# BCSL-058 (Set-1) <br> BACHELOR OF COMPUTER APPLICATION (REVISED) BCA 

Computer Oriented Numerical Techniques Lab

## Duration: 1 Hr .

Maximum Marks: 50

Note: 1. There are two questions in this paper and both are compulsory.
2. Each question carries 20 marks. Rest 10 marks are for viva-voce.

1. Write a $\mathrm{C} / \mathrm{C}^{++}$program to implement Bisection method for finding a positive root of the equation $x^{2}-9 x+21=0$. Make the suitable choice for the bounds.
2. Write a program in $\mathrm{C} / \mathrm{C}^{++}$to determine the approximate value of the definite integral(I) by using Simpson's ( $1 / 3)^{\text {rd }}$ rule:

$$
\mathrm{I}=\int_{0.4}^{1} x^{1 / 3} d x
$$

Using step size (h) $=0.2$

