Annexure-II

List of practical (Fundamentals of C Programming -22CS002)

| S.No. | Practical | CLO Level |
|-------|--|-----------|
| 1. | Write a Program to show the use to input (Scanf)/output (Printf) | CLO01 |
| | statements and block structure of C-program by highlighting the | |
| | features of "stdio.h". | |
| 2. | Write a program to add two numbers and display the sum. | CLO-02 |
| 3. | Write a program to calculate the area and the circumference of a | CLO-02 |
| | circle by using radius as the input provided by the user. | |
| 4. | Write a Program to perform addition, subtraction, division and | CLO-02 |
| | multiplication of two numbers given as input by the user. | |
| 5. | Write a program to evaluate each of the following equations. | CLO-02 |
| | (i) $V = u + at$. (ii) $S = ut + 1/2at^2$ (iii) $T = 2*a + \sqrt{b + 9c}$ (iv) $H = \sqrt{b^2 + p^2}$ | |
| 6. | Write a program to swap two variable: | CLO-02 |
| | a) By using temporary variable. | |
| | b) Without using temporary variable | |
| 7. | Write a Program to find the greatest among three numbers using: | CLO-03 |
| | Conditional Operator | |
| | If-Else statement | |
| 8. | Write the following programs using switch case statement: | CLO=03 |
| | To check that an input alphabet is vowel or consonant | |
| | To check whether a number is positive, negative or zero | |
| | CE-I | |
| 9. | Write a program using while loop to print the sum of first n natural | CLO-03 |
| | numbers. | |
| 10. | Write a program to check a number is Armstrong or not using For | CLO-03 |
| | loop. | |
| 11. | Write the program to count the digits in a number and then print the | CLO-03 |
| | reverse of the number also. | |
| 12. | Write a program to generate the Fibonacci series. | CLO-03 |
| 13. | Write a program to print the following patterns: | CLO-03 |
| | a) | |
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| 14. | Write the program to print the following pattern: 1 2 3 4 5 6 | CLO-03 |
| | 2 4 6 8 10 12 | |
| | 3 6 9 12 15 18 4 8 12 16 20 24 | |
| | 5 10 15 20 25 30 | |
| | 6 12 18 24 30 36 | |
| 15. | Write a program to check that the given number is prime, Armstrong or perfect using the concept of functions. | CLO-03 |
| 16. | Write a program to calculate the area and circumference of a circle using functions. | CLO-04 |
| 17. | Write a program to swap two variables using the concept of call by value and call by reference. | CLO-04 |
| 18. | Write a program to perform the following operations on 1D-Array: • Insert | CLO-05 |
| | Update | |
| | • Delete | |
| | • Display | |
| 19. | Search Write a program to calculate the sum of array elements by passing it | CLO-04 |
| | to a function. | 220 01 |
| 20. | Write a program to show the use of passing pointer as arguments to the functions. | CLO-04 |
| 21. | Write a program matrix multiplication using the concept of 2D array | CLO-05 |
| 22. | Write a program to transpose a given matrix. | CLO-05 |
| | CE-II | |
| 23. | Write a program to find the factorial of a number by using the concept of recursion. | CLO-05 |
| 24 | Write a menu driven C program to show the use of in-built string functions like strlen, strcat, strcpy, strcmp, strrev etc. | CLO-05 |
| 24 | Write a Program in C to display the total number of appearances of a substring provided as input by the user in a given string. | CLO-05 |
| 25. | Write a program to display the sum of the digits of a number by using the concept of recursion. | CLO-05 |
| 26. | Write a C program to add two distances in inch & feet using the concept of structures. | CLO-05 |
| 27 | Write a C program to add two complex numbers using the concept of structures in C. | CLO-05 |
| 28 | Write a program in C to store the information of five employees using both concepts i.e. array of structure and array within structure. | CLO-05 |
| 29 | Write a Program in C to store and retrieve the information about students of a university by using the concept of file handling. | CLO-06 |
| 30 | Write a Program in C to find and replace a specific string in a file and also display the total number of appearances of that string. | CLO-06 |