Code No: 21ES1108 RM 21

## I B.Tech I Semester Regular Examinations, May -2022 Programming for Problem Solving Using C

(Com. to ECE, CSE, CSE-AI, AI & DS Branches)

Time: 3 Hours Max. Marks: 70

## Answer any five Questions one Question from Each Unit All Questions Carry Equal Marks

**SET - 1** 

7M

## UNIT -I Discuss different computer languages with examples. 1 7M Write an algorithm for the sum of digits in a given number. 7M Describe the purpose of the qualifiers, constants, identifiers, and keywords 2 7M with examples. List the basic data types, their sizes, and range of values supported by c 7M language. UNIT -II 3 A) Explain various iterative statements available in C language with examples. 7M What is the difference between break and continue statements? Discuss selection statements with examples? 7M Explain about switch statement. What is the importance of break and continue 4 7M in the switch statement? Write a table for operator precedence. B) 7M UNIT -III What is Array? Discuss the initialization and accessing of array elements in 5 7M one dimensional and two-dimensional arrays. Write a C program to perform the multiplication of two matrix, and write the 7M expected output for the program? A) What is a Pointer? Mention the advantages of pointers. How do you declare a 6 7M pointer variable? Explain. Write a C program to find the largest of two numbers using pointers. B) 7M **UNIT-IV** 7 Explain different string handling functions available in C language. 7M Write a C program to concatenate two strings without using the strcat() 7M function. What are the two different techniques of passing arguments to function? 8 7M Explain with example. Write a C program to check whether the given string is palindrome or not? 7M UNIT-V Simulate the following sting functions a) strlen(), b) strcpy() 9 7M Distinguish between text and binary files. 7M What do you mean by command-line arguments? Give an example program. 10 A) 7M

Discuss, how a file can be opened in different modes.