CE/AM/CS/CYS/DS/EC/EEE/ME 115 (R-22)

Total No. of Questions : 10] [Total No.of Pages : 02

I/IV B. Tech. DEGREE EXAMINATIONS, MARCH - 2023

First Semester

CE / AM / CS / CYS / DS / EC / EEE / ME

PROGRAMMING FOR PROBLEM SOLVING USING 'C'

Time : **Three Hours** Maximum : **60** Marks

Answer All Questions

Answer ONE question from each Unit. 5x12=60 M

UNIT - I

1. a) Explain in detail about block diagram of Computer with neat Architecture.

   b) How many Keywords and Identifiers does 'C' Language Support ? Explain.

(OR)

2. a) Write the importance of precedence and associativity ? Write the table for operator precedence.

   b) Explain in detail about Formatted Input and output functions with an example.

UNIT - II

3. a) Explain various If Statements in C.

   b) Write a C Program to find the given number is Prime or Not.

(OR)

4. Define Loop ? Explain about different looping statements with their examples.

UNIT - III

5. a) What is array ? Explain the declaration and initialization of one dimensional and two dimensional array with an example.

   b) Write a C program to find the largest element in an array.

(OR)

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6. a) Explain any four basic string functions with examples.

   b) Write a C Program to find the given string is Palindrome or not.

UNIT - IV

7. a) Define Function ? Explain different types of passing parameters in a Function with syntax and examples.

   b) Develop a function which computes Tower of Hanoi Problem using recursion.

(OR)

8. a) Define a Pointer. How to initialize and declare pointer variables ? Explain the same with examples.

   b) Write a C program using pointers to compute the Sum, Mean and Standard deviation of all elements stored in an array of "n" real numbers.

UNIT - V

9. a) Explain with an example how structures are initialized ?

   b) Define a structure with the name student. Assume appropriate fields in student structure. Develop a program which reads n students data and displays all n students information.

(OR)

10. a) Explain about Error Handling on Files with an example.

    b) Write the syntax for opening a file with various modes and closing a File with an example.