. 6
- 35 Question Image A. $ab - cd = 0$
B. $ac - bd = 0$
C. $ad - bc = 1$
D. $ad - bc = 0$
- 36 $[0]$ is a:
A. 1
B. -1
C. -6
D. 6
- 37 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
- 38 Two matrices X and Y are equal if and only if:
A. X and Y are of same order
B. Their corresponding elements are equal
C. Both a and b
D. None of these

D. None of these			
39	Question Image	A. 3x3 B. 3x2 C. 2x1 D. 2x3	
40	If any two rows of a square matrix are interchanged, the determinant of the resulting matrix:	A. is zero B. is multiplicative inverse of the determinant of the original matrix C. is additive inverse of the determinant of the original matrix D. none of these	
41	Question Image	A. 40 B. -40 C. 26 D. -26	
42	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)	
43	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:	A. $p \times m$ B. $p \times n$ C. $n \times p$ D. $m \times p$	
44	Question Image	A. 3×1 A. 3×1 B. 1×3 C. 3×3 D. 1×1	A. 3×1 A. 3×1 B. 1×3 C. 3×3 D. 1×1
45	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	A. equal to each other B. multiplicative inverse of each other C. additive inverse of each other D. both singular
46	Question Image	A. 25 B. 20 C. 40 D. $2a + 2b + 2c$	A. 25 B. 20 C. 40 D. $2a + 2b + 2c$
47	Question Image	A. scalar matrix B. diagonal matrix C. lower triangular matrix D. upper triangular matrix	A. scalar matrix B. diagonal matrix C. lower triangular matrix D. upper triangular matrix
48	Minors and co-factors of the elements in a determinant are equal in magnitude but they may differ in:	A. order B. position C. sign D. symmetry	A. order B. position C. sign D. symmetry
49	If A is a square matrix, then:	A. $ A^T = A$ B. $ A^{-1} = -A$ C. $ A^T = A $ D. $A^T = A$	A. $ A^T = A$ B. $ A^{-1} = -A$ C. $ A^T = A $ D. $A^T = A$

- 50 A. 3
 B. -3
 C. $\frac{1}{3}$
 D. $-\frac{1}{3}$
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- 51
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- 52 B. diagonal matrix
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