MID TERM EXAMINATION

B. TECH PROGRAMMES (UNDER THE AEGIS OF USICT)

3rd _Semester, November, 2023

Paper Code: CIC 211   **Subject: Object-Oriented Programming using C++**

Time: 1:30 Hrs.   **Max Marks: 30**

Note: Attempt Q. No. 1 which is compulsory and any two more questions from remaining.

Q. No.	Question	Max. Marks	CO(s)
1 a	Explain inline function with example.	2	CO1
b	Explain the concept of array of objects and pointers to objects with an example	3	CO2
c	What is this pointer.	2	CO1
d	Discuss the importance of Data Abstraction and Encapsulation with a real time example.	3	CO1
2 a	Design a class from which only one object can be created. If more than one object is created the program should terminate.	4	CO2
b	Name the operators that cannot be 'overloaded. Justify why they cannot be overloaded? Write program to overload << and >> operators in complex numbers.	6	CO3
3 a	Display a stack program in C++ using class, overloaded constructors, member functions(push,pop), friend function (display stack content)	7	CO2
b	Differentiate between run time polymorphism and compile time polymorphism.	3	CO2
4 a	Explain default, parameterized constructor and copy constructor with an example?	5	CO3
4 b	Define dynamic memory allocation. Write a C++ program to illustrate new and delete operators. Explain why new is better than malloc() in C.	5	CO2, CO3

Pop vs Push