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

**B.Tech I Year I Semester (R16) Regular & Supplementary Examinations Dec 2017
COMPUTER PROGRAMMING
(Common to All Branches)**

Time: 3 hours

Max. Marks: 60

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

UNIT-I

- 1 a. Define an Algorithm and write an algorithm to find the roots of a quadratic equation. 6M
b. Explain the various data types used in C. 6M

OR

- 2 a. Draw a flow chart to find the factorial of a given number. 6M
b. What is a variable? Explain the rules for declaring it. 6M

UNIT-II

- 3 a. Explain various decision making statements in C. 8M
b. Write a C program to find the smallest out of 3 numbers. 4M

OR

- 4 a. Describe the syntax of “do-while” loop with an example. 6M
b. List and explain unconditional statements in C. 6M

UNIT-III

- 5 a. How do you declare and initialize a two-dimensional array? Explain with a suitable example. 8M
b. Write a C program to check whether the given string is a palindrome or not?. 4M

OR

- 6 a. Write a c program to search for an element in a given array of elements. 6M
b. How do you declare and initialize array of strings? 6M

UNIT-IV

- 7 a. What is a function? Explain its advantages. 6M
b. Write a C program to simulate call-by value. 6M

OR

- 8 a. Explain various arithmetic operations using pointers. 6M
b. Explain various storage classes in C. 6M

UNIT-V

- 9 a. Define a structure and write the general form for declaring and accessing members of a structure. 8M
b. Distinguish between structures and Unions. 4M

OR

- 10 a. Discuss about command-line arguments. 6M
b. Explain the following.
(i) fgets() (ii) fputs() (iii) fseek() 6M

***** END *****