

**B. Sc. (HONOURS) SIXTH SEMESTER EXAMINATIONS, 2021**  
**RAMANANDA COLLEGE**

**Subject: Computer Science**

**Course Code: SH/CSC/604/DSE-4**

**Course ID: 61527**

**Course Title: Project Work**

**Full Marks: 40**

**Time: 2 Hrs.**

**The figures in the margin indicate full marks**

- 1. Answer *any two* of the following questions: (20×2 = 40)**
- a) Write a program in C language to display Fibonacci series: (i) using recursion, (ii) using iteration.
  - b) Write a program in Java to convert a decimal number to a binary number.
  - c) Write a program in C to search an element from a list. Give user the option to perform Linear or Binary search.
  - d) Perform Stack operations using Linked List implementation.
  - e) Write program in C/C++ to implement FCFS scheduling algorithm.
  - f) Simulate Cyclic Redundancy Check (CRC) error detection algorithm for noisy channel.
  - g) Simulate and implement Dijkstra algorithm for shortest path routing.
  - h) Write a program in C to find the roots of an equation by bisection method.
  - i) Write a program in C to determine the minimum spanning tree of a graph.
  - j) Write program to implement SRJF scheduling algorithm.