Q.P. Code: 18CS0501 **R18**

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

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B Tech I Year I Semester Supplementary Examinations November-2020

PROGRAMMING FOR PROBLEM SOLVING

(Common to CE, EEE, ME & AGE)

Time: 3 hours Max. Marks: 60

PART-A

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

1	**a**	Explain sizeof() operator with example.	**2M**
	b	Differentiate between break and continue.	**2M**
	c	What is recursion?	**2M**
	d	What is pointer to pointer?	**2M**
	e	What is the differences between Structure and Union?.	**2M**

PART-B

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

UNIT-I

2	**a**	Write the structure of C program and explain	**5M**
	b	Draw a flowchart to find whether the given number is prime or not.	**5M**
		OR	
3	**a**	Write an algorithm and flowchart to generate Fibonacci series of numbers up to 'n'.	**5M**
	b	Draw the flowchart to find the greatest of three numbers.	**5M**

UNIT-II

4		What is meant by iteration statements in C. Explain with suitable examples	**10M**
		OR	
5		List and explain unconditional statements in C with examples.	**10M**

UNIT-III

6	**a**	What is recursion? What are the advantages and Disadvantages of recursion?	**5M**
	b	Write a C program to find the factorial of a given number using recursion.	**5M**
		OR	
7	**a**	Write a C program to illustrate call-by-value parameter passing technique.	**4M**
	b	Write a C program to add 2 matrices of size n by n.	**6M**

UNIT-IV

8	**a**	Explain the concept of array of pointers with examples.	**5M**
	b	Write a C program to read and display multiple strings using pointers.	**5M**
		OR	
9		Explain the following string handling functions with example: i) strcpy() ii) strcmp() iii) strcat() iv) strlen() v) strncat()	**10M**

UNIT-V

10	**a**	Explain the preprocessor directives: i) #include ii) #define	**5M**
	b	Write a program in C that reads the name of a file and displays the contents of the file on the user screen.	**5M**
		OR	
11	**a**	Write a C program to display the contents of the file in reverse order.	**5M**
	b	Write a C program to copy the contents from one file to another file.	**5M**

END