11th Class FA Mathematics Chapter 3 Online Test

Sr	Questions	Answers Choice
1	The order of a matrix is shown by:	B. number of columns + number of rows C. number of rows × number of columns D. number of columns - number of rows
2	Question Image	A. 3×3 B. 3×2 C. 2×1 D. 2×3
3	A matrix of order m×1 is called:	A. row matrix B. column matrix C. identity matrix D. scalar matrix
4	Question Image	
5	Question Image	
6	Question Image	
7	[0] is a:	
8	If A is a matrix of order m × n, then the number of elements in each row of A is:	A. m B. n C. m + n D. m - n
9	Question Image	D. diagonal matrix
10	Question Image	A. 1 B. -1 C. -6 D. 6
11	Question Image	A. 5 B. -5 C. -4 D. 4
12	The additive inverse of a matrix A is:	A. A B. A⁻¹ C. - A D. A²
13	Question Image	D. None
14	Question Image	B. diagonal matrix
15	Question Image	A. singular B. non-singular C. rectangular D. null
16	A matrix in which each element is 0 is called:	
17	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
18	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
19	If A is a matrix of order m × n and B is a matrix of order n × p then the order of AB is:	A. p×m B. p×n C. n×p D. m×p
		A. 3×1<!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:d><m:dPr><m:begChr m:val="["/><m:endChr m:val="]"/><span style='font-size:16.0pt;mso-ansi-font-size:16.0pt;mso-bidi-font-size:16.0pt;font-family:"Cambria Math","serif"; mso-ascii-font-

20	Question Image	family:"Cambria Math";mso-fareast-font-family:"Times New Roman"; mso-fareast-theme-font:minor-fareast;mso-hansi-font-family:"Cambria Math"; mso-bidi-font-family:"Calibri Light";mso-bidi-theme-font:major-latin; color:#202124;background:white;font-style:italic;mso-bidi-font-style:normal'><m:ctrlPr></m:ctrlPr></m:dPr><m:e><m:m><m:mPr><m:mcs><m:mc><m:mcPr><m:count m:val="1"/><m:mcJc m:val="center"/></m:mcPr></m:mc></m:mcs><span style='font-size:16.0pt;mso-ansi-font-size:16.0pt;mso-bidi-font-size: 16.0pt;font-family:"Cambria Math","serif";mso-ascii-font-family:"Cambria Math"; mso-fareast-font-family:"Times New Roman";mso-fareast-theme-font:minor-fareast; mso-hansi-font-family:"Cambria Math";mso-bidi-font-family:"Calibri Light"; mso-bidi-theme-font:major-latin;color:#202124;background:white; font-style:italic;mso-bidi-font-style:normal'><m:ctrlPr></m:ctrlPr></m:mPr><m:mr><m:e></m:e></m:mr><m:mr><m:e></m:e></m:mr><m:mr><m:e></m:e></m:mr></m:m></m:e></m:d></m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><span style="font-size:11.0pt;line-height:150%;font-family:"Calibri","sans-serif"; mso-ascii-theme-font:minor-latin;mso-fareast-font-family:SimSun;mso-hansi-theme-font: minor-latin;mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi; mso-ansi-language:EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA"><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"><v:stroke joinstyle="miter"><v:formulas><v:f eqn="if lineDrawn pixelLineWidth 0"><v:f eqn="sum @0 1 0"><v:f eqn="sum 0 0 @1"><v:f eqn="prod @2 1 2"><v:f eqn="prod @3 21600 pixelWidth"><v:f eqn="prod @3 21600 pixelHeight"><v:f eqn="sum @0 0 1"><v:f eqn="prod @6 1 2"><v:f eqn="prod @7 21600 pixelWidth"><v:f eqn="sum @8 21600 0"><v:f eqn="prod @7 21600 pixelHeight"><v:f eqn="sum @10 21600 0"></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:f></v:formulas><v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"><o:lock v:ext="edit" aspectratio="t"></o:lock></v:path></v:stroke></v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style="width:27.75pt; height:61.5pt"><v:imagedata src="file:///C:\Users\Campus.pk\AppData\Local\Temp\msohtmlclip1\01\clip_image001.png" o:title="" chromakey="white"></v:imagedata></v:shape><!--[endif]--> B. 1×3 C. 3×3 D. 1×1
21	Question Image	A. 3×2 B. 2×3 C. 2×2 D. 3×3
22	If A is a square matrix, then A + A^t is:	
23	If A is a square matrix, then A - A^t is:	
24	If A and B are two matrices, then:	A. A B = O B. AB = BA C. AB = I D. AB may not be defined
25	Question Image	D. diagonal matrix
26	Question Image	A. ab - cd = 0 B. ac - bd = 0 C. ad - bc = 1 D. ad - bc = 0
27	If A is non singular matrix then A^t is:	A. singular B. nonsingular C. symmetric D. none
28	Question Image	A. zero B. non-singular C. singular D. none of these
29	A^{-1} exists if A is:	A. singular B. nonsingular C. symmetric D. none
30	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
31	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
32	Question Image	A. 1 B. -5 C. -1 D. none
33	Question Image	A. 40 B. -40 C. 26

		D. -26
34	Question Image	A. 2 B. -2 C. 5 D. -5
35	Question Image	A. 5 B. 14 C. 20 D. 6
36	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
37	Question Image	A. 3 B. -3 C. 1/3 D. -1/3
38	Question Image	A. 9 B. -9 C. -6 D. none
39	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
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 the original matrix D. none of these
41	If A is a square matrix, then:	A. |A^t| = A B. |A^t| = -A C. |A^t| = |A| D. A^t= A
42	Question Image	A. scalar matrix B. diagonalmatrix C. lower triangularmatrix D. upper triangularmatrix
43	Question Image	A. scalarmatrix B. diagonalmatrix C. lower triangularmatrix D. uppertriangularmatrix
44	Question Image	A. scalar matrix B. diagonalmatrix C. triangularmatrix D. none of these
45	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
46	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)
47	If A = [aij] and B = [bij] are two matrices of same order r × s, then order of A - B is:	A. r - s B. r × s C. r + s D. none of these
48	If A = [a_{ij}], B = [b_{ij}] and AB = 0 then:	A. A = 0 B. B = 0 C. either A = 0 or B = 0 D. A & B not necessarily zero
49	For a square matrix A, |A| equals:	A. A^t B. |A^t| C. -|A^t| D. -A^t
50	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|
51	If A is a square matrix order 3 × 3 the |kA|	A. k |A| B. k²|A|

51	equals:	C. k³ |A| D. k⁴ |A|
52	Question Image	A. 25 B. 20 C. 40 D. 2a + 2b + 2c