


## Mathematics Fsc Part 1 Online Test

Sr	Questions	Answers Choice
1	When a rational fraction is separated into partial fractions, the result is:	
2	A numbers exceeds its square root by 6, the number is:	A. 6 B. 3 C. 9 D. none of these
3	Solution set of the simultaneous equations : $x + y = 1$ , $x - y = 1$ is:	A. $\{(0,0)\}$ B. $\{(1,0)\}$ C. $\{(0,1)\}$ D. $\{(1,1)\}$
4	Equations having a common solution are called:	A. linear B. quadratic C. homogeneous D. simultaneous
5	The roots of the equation $25x^2 - 30x + 9 = 0$ are;	A. rational B. irrational C. equal D. complex
6	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
7	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
8	If the Discriminant of a quadratic equation is a perfect square, then roots are:	A. real and equal B. complex C. rational D. irrational
9	Question Image 	A. linear equation B. Quadratic equation C. cubic equation D. radical equation
10	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
11	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
12	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. $\pm 1$ B. 4 C. $\pm 4$ D. -4
13	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
14	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
15	Synthetic division is a process of:	A. division B. subtraction C. addition D. multiplication
16	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. 4

		D. 5
17	Sum of all four fourth roots of unity is:	A. 1 B. 0 C. -1 D. 3
18	Sum of all three cube roots of unity is:	A. 1 B. -1 C. 0 D. 3
19	How many complex cube roots of unity are there:	A. 2 B. 0 C. 1 D. 3
20	Complex roots of real quadratic equation always occur in:	A. conjugate pair B. ordered pair C. reciprocal pair D. none of these