

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– IV (New) EXAMINATION – WINTER 2019****Subject Code: 2140705****Date: 16/12/2019****Subject Name: Object Oriented Programming With C++****Time: 102:30 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.

| | | MARKS |
|------------|--|-----------|
| Q.1 | (a) Explain Type Conversion with example. | 03 |
| | (b) Explain default argument in a function with example. | 04 |
| | (c) Explain different features of Object Oriented Programming. | 07 |
| Q.2 | (a) What is difference between Structure and Class in C++? | 03 |
| | (b) Explain Copy Constructor with example. | 04 |
| | (c) What is Function Prototype? Explain Function overloading with example. | 07 |
| | OR | |
| | (c) What is Friend Function? Explain the characteristics of friend function. | 07 |
| Q.3 | (a) Explain Constructor with example. | 03 |
| | (b) Explain Static Data Member with example. | 04 |
| | (c) Create a class distance with feet and inches as two data member, define the necessary member function to get the data of two distance objects from user, add both the objects of distance class and display the result. Invoke all member function from main (). | 07 |
| | OR | |
| Q.3 | (a) Explain Destructor with example. | 03 |
| | (b) Explain Static Function with example. | 04 |
| | (c) Create a class time with hours and minutes as two data member, Get the data of two time objects from user and overload function with + operator to add both time objects and display the result. | 07 |
| Q.4 | (a) Explain this pointer with example. | 03 |
| | (b) Explain Call by Address with example. | 04 |
| | (c) Explain different types of Inheritance with example. | 07 |
| | OR | |
| Q.4 | (a) Explain inline function with example. | 03 |
| | (b) Explain Call by Reference with example. | 04 |
| | (c) What is Inheritance? Explain Multiple and Multilevel inheritance with example. | 07 |
| Q.5 | (a) Explain Exception in C++ with example. | 03 |
| | (b) Explain type conversion from class type to basic type with suitable example. | 04 |
| | (c) Write a function template for finding the maximum value from an array. | 07 |
| | OR | |
| Q.5 | (a) What is Exception handling in C++? | 03 |
| | (b) Explain type conversion from one class type to another class type with suitable example. | 04 |
| | (c) What is a stream? Explain different stream classes for console I/O operations in C++. | 07 |
