



Department Of CED

Final Term Summer-2020

Subject: Applied Mathematics-1
Instructor: Anwar Shamim

Duration: 240 Minutes
Total Marks: 50

Note: Attempt all questions. Manage your time properly.

Q.No. 1

(10+10)

(a) Solve the system with two variables by Cramer's rule.

$$X - 2y = 1$$

$$3X + y = 10$$

(b) Solve the system with two variables by Inversion method.

$$X - 3y = 0$$

$$2X + y = 7$$

Q.No.(02)

(5+5+5)

Solve the Following Quadratic Equation by Using Factorization Method

(a) $4Y^2 + 15Y + 6 = 4Y$

(b) $X^2 + 15X = -50$

(c) $Y^2 = 6Y + 27$

Q.No.(03)

(7+8)

Solve the Following Quadratic Equation by Using Factorization Method.

(a) The sum of two numbers is 27 and their product is 50. Find the numbers.

(b) The Three sides of a right angled triangle are X, X+1 and 5. Find X and the area, if the longest side is 5.