Roll No…….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [11]

M.Sc. (Computer Sc.) (Semester – 1st)
PROGRAMMING USING C
Subject Code: MSCCS1104
Paper ID: [19221004]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It carries 16 marks. It consists of 4 questions of 4 marks each.
2. Section B consist of 4 questions of 8 marks each. The student has to attempt any 3 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(4 marks each)**

Q1. Define Relational, Logical and Arithmetic expressions. Give their syntax in C.
Q2. Explain all types of operators supported in C with example.
Q3. What is an identifier? What are the rules for defining an identifier in C?
Q4. Explain various data types with their sizes.

Section – B **(8 marks each)**

Q5. What is user defined functions? Write a recursive function to find the factorial of a given number.
Q6. What are pointers? How are they defined? What are their uses?
Q7. Explain the conditional statement if and if-else ladder in C with a suitable example.
Q8. a) Write a program in C to open a text file in C.
b) What is the difference between arrays and structure?

Section – C **(10 marks each)**

Q9. What is a union and what are its uses? How to declare a union and how to initialize a union? How are data elements of a union accessed and processed?
Q10. Explain various iterative control constructs available in C language with the help of examples.
Q11. Distinguish between the following:
a) Actual and formal parameters
b) Global and local variables.