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Roll No

MCADD-501

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

Examination, May 2022

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. 7
b) What is a Class? How does it accomplish the data binding? 7
2. a) What is Constructor? Illustrate memory allocation to an object using constructor. 7
b) Illustrate the need of operator overloading in OOPs. Write a program to overload the unary ‘-‘ operator to overload using C++. 7
3. a) How a base class pointer points to the derived class? Explain with an example. 7
b) Explain the concept of data hiding in C++ with suitable example. 7
4. a) Explain in detail about static and dynamic binding. 7
b) Explain in detail about the virtual functions. 7

5+2

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5. a) Write short notes on abstract classes. 7
b) Explain in detail about I/O streams along with an example program. 7
6. a) Write a program to display the given decimal number in hexadecimal number using manipulators. 7
b) Explain the different types of file stream classes. 7
7. a) Write short notes on UML diagrams and object diagrams. 7
b) Write short notes on UML concepts. 7
8. Answer any two of the following with examples: 14
a) Destructor
b) Friend function
c) Exception handling
d) Object oriented design
