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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

MCA I Year I Semester Supplementary Examinations Feb-2021
COMPUTER PROGRAMMING AND PROBLEM SOLVING

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a Explain C keywords and identifiers with suitable examples. 6M
b Write an algorithm and a flow chart to check given number is Armstrong or not. 6M

OR

- 2 a What is a data type? Discuss about the range for different data types. 6M
b What is variable? Write syntax for declaring and initializing a variable. 6M

UNIT-II

- 3 a Explain any two iterative statements with example. 8M
b What is the usage of gets () and puts ()? 4M

OR

- 4 a Explain about unformatted input and output functions. 6M
b Write a C program to generate Fibonacci series without using functions. 6M

UNIT-III

- 5 What is an array? How is it initialized? How are the elements of two dimensional arrays stored? Comment on the accessing of the elements with example. 12M

OR

- 6 a How the strings are declared and initialized? Discuss. 6M
b Write a C program to find the length of a string without using string handling functions. 6M

UNIT-IV

- 7 Define function. Discuss various categories of functions based on arguments and return type and what are the different parameter passing methods in functions? 12M

OR

- 8 Explain about different storage classes with examples along with scope rules. 12M

UNIT-V

- 9 What is union? How to declare and initialize unions? Discuss with examples. 12M

OR

- 10 a What are different operating modes of files? Explain with example. 6M
b Write short notes on i) unions within structures. 6M
ii) typedef

*** END ***