

TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.SC) IN COMPUTER APPLICATIONS
EXAMINATION : JUNE - 2025

SEMESTER - II

Sub : Object Oriented Programming using C++ (MSC- 201-22)

Date : 3/06/2025**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 does polymorphism mean in C++?
2. How to allocate deallocate memory in c++?
3. How the class is specified?
4. What is file pointer?
5. Compare and contrast the structured programming and object oriented programming.
6. What are the situations that inline functions may not work?
7. What are operators cannot be overloaded?

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

1. Discuss the use of public, private and protected access specifiers and their visibility in the class.
2. Explain function overloading in detail.
3. Explain different modes used file stream class?
4. Explain virtual function with example.
5. Explain friend function in detail
6. Explain with example how exceptions are handled.

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

1. Write a C++ program to create a simple class named Account and write methods to deposit and withdraw amount from the account.
2. Explain object oriented programming concept
3. What is inheritance? Explain any 2 type of inheritance.
4. What is constructor? Explain parameterized and overloaded constructor.
5. Write a C++ program to overload '+' operator to perform concatenation of two strings.
