## BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA)

## **Term-End Practical Examination**

June, 2015

JO423

BCSL-058(P)/S3: 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 written in any **one** of the programming languages out of C, C++, MS-Excel or Spreadsheet.
- 1. Write a program to implement Bisection Method or Secant Method (only one of the methods) for finding out an approximate root of the equation  $x^2 9x + 20 = 0$ . You may make your own assumptions.
- 2. Write a computer program that implements Trapezoidal rule for approximating the value of a definite integral. Use it to approximate the value of

$$\int_{4}^{7} (4x^2 + 3x - 8) dx \quad \text{with } h = 1.0.$$