BACHELOR OF COMPUTER APPLICATIONS (Revised)
(BCA)

01664   **Term-End Practical Examination**

December, 2014

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 twenty marks.*

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

   (iv)   *The programs may be written 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

   $x^2 + x - 20 = 0.$

   You have to make a suitable choice for the bounds.   *20*

2.   Write a computer program that implements Simpson's 1/3 formula to approximate the value of a definite integral. Further, use the program to approximate the value of

   $$\int_{1\cdot3}^{1\cdot7} e^x \, dx, \text{ using } h = 0\cdot2.$$ *20*

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