Roll No: *IC-2k21-96*

IC-104C

International Institute of Professional Studies
End-Semester Exam February-March, 2022
MCA (5 Years) –I Semester Section "B"
Problem Solving Using C

Time-3 Hrs.]   [Max. Marks-60

Note: - Attempt any five questions. Solve all parts of a question together at one place.

Q: -1   A   Distinguish between the following terms: 6
         (i) Program (ii) Algorithm (iii) Flow Chart

         B   What are the differences between Compiler, Interpreter and   6
           Assembler?

Q: -2   A   Explain the different types of loops in C with the help of examples.   6
         B   Explain the use of break and continue statement in loops.   6

Q: -3   A   What are Arrays, Strings and Matrix in C programming?   6
         B   List any three string functions from string.h and their uses.   6

Q: -4   A   Write a program for performing binary search on an integer array.   6
         B   Write a program to add 2 matrices.   6

Q: -5   A   What is call by value and call by reference? Explain with the help of   6
           example program.
         B   What is recursion? Explain with the help of example program.   6

Q: -6   A   What are the differences between Structure and Union? Give   6
           examples also.
         B   Write a short note on (any two) (i) Data type (ii) Format String (iii)   6
           Middle level language (iv) Keywords

Q:-7   A   Write a C Program to print the following output using nested loops: 6
         *
         **
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         B   Write a program to check weather a given string is palindrome or   6
           not.

Q: -8   Write a note on (any three):   12
         (i) if statement (ii) switch statement (iii) enum
         (iv) typedef (v) Pointers

JC-2K21- 9

Q:-1 Write the difference between Compiler, Interpreter and Assembler.

Q:-2 Draw a flow chart for exchanging the values of two variables.

Q:-3 If a five-digit number is input through the keyboard, write an algorithm to reverse the number.

Q:-4 Write a program using user defined function that receives marks received by 3 students' individually in 3 subjects and returns the average and percentage of these marks. Call this function from main( ) using a loop and print the results in main( ).

IIPS, DAVV, 2022 Test-2, C-Prog., MCA 1 B

Q:-1	What is array? Write a Program to find and count duplicate elements in an array.
Q:-2	Write a program to perform binary search on already sorted array.
Q:-3	.What is pointer? What operations can be performed on pointers?
Q:-4	What is recursion? Write a program for finding factorial of a given number using recursion.

International Institute of Professional Studies
IInd Mid Test- 2022
MCA (6 Y) Ist Semester(Sec-A)
IC-104B (Fundamentals of programming using C)

Duration:1 hour

(Attempt all questions)

Max Marks :20

Q: -1 (a) Narrate the structure and functions of For Loop? Write a program to find maximum and minimum number among 6
N numbers entered by the user using For loop.

(b) Narrate the structure and functions of Do- While loop? Write a program to display n terms of Fibonacci series using 6
Do-While loop.

Q: -2   Write a program to find multiplication of two matrices entered by the user.   8