QP CODE: 24802102

24802102

Reg No : .....

Name : .....

I.M.C.A DEGREE EXAMINATION, MARCH 2024

First Semester

Faculty of Technology and Applied Sciences

I M C A

CORE - IMCA1C05 - PROGRAMMING METHODOLOGY & C PROGRAMMING

2020 ADMISSION ONWARDS

FCB61925

Time: 3 Hours Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1. Explain the purpose of pseudo code.
2. Explain about escape sequences in C.
3. Explain about printf function.
4. Explain typecasting with examples.
5. What is the use of default statement in switch case?
6. Write the syntax for go to statement and explain with an example.
7. Define functions and discuss the need for functions.
8. Explain how to search for an element in an array.
9. How do you declare a string using pointer?
10. Illustrate dynamic memory allocation with an example.
11. How do you write data into a data file?
12. Define macro.

(10×3=30 marks)

Part B

*Answer **all** questions*

*Each question carries **9** marks*

13. a) Show with examples, the memory used by different data types in C.

OR

b) What are constants? Explain the different types of constants in C.

14. a) Explain the different operators in C with examples.

OR

b) Explain the working of loop statement in C. Also differentiate between a while and a do…while loop.

15. a) What is function parameter? Explain in detail with examples the different parameter passing mechanisms in C.

OR

b) Define array. Discuss the storing and accessing values in a multidimensional array with an example.

16. a) Write a program to read an array of integers and allocate its memory dynamically. Define a function to reorder the array from smallest to largest.

OR

b) Define a structure and Explain the array of structures with example.

17. a) Create a datafile which stores customer details of a bank and display the details.

OR

b) What is the use of preprocessor directives in C language? Explain it.

(5×9=45 marks)