PRACTICAL LIST

Semester: 2 Academic Year: 2024-25

Sr. No.	Practical Definition
1	**Basic Programs Using User-Defined Function** 1. Add two numbers using function. (A) 2. Find maximum and minimum between two numbers using function. (A) 3. Count simple interest using function. (A) 4. Generate Fibonacci series of N given number using function name fibbo(). (B)
2	**Intermediate Programs Using User-Defined Function** 1. Return the maximum of three floating-point numbers. (A) 2. Return the minimum of three floating-point numbers. (A) 3. Swap two numbers using call by value and call by reference. (A) 4. Find all prime numbers between given interval using functions. (B) 5. Create a function that converts amount into words. (i.e. 9241: Nine Thousand Two Hundred Forty One) (C)
3	**Advanced Programs Using User Defined Function** 1. Find factorial of a number using function and recursive function. (A) 2. Pass an array in function to print array elements. (A) 3. Find power of any number using recursion. (A) 4. Scan a character string passed as an argument and convert all lowercase string to uppercase string. (B) 5. Swap elements of two integer arrays using user define function. (B) 6. Find reverse of any number using recursion. (C)
4	**Basic Programs Using Structure and Union** 1. Create, declare and initialize structure employee. (A) 2. Create a structure book with book title, author, publication, and price. Read data of 3 books and display. (A) 3. Demonstrate difference between structure and union. (A) 4. Demonstrate nested structure. (B) 5. Add two distances in feet and inches using structure. (C) 6. Add two times hh, mm and ss using structure. (C)
5	**Intermediate Programs Using Structure and Union** 1. Create structure student with name, percentage and age. Read data of 5 students using array of structure. (A) 2. Create structure student with name, percentage and age. Read data of N students using array of structure. Print details of student with maximum percentage. (A) 3. Create structure student with name, percentage and age. Read data of N students using array of structure. Arrange student data alphabetically and print all data. (B)
6	**Advanced Programs Using Structure and Union** 1. Define a structure called Players which describe details like p_name, team, score, average. Write a program to read data for 3 players and print that data. (A) 2. Define a union called Players which describe details like p_name, team, score, average. Write a program to read data for 3 players and print that data. (A) 3. Define a structure called Players which describe details like p_name, team, score, average. Write a program to read data for N players and arrange p_name in alphabetical order. (B)

7	**Basic Programs Using Pointer** 1. Print value and address of a variable. (A) 2. Demonstrate int, float, double and char pointer. (A) 3. Calculate sum of two numbers using pointer. (A) 4. Copy one array to another using pointers. (B) 5. Swap two arrays using pointers. (C)
8	**Intermediate Program of Pointer** 1. Swap value of two numbers using Pointers. (A) 2. Store n elements in an array and print the elements using Pointers. (A) 3. Find Even and Odd Numbers in Array Using Pointers. (A) 4. Calculate Positive and Negative Numbers in Array Using Pointers. (A) 5. Sort array using Pointers. (B)
9	**Advanced Program of Pointer** 1. Add two matrix using Pointers. (A) 2. Print sum of columns of a matrix using Pointers. (A) 3. Find length of string using Pointers. (A) 4. Copy one string into another string using Pointers. (A) 5. Find Maximum Element in a 2-D Array Using Pointers. (B)
10	**Programs Using Dynamic Memory Allocation** 1. Allocate and de-allocate memory for int, char and float variable at run time. (A) 2. Calculate the sum of n numbers entered by the user using malloc(). (A) 3. Calculate the sum of n numbers entered by the user using calloc(). (A) 4. Allocate dynamic memory for structure variable. (A)
11	**Programs Using Pre-processor Directives** 1. Illustrate use of #dfine preprocessor (A) 2. Get current time using __TIME__(A) 3. Define a function like Macro that should use printf Define Macro PRINT to print given integer argument. (A)
12	**Basic Programs Using File Handling** 1. Create, open and close a file. (A) 2. Count chars, spaces, tabs and new lines in a file. (A) 3. Demonstrate functions fprintf(), fscanf(), fputc(), fgetc(), fseek() and rewind(). (A) 4. Print contents of file in reverse order. (B) 5. Capitalize first letter of each word in file. (B)
13	**Advanced Programs Using File Handling** 1. Append one file at the end of other. (A) 2. Copy one file to another file. (A) 3. Merge alternate lines from two files. (B) 4. Delete all blank lines in a file then insert a blank line after the third line in a file. (C)