Q.P. Code: 19MC9101

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

MCA I Year I Semester Regular Examinations January 2020 COMPUTER PROGRAMMING AND PROBLEM SOLVING

Time: 3 hours Max. Marks: 60

(Answer all Five Units $5 \times 12 = 60$ Marks) UNIT-I a List out the notations used in flowchart and explain its usage in drawing the **6M** flowchart. **b** Design an algorithm to solve Fibonacci series. **6M** What is a data type? Explain various data types in C with example program. 12M UNIT-II Discuss the following with example. 12M i) For ii) While iii) do – While OR Explain Different kinds of operators with an example program. 12M UNIT-III **a** How the strings are declared and initialized? Discuss. **6M b** Explain any three string handling functions with examples for each. **6M** OR What is an array? Explain types of arrays with example Program. **12M**

Define a function. Explain how to pass arrays as parameters to a function with 12M Example program.

UNIT-IV

OR

Explain about different storage classes and scope rules with examples.

UNIT-V

a Define union. Explain how to declare and initialize unions.

6M

12M

b Differentiate between structures and unions.

6M

OR

10 Describe in detail various pre-processor directives.

12M

*** END ***