


11th Class FA Mathematics Chapter 4 Online Test

Sr	Questions	Answers Choice
1		A. $c = 0$ B. $b = 0, c = 0$
2	A numbers exceeds its square root by 6, the number is:	A. 6 B. 3 C. 9 D. none of these
3	If the roots of $x^2 - bx + c = 0$ are two consecutive integers, then: $b^2 - 4ac =$	A. 0 B. 1 C. -1 D. 2
4		A. quadratic equation B. reciprocal equation C. exponential equation D. none of these
5	If α, β are complex cube roots of unity, then $1 + \alpha^n + \beta^n = \dots\dots\dots$ where n is a positive integer divisible by 3:	A. 1 B. 3 C. 2 D. 4
6	Which one is exponential equation:	A. $ax^{2\sup} + bx + c = 0$ B. $ax + b = 0$ D. $2^{\sup}x^{\sup} = 16$
7		D. none of these
8		A. 1 B. 0 C. 2 D. 3
9	One of the roots of the equation $3x^2 + 2x + k = 0$ is the reciprocal of the other, then $k = \dots\dots\dots$:	A. 3 B. 2 C. 1 D. 4
10	If $4^x = 2$, then x equals:	A. 2 B. 1
11	If $P(x)$ is a polynomial of degree m and $Q(x)$ is a polynomial of degree n, the product $P(x) \cdot Q(x)$ will be a polynomial of degree:	A. $m \cdot n$ B. $m - n$ C. $m + n$ D. $m \times n$
12	Equations having a common solution are called:	A. linear B. quadratic C. homogeneous D. simulteneaeous
13	$3^{2x} - 3^x - 6 = 0$ is:	A. reciprocal equation B. exponentialequation C. radicaequation D. none of these
14	The other name of quadratic equation is:	A. linear equation B. 1st degree equation C. 2nd degree equation D. none
15	The ration of the sum and product of roots of $7x^2 - 12x + 18 = 0$ is:	A. 7:12 B. 2:3 C. 3:2 D. 7:18
16	In $ax^2 + bx + c = 0$, if $b^2 - 4ac > 0$ and perfect square the roots are:	A. rational B. irrational C. equal D. complex
17	No. of ways of solving a quadratic equation:	A. 1 B. 3 C. 2

		D. 4
18	The roots of the equation:	A. complex B. irrational C. rational D. none of these
19	Question Image	A. 4 B. 16 C. 8 D. 64
20	Solution set of the simultaneous equations : $x + y = 1$, $x - y = 1$ is:	A. $\{(0,0)\}$ B. $\{(1,0)\}$ C. $\{(0,1)\}$ D. $\{(1,1)\}$
21	For what value of k, the sum of the roots of the equation $x^2 + kx + 4 = 0$ is equal to the product of its roots:	A. ± 1 B. 4 C. ± 4 D. -4
22	Sum of all four fourth roots of unity is:	A. 1 B. 0 C. -1 D. 3
23	Complex roots of real quadratic equation always occur in:	A. conjugate pair B. ordered pair C. reciprocal pair D. none of these
24	If the Discriminant of a quadratic equation is a perfect square, then roots are:	A. real and equal B. complex C. rational D. irrational
25	If α, β are the roots of $x^2 + kx + 12 = 0$ such that $\alpha - \beta = 1$ then $K =$:	A. 0 B. ± 5 C. ± 7 D. ± 15
26	Sum of all three cube roots of unity is:	A. 1 B. -1 C. 0 D. 3
27	If $P(x)$ is a polynomial of degree m and $Q(x)$ is a polynomial of degree n, the quotient $P(x) \div Q(x)$ will produce a polynomial of degree:	A. m . n, plus a quotient B. m - n, plus a remainder C. m + n, plus a factor D. m + n, plus a remainder
28	The roots of the equation $25x^2 - 30x + 9 = 0$ are;	A. rational B. irrational C. equal D. complex
29	For what value of k, the roots of the equation $x^2 + \sqrt{k}x + 2 = 0$ are equal:	A. 1 B. 8 C. 2 D. 4
30	Four fourth roots of 625 are:	A. $\pm 5, \pm 5i$ B. $\pm 5, \pm 25i$ C. $\pm 25, \pm 25i$ D. none of these
31	Solution set of the equation $x^2 - 3x + 2 = 0$ is	A. $\{-1, 2\}$ B. $\{1, -2\}$ C. $\{-1, -2\}$ D. $\{1, 2\}$
32	If one root of $2x^2 + ax + 6 = 0$ is 2 then the value of a is:	A. 7 B. -7
33	Question Image	D. i
34	How many complex cube roots of unity are there:	A. 2 B. 0 C. 1 D. 3
35	Which one is radical equation:	A. $ax^2 + bx + c$ B. $ax + b = 0$ D. $2^x = 16$
36	If a polynomial $P(x) = x^2 + 4x^2 - 2x + 5$ is divided by $x - 1$. then the remainder is:	A. 8 B. -2 C. 2

		C. 4 D. 5
37	If the sum of the roots of the equation $kx^2 - 2x + 2k = 0$ is equal to their product, then the value of k is:	A. 1 B. 2 C. 3 D. 4
38	Synthetic division is a process of:	A. division B. subtraction C. addition D. multiplication
39	Question Image	A. linear equation B. Quadratic equation C. cubic equation D. radical equation
40	Sum of roots of $ax^2 + bx + c = 0$ is equal to product of roots only if:	A. $a+c=0$ B. $b+c=0$ C. $a+b=0$ D. $a+b+c=0$
41	If the sum of the roots of $ax^2 - (a + 1)x + (2a + 1) = 0$ is 2, then the product of the roots is:	A. 1 B. 2 C. 3 D. 4