

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No .....

## **MCADD-501**

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

Examination, May 2023

### **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) What is Object Oriented Programming? How it differs from Structured programming? Discuss the characteristics of Object Oriented Languages.  
b) What is Constructor and Destructor function? Explain different types of constructor. Also explain the purpose of constructor and destructors in a program.
2. a) What is function overloading? Illustrate function overloading through mydiv function which divide two integer and two float numbers.  
b) What is inheritance? Explain different types of inheritance used in C++ with suitable Example.
3. a) Write a program in C++ which concatenates two strings by operator overloading.  
b) What is friend function? Explain with suitable example.

[2]

4. a) Write a C++ program to illustrate try, throw and catch block.  
b) What is file handling? Discuss the use of seekg(), seekp() functions.
  
5. a) Write brief note on UML diagram and object diagram.  
b) Explain aggregation, generalization and association.
  
6. a) What is the basic difference between manipulators and ios member function in implementation? Give example.  
b) Explain command line arguments with suitable example.
  
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) Structure and Class

\*\*\*\*\*