BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA)

Term-End Practical Examination

01895

June, 2017

BCSL-058(P)/S2 : COMPUTER ORIENTED NUMERICAL TECHNIQUES LAB

Time : 1 Hour   *Maximum Marks : 50*

Note : (i)   *There are two questions in this paper, and both are* ***compulsory***.

(ii) *Each question carries 20 marks.*

(iii) *10 marks are reserved for viva-voce.*

(iv) *The programs may be implemented in any* ***one*** *of the programming languages out of C, C++, MS-Excel or Spreadsheet.*

1. Write a program to implement Bisection method for finding a positive root of the equation $x^2 - 9x + 20 = 0$. You have to make a suitable choice for bounds.   *20*

2. Write a program to implement Trapezoidal rule for approximating the value of a definite integral. Use it to approximate the value of

$$\int_{2 \cdot 0}^{3 \cdot 0} x^{2/3} \, dx, \text{ using only two nodal points.}$$ *20*