

## INTERNAL ASSIGNMENT 2021 (CC07)

1. Write a C Program to convert the temperature in Fahrenheit to Celsius.
2. Write a C programme to evaluate  $\int_1^2 \frac{dx}{1+x^2}$  using Simpson's one third rule.
3. Write a C programme for solving the differential equation  $dy/dx = (y^2 - x^2)/(y^2+x^2)$  with initial condition  $y = 1$  for  $x = 0$  . also find  $y(0.4)$ .
4. Write a C programme for solving equations using Gauss Elimination method.

$$6.32x_1 - 1.73x_2 - 0.65x_3 + 1.06x_4 = 2.95$$

$$1.13x_1 - 0.89x_2 + 0.61x_3 + 5.63x_4 = 4.27$$

$$0.74x_1 + 1.01x_2 + 5.28x_3 - 1.88x_4 = 1.97$$

$$0.89x_1 + 4.32x_2 - 0.47x_3 + 0.95x_4 = 3.36$$