JIS College of Engineering

(An Autonomous Institute)

Department of Computer Science and Engineering B. Tech. 2nd Year Odd semester 2021-2022

Programming with C++ lab Lab Program Marks – 40

Code: CS393 Viva Marks – 20

Answer the question whose question number is equal to 0-th digit of your University Roll Number (i.e. rightmost digit in your Univ. Roll Number)

- 0) Write a Program in C++ to show multi-level inheritance where mode of inheritance is public. In the same program you need to show the use of multiple inheritances where mode of inheritance is private.
- 1) Write a program in C++ to implement stack & its operations (push, pop, display).
- 2) Write a Program in C++ to read and display information of 'n' number of students using dynamic memory allocation ('n' is user input). Use new and delete operators.
- 3) Write a Program in C++ to read and display information of employees using constructor (consider suitable members for the class of employees).
- 4) Write a program in C++ using template to implement Stack for generic data types.
- 5) Define one BOOK class with the following specifications and then store information of any 5 books. Consider array of objects.

PRIVATE MEMBERS:

BOOK_NO integer type
BOOK_TITLE 20 characters
BOOK_Authors 50 characters

PUBLIC:

INPUT() //read required inputs
DISPLAY() //display information of all books

- 6) Write a program in C++ using operator overloading to subtract two matrices.
- 7) Write a Program in C++ to swap data between two objects (of classes named as class_1, class_2, where every class has one integer member and one float member). Do not use friend function.
- 8) Write a Program in C++ in which you should create a class for rectangle and find out the area and perimeter of rectangle. Use default constructor and parameterized constructor.
- 9) Write one simple program in C++ to create Linked List by adding items at the end of linked list (i.e. define a function insert_at_end only).

Submit in LMS and through Google form.

Google form link: https://forms.gle/m9nejFXF1JtHZT3UA

Note: Write Name, Roll number, department, section in the answer paper