Q.P. Code: 16CS501 **R16**

Reg. No: | | | | | | | | | | |

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech I Year I Semester (R16) Regular Examinations December 2016

COMPUTER PROGRAMMING

(Common to CE, EEE, ME, ECE & CSE)

(For Students admitted in 2016 only)

Time: **3 hours** Max. Marks: **60**

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

UNIT-I

Q1	a.	Define an Algorithm? Write an algorithm for finding Armstrong number.	6M
	b.	Explain the following operators with example (i) Relational Operators (ii) Logical Operators (iii) Bitwise operators	6M

OR

Q.2	a.	Write an algorithm and flowchart to find the given number is prime or not.	8M
	b.	Compare and contrast increment and decrement operators with example	4M

UNIT-II

Q.3	a.	Describe syntax of various if-Else statements.	6M
	b.	Write a C program to simulate switch case statement with your own example.	6M

OR

Q.4	a.	Compare and contrast entry control and exit control loops in C.	6M
	b.	Write a C program to display the prime numbers upto the given n value.	6M

UNIT-III

Q.5	a.	Define an array. How to initialize one-dimensional array? Explain with suitable examples.	6M
	b.	Write a C program to display only odd numbers from given array of elements.	6M

OR

Q.6	a.	Explain arrays as functional arguments with an example.	6M
	b.	Write a C program to read a set of strings and display them based on the increasing order of number of alphabets in the strings	6M

UNIT-IV

Q.7	a.	Discuss about the different categories of functions.	6M
	b.	Write a C program using function to sort the given numbers in ascending order.	6M

OR

Q.8	a.	Explain the dynamic memory allocation functions with syntax and example: (i) malloc() (ii) calloc() (iii) free()	6M
	b.	Write a C program to implement matrix multiplication using pointers	6M

UNIT-V

Q.9	a.	Compare and contrast structure and Union variables with examples.	4M
	b.	Write a C program that simulates structures within structures with own example.	8M

OR

Q.10	a.	Write a C program to accept n numbers as the input and store odd numbers in odd, txt and even numbers even.txt.	6M
	b.	Explain about (i) #include (ii) # define with an example.	6M

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