Roll No

MCADD-501

M.C.A. (Integrated), V Semester

Examination, May 2024

Object Oriented Programming in C++

Time: Three Hours

Maximum Marks: 70

- Note: i) Attempt any five questions.
 - ii) All questions carry equal marks.
- 1. a) Discuss the important features of OOPs concepts. Explain the organization of data and functions in OOPs.
 - b) What is a Class? How does it accomplish the data binding?
- 2. a) What is Constructor? Illustrate memory allocation to an object using constructor.
 - b) Illustrate the need of operator overloading in OOPs. Write a program to overload the unary '-'operator to overload using C++.
- 3. a) Explain UML concepts.
 - b) Write brief note on UML diagrams and object diagrams.
- 4. a) Describe briefly the features of I/O system supported by C++.
 - b) What is the basic difference between manipulators and ios member functions in implementation? Give examples.

- 5. a) Write the syntax and example of seekg(), seekp().
 - b) What is File? What are steps involved in manipulating a file in C++ program?
- 6. a) Write a program to display the given decimal number in hexadecimal number using manipulators.
 - b) Explain the different types of file stream classes.
- 7. a) Write a C++ program to illustrate the virtual function in inheritance.
 - b) Discuss the error handling during file operations.
- 8. Write short notes on the following:
 - i) In-line function
 - ii) "This' pointer.
 - iii) Friend function
