Total Pages : 3   Roll No. ....

MCS-401/DCA-101

MSCIT/DCA

(Introduction to Programming Using C)

1st Semester Examination, 2024 (June)

Time : 2:00 Hrs.   Max. Marks : 70

Note :– This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. ***Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.***

Section–A

(Long Answer Type Questions)   2×19=38

Note :– Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Explain if, if-else, nested if-else and cascaded if-else with examples and syntax.

2. Explain string manipulation library functions with their syntaxes. Write a program to check whether a string is palindrome or not.

3. "What is function ? Explain different classification of user defined functions based on parameter passing and return type with examples.

4. What is function ? Explain different classification of user defined functions based on parameter passing and return type with examples.

5. Describe different ways to initialize the Structure. Write a program in C to read Name, Age and Roll of Two students and print them by using structure.

Section–B

(Short Answer Type Questions)   4×8=32

Note :– Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. What is meant by pointer ? Write a program in C to input a String and print it in reverse order using pointer.

2. What is File ? Write a program in C to create a file, write some text in to the file and print it.

3. Differentiate the followings with example. Function Definition Vs. Function Declaration.

4. Distinguish between While-Do and Do-While looping structures. Write a program in C to calculate first 50 Fibonacci numbers using while-loop.

5. What are the different decision control and branching statements available in C ? Explain about each of them with suitable examples.

6. What is recursion ? Write a program in C to find out factorial of a given number using recursion.

7. What is a file ? Discuss about the various modes in which a file can be opened in C language. What are the functions associated with opening and closing a file in C language.

8. Describe the concept of "Function returning pointers" and "Pointers to functions" with examples.

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