Guidelines for Assignment submission

- **There are 4 sections I,II,II,IV. Begin each section on a new page.**
- **Assignment to be handwritten neatly.**
- **Do not write the questions, only the answers.**
- **Flowcharts to be drawn with ruler and pencil**
- **Mention the output of each program**
- **Last day of submission is 9th May 2024**

I) i) Write and algorithm and draw a flowchart to generate the Fibonacci series upto a number "n" entered by the user.

ii) Write and algorithm and draw a flowchart to generate the sum of the following pattern:
1!+2!+3!+….n!. where "n" is entered by the user.

II) i) A library charges a fine for every book returned late. For first 5 days the fine is 50 paise, for 6-10 days fine is one rupee and above 10 days fine is 5 rupees. If you return the book after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or the appropriate message.

ii) Write a program using a function to check if the entered number is prime or composite.

iii) Using conditional operators determine whether the character entered through the keyboard is a lower case alphabet or not.

III) i) Write a program to reverse the elements of a 1d array.

ii) Write a program to accept two 2d arrays at runtime. Subtract one array from the other and save the results in another array. Display the resultant array.

iii) Write a program which declares an array pointers of type double. Using pointers replace each of double values by its square.

IV) i) Write a program that compares two given dates. To store date use structure say date that contains three members namely date, month and year. If the dates are equal then display message as "Equal" otherwise "Unequal"

ii) Create a structure to specify data of customers in a bank. The data to be stored is: Account number, Name, Balance in account. Assume maximum of 200 customers in the bank. Write a function to print the Account number and name of each customer with balance below Rs. 500.

I

II

III

IV