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MASTER OF COMPUTER APPLICATIONS
EXAMINATION : DECEMBER - 2023
SEMESTER - II

Sub : Object Oriented Programming using C++ (MCA- 203-22)

Date :21/12/2023

Total Marks : 60

Time: 10.00 am to 12.30 pm

Instruction:

1. All questions are compulsory unless and otherwise stated.
2. Bold figures to the right of every question are the maximum marks for that question.
3. Candidates are advised to attempt questions in order.
4. Answers written illegibly are likely to be marked zero.
5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
6. Draw neat and labelled diagram wherever necessary.

Q. 1. Answer the following in 2 - 3 lines. (Any 5) (10)

1. What are member functions?
2. What do you mean by pure virtual functions?
3. What is function Prototype?
4. List out the benefits of oops
5. What are operators that cannot be overloaded?
6. Describe the importance of destructor
7. What is role of manipulators in C++. Write down different manipulators in C++.

Q. 2. Answer the following in short. (Any 4) (20)

1. What do you mean by friend functions?
2. Illustrate the exception handling mechanism. What happens when a raised exception is not caught by catch block?
3. Explain the use of public, private and protected access specifiers and their visibility in the class.
4. How dynamic memory allocation is done? Write a program for same.
5. Explain the process of open, read, write and close files?
6. Explain inline function with example.

Q. 3. Answer the following in detail. (Any 3) (30)

1. What is inheritance? Explain with examples the different types of inheritance in C++
2. Write down the example to overload unary and binary operators in C++
3. What is the use of constructor? Write a program for illustrating default constructor, parameterized constructor and copy constructor.
4. Describe the concept of object oriented programming language
5. Explain function overloading with example.
