

GUJARAT TECHNOLOGICAL UNIVERSITY
M.SC(IT)- INTEGRATED – SEMESTER II- EXAMINATION –WINTER-2024

Subject Code:1320504**Date: 27/11/2024****Subject Name: Object oriented Programming in C++****Time:02:30 PM TO 05:00 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) List out the basic characteristics of OOP | 03 | |
| | (b) State the difference between OOP and POP | 04 | |
| | (c) Explain function overloading with proper example | 07 | |
| Q.2 | (a) Describe public, private and protected in C++ | 03 | |
| | (b) Explain reference variable with proper example | 04 | |
| | (c) What is constructor? Explain all its types | 07 | |
| OR | | | |
| Q.3 | (c) Explain class to class type conversion with proper example | 07 | |
| | (a) Explain the use of 'this' pointer | 03 | |
| | (b) What is exception handling. Give one simple example of try..catch block | 04 | |
| Q.3 | (c) Explain different types of inheritance with example | 07 | |
| | OR | | |
| | (a) What is inline function | 03 | |
| Q.4 | (b) Write a short noyte on Polymorphism | 04 | |
| | (c) Explain operator overloading in C++ | 07 | |
| | (a) Explain destructor in detail | 03 | |
| Q.4 | (b) Explain the use of scope resolution operator in C++ | 04 | |
| | (c) Explain class template with proper example | 07 | |
| | OR | | |
| Q.4 | (a) List the application of OOP | 03 | |
| | (b) Write a short note on rethrowing exception in C++ | 04 | |
| | (c) What is a stream? Describe various stream classes for console I/O operations in C++. | 07 | |
| Q.5 | (a) Explain default argument with example | 03 | |
| | (b) Explain manipulators in C++ | 04 | |
| | (c) What is template? Explain function templarte. | 07 | |
| OR | | | |
| Q.5 | (a) Explain user defined exception in detail | 03 | |
| | (b) Explain function overriding. | 04 | |
| | (c) Write a short note on multiple catch exception in C++ | 07 | |
