Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
B Tech I Year II Semester Supplementary Examinations October-2020
PROGRAMMING FOR PROBLEM SOLVING
(Common to ECE, CSE & CSIT)

Time: 3 hours   Max. Marks: 60

PART-A
(Answer all the Questions **5 x 2 = 10** Marks)

1	**a**	Write a short note on type casting.	**2M**
	b	What is a loop? Write the syntax of infinite "for" loop.	**2M**
	c	What is meant by call-by value and call-by reference?	**2M**
	d	Discriminate puts() and gets()	**2M**
	e	Write about different file modes.	**2M**

PART-B
(Answer all Five Units 5 x 10 = 50 Marks)

UNIT-I

2	**a**	What is an algorithm? Write algorithm for finding factorial of a number.	**5M**
	b	What is flow chart? Draw a flow chart to generate Fibonacci series of numbers up to 'n'.	**5M**

OR

3	**a**	Write the structure of C program and explain.	**5M**
	b	Write a program to perform swapping of two numbers.	**5M**

UNIT-II

4	**a**	List out unconditional control statements. Explain the difference among them.	**5M**
	b	Write a program to find the factorial of a given number.	**5M**

OR

5	**a**	Write a program to find sum of individual digits of a given number.	**5M**
	b	Explain else-if ladder with the help of flowchart and program.	**5M**

UNIT-III

6	**a**	Define function. List out the advantages of functions.	**5M**
	b	Write a C program using function to exchange two numbers using pointers.	**5M**

OR

7		Write a C program to multiply two matrices of different order.	**10M**

UNIT-IV

8	**a**	Write a C program to read and print an array of elements using pointers.	**5M**
	b	Explain the concept of functions returning pointers with example.	**5M**

OR

9	**a**	What are the features of pointers? Write a C program to print address of a variable	**5M**
	b	Explain the declaration of pointers and pointer to pointer with examples.	**5M**

UNIT-V

10	**a**	Discuss command line arguments in detail with examples.	**5M**
	b	Write a short notes on i) fgets() ii) fputs()	**5M**

OR

11	**a**	Write the syntax for opening a file with various modes and closing a file.	**4M**
	b	Explain any three of the following file handling functions:	**6M**
		i) fseek() ii) ftell() iii) rewind() iv) feof()	

END