X — Mathematics Assignment No. 9 — Quadratic Equations.

M.C.Q

Find the Correct answer

Q1. If one root of the quadratic equation $x^2 - 5x + 6 = 0$ is 2. The other root is

(i) 3 (ii) -3 (iii) -2

Q2. The roots of the equation $4x^2 - 12x + 9 = 0$ are

(i) equal (ii) unequal (iii) unreal

Q3. If (-2) is a root of the equation $x^2 + kx + 6 = 0$ The value of k is

(i) 5 (ii) -5 (iii) 3

Q4. If the sum of a number and its reciprocal is 2, the number is

(i) 1 (ii) -1 (iii) 2

Q5. If the roots of $ax^2 + bx + c = 0$ $a \neq 0$ are real and equal then

(i) $b^2 - 4ac \geq 0$ (ii) $b^2 - 4ac > 0$ (iii) $b^2 - 4ac = 0$

Q6 If the roots of $4x^2 - kx + 9 = 0$ are equal then the value of k is (are)

(i) 6 (ii) -6 (iii) ± 6

Q7 The roots of the equation $2\sqrt{3}x^2 - 14x + 4\sqrt{3} = 0$ are (i) $\left(2\sqrt{3}, -\frac{1}{\sqrt{3}}\right)$ (ii) $\left(-2\sqrt{3}, \frac{1}{\sqrt{3}}\right)$ (iii) $\left(\frac{2}{\sqrt{3}}, \sqrt{3}\right)$

ANS:-	Q4 (i)	Q7 (i)
Q1 (i)	Q5 (iii)	
Q2 (i)	Q6 (iii)	
Q3 (i)		

Q8. For the quadratic Equation $2x^2 - 5x - 3 = 0$ determine which of the following are solutions?

(i) 3   (ii) -2 (iii) $-\frac{1}{2}$

Q9. If $x = \frac{2}{3}$ a solution of the equation $Kx^2 - x - 2 = 0$ then the value of K is

(i) -6 (ii) 6   (iii) 4

Q10 The Roots of $2x^2 - 9x + 10 = 0$ are

(i) $(2, \frac{5}{2})$ (ii) $(-2, \frac{5}{2})$ (iii) $(2, -\frac{5}{2})$

Q11. If $2^x = 1$ then the value of x is

(i) 2   (ii) 1   (iii) 0

Q12 If the sum of two natural numbers is 18 and their product is 45. The numbers are

(i) 9, 5   (ii) 15, 3   (iii) 45, 1

Q13 If the product of two consecutive natural numbers is 20, Then the numbers are

(i) 10, 2   (ii) 1, 20   (iii) 4, 5

Q14. If the sum of a number and its square is 20. The number is (i) 4 (ii) 5 (iii) 6

ANSWERS :-

	(Q11) (iii)	(Q13) (iii)
(Q9) (ii)	(Q12) (ii)	Q14 (i)
(Q10) (i)		