

**B. Sc. (HONOURS) FIFTH SEMESTER EXAMINATIONS, 2021-22**

**RAMANANDA COLLEGE**

**Subject: Computer Science**

**Course Code: SH/CSC/503/DSE-1**

**Course ID: 51526**

**Course Title: Numerical Methods (Practical)**

**Full Marks: 15**

**Time: 2 Hrs.**

The figures in the margin indicate full marks  
Problem = 10 marks, Viva = 05 marks

1. Answer *any one* of the following questions: (10)

- a) Find the solution of tridiagonal system using Gauss Thomas method
- b) Find the cubic spline interpolation function.
- c) Find the roots of the equation by Regula-Falsi method.
- d) Find the roots of the equation by Bisection Method.
- e) Find the roots of the equation by Newton-Raphson's method.
- f) Evaluate the approximate value of finite integrals using Gaussian integration
- g) Find the solution of system of equations using Gauss-Seidel method.
- h) Solve the boundary value problem using finite difference method.