

GUJARAT TECHNOLOGICAL UNIVERSITY
M.SC(IT)- INTEGRATED – SEMESTER II- EXAMINATION –SUMMER-2025

Subject Code: 1320504**Date: 27/05/2025****Subject Name: Object oriented Programming in C++****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make Suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

	Marks
Q.1 (a) Define following terms.	03
1) Expression	
2) Local Variable	
3) iostream	
(b) Differentiate Procedural Programming and Object Oriented Programming.	04
(c) Write a short note on data types available in C++.	07
 Q.2 (a) What is the need of array. Discuss different types of arrays.	03
(b) Explain public, private and protected access specifiers.	04
(c) Explain inline function with suitable example. also discuss its advantages and disadvantages.	07
OR	
(c) What is constructors? Explain different types constructors with suitable example.	07
Q.3 (a) Write down the syntax and example to create a class.	03
(b) What is destructor? Explain destructor with suitable example.	04
(c) What is Inheritance? Explain different types of Inheritance with example.	07
OR	
Q.3 (a) Explain Scope Resolution Operator (::).	03
(b) Explain Type Conversion with suitable example.	04
(c) Explain operators overloading with suitable examples.	07
Q.4 (a) Explain Static Data Member with example.	03
(b) Explain user defined exceptions with suitable example.	04
(c) Write a C++ program involving input/output operations on characters in a file.	07
OR	
Q.4 (a) What is an abstract class? Explain with suitable example.	03
(b) Explain Unformatted and formatted I/O with example.	04
(c) Explain the exception-handling in C++ with suitable example.	07
Q.5 (a) Explain eof() function with suitable example.	03
(b) Define polymorphism. How is compile time polymorphism achieved?	04
(c) What is STL? Differentiate it with C++ standard library.	07
OR	
Q.5 (a) Enlist various stream classes.	03
(b) What is the function template in C++?	04
(c) Write a program to Swapping two variables value using call by value, call by reference and call by address.	07
