UG EVEN SEMESTER (CBCS) EXAMINATION, SEPTEMBER - 2021

COMPUTER SCIENCE

2nd Semester

COURSE NO. MCSCC - 201

(Programming in C)

Full Marks : 70
Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer any five questions, taking one from each unit)

UNIT - I

1. (a) Differentiate among compiler, assembler and interpreter. [4]

   (b) Draw a flowchart to find whether the number is even or odd. [4]

   (c) Define algorithm. Write characteristics of algorithm. [6]

2. (a) Explain basic data types with their range and example. [4]

UNIT - V

9. (a) Write the syntax for opening a file with various modes and closing a file [4]

   (b) Explain the following preprocessor directives:
   i. #include ii. #define [4]

   (c) Write a short notes on : i. fgets() ii. fputs() [6]

10. (a) Write about different error handling functions on files? [4]

    (b) Explain the following file handling functions:
    i) fseek() ii) ftell() [4]

    (c) Write a C program to copy the contents from one file to another file. [6]

(b) Differentiate among high level, low level and middle level language. [4]

(c) Draw a flowchart to check a number is prime number or not. [6]

UNIT - II

3. (a) What is a function? Write a C program to explain call-by-reference parameter passing technique. [8]

(b) Differentiate between puts() and gets(). [2]

(c) Define pointer. How to declare and initialize it. [4]

4. (a) What is meant by call-by value and call-by reference? Write a C program to illustrate call-by-value parameter passing technique. [8]

(b) Differentiate between putchar() and getchar(). [2]

(c) What is recursion? What are the advantages and Disadvantages of recursion? [4]

UNIT - III

5. (a) Define array. Explain the basic concept of array. [4]

(b) How to declare and initialize a Two-dimensional array? Discuss with Examples. [4]

(c) Write a program to print the array elements in reverse order. [6]

6. (a) Illustrate multidimensional arrays with example program. [4]

(b) Write a program to find maximum and minimum number from an array of 10 elements. [4]

(c) Write a program to read and display the elements using 1-D array. [6]

UNIT - IV

7. (a) Define structure and explain how it differs from other data types. [4]

(b) Define Union? How to represent an union? [4]

(c) How to copy and compare structure variables? Illustrate with example. [6]

8. (a) What do you mean by array of structure? Explain with example. [4]

(b) Write some of the differences between Structure and Union? [4]

(c) Write a C program to illustrate the concept of structure within structure. [6]