# BACHELOR OF COMPUTER APPLICATIONS (Revised) (BCA) 

Term-End Practical Examination

December, 2015

## BCSL-058(P)/S3 : COMPUTER ORIENTED NUMERICAL TECHNIQUES LAB

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 Secant method or Bisection method (only one of the methods) for finding an approximate root of a polynomial equation. Use it to find a root of $x^{2}-3 x-10=0$. Make your assumptions about bounds.
2. Write a program to implement Trapezoidal rule for approximating the value of a definite integral. Use it to approximate the value of $\int_{1 \cdot 0}^{2 \cdot 0} x^{2 / 3} d x$, using only two nodal points.
