Academic Year 2022-23

F.E. – SEM II

Subject :- C Programming Lab

List of Experiments

1. Write a C Program to find volume of a cone.
2. Write a C Program to reverse a four digit number and also find sum of digits.
3. Write a C Program to check given year is leap year or not.
4. Write a C Program to check whether the given number is Armstrong number or not.
5. Write a C Program to find the roots of quadratic equation.
6. Write a C Program to display the grade of the student w.r.t. marks of 3 subject each out of 100 using switch statement, also check for data validity.
7. Write a C Program to convert a decimal number to binary equivalent.
8. Write a C Program to print the sum of cosine series of given angle.
9. Write a C Program to display terms of Fibonacci series up to entered term.
10. Write a C Program to generate the series of prime numbers from 1 to entered limit.
11. Write a C Program to print the Pascal triangle.
12. Write a C Program to find out the maximum & minimum value and their location in given array.
13. Write a C Program to sort single dimensional array.
14. Write a menu driven program addition, subtraction, multiplication of two matrices.
15. Write a C Program to sort names in Alphabetic order.
16. Write a C Program function to check if the given string is palindrome or not.
17. Write a C Program to check whether a matrix is symmetric or not.
18. Write a C Program to calculate x^y using recursive function where 'y' should be an integer value.
19. Write a C Program to store the names, matches played and runs scored by 'n' cricket players and generate a list with runs scored in descending order.
20. Write a C Program to find addition of two complex numbers by passing structure as argument to a function.

Course Code	Course Name	Teaching Scheme (Contact Hours)			Credits Assigned			
		Theory	Pract.	Tut.	Theory	Tut.	Pract.	Total
FEL204	C programming	--	2	--	--	--	1	1

Course Code	Course Name	Examination Scheme							
		Theory					Term Work	Pract. /oral	Total
		Internal Assessment			End Sem. Exam.	Exam. Duration (in Hrs)			
		Test1	Test 2	Avg					
FEL204	C programming	--	--	--	--	--	25	25	50

Lab Outcomes:

- To translate given algorithms to a program.
- To be able to correct syntax and logical errors.
- To be able to write iterative as well as recursive programs.
- To be able to represent data in arrays, strings and structures and manipulate them through a program.
- To be able to declare pointers and demonstrate call by reference concept.

Lab Description:

Weekly 2 hours of laboratory Programming Assignments on the following topics:

- Basic data types and I/O operations
- Branching Statements
- Loop Statements
- Arrays
- Strings
- Functions
- Recursion
- Structure and Union
- Pointers

Term Work:

Experiments (20 Programs) and Assignments (2 Assignments) should be completed by students on the given time duration

Experiments ----------(15) Marks

Assignment ----------(05) Marks

Attendance ----------(05) Marks

Total ----------(25) Marks

The final certification and acceptance of TW ensures the satisfactory performance of laboratory work and minimum passing in the TW.

Practical and Oral :

Practical and oral Exam should be conducted for the Lab, on Computer Programming in C subject for given list of experiments.

Implementation ----------(15) Marks

Oral ----------(10) Marks

Total ----------(25) Marks