Cluster Innovation Centre, University of Delhi, Delhi-110007

Examination : End Semester Examination – March 2021

Name of the Course : B.Tech (Information Technology and Mathematical

Innovations)

Name of the Paper : Automating real world through Programs: Programming

Fundamentals

Paper Code : 32861103

Semester : I

Duration : 3 Hours

Maximum Marks : 75

Instructions:

This question paper contains six questions, out of which any four are to be attempted. Each question carries equal marks.

- 1. Write a structure to store the roll no., name, age (between 11 to 14) and address of students (more than 10). Do the following. Write a function to print the names of all the students having age 14. Write another function to display the details of the student whose roll no is given (i.e. roll no. entered by the user).
- 2. What is a String? Demonstrate the implementation of string with examples for the following requirements such as Declaration of String, Initialisation of string, Passing String to function and changing one character.
- 3. Explain the concept of function and its advantages. Discuss the difference in call by value and call by address?
- 4. Explain the functionality of conditional statements in C language with examples.
- 5. Explain File Handling in C with examples of creating new files, opening existing files and reading and writing data in the file.
- 6. Explain the concept of Array with its features. Implement an array with requirements, such as D=declaration of array, initialisation of array and accessing or modification of array elements.