

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-IV (OLD) EXAMINATION – WINTER 2018****Subject Code:140704****Date: 12/12/2018****Subject Name: Object Oriented Concepts And Programming****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.

- Q.1** (a) Explain the basic characteristics of object oriented programming. **07**
(b) Describe Three models and relationship between them in detail. **07**
- Q.2** (a) Explain the generalization and specialization with example. **07**
(b) What do you mean by function overloading? Explain it with example. **07**
- OR**
- (b) Explain the inline function and default arguments with example. **07**
- Q.3** (a) Explain different data types in C++. **07**
(b) What is Constructor? Explain constructor overloading with example. **07**
- OR**
- Q.3** (a) What is default constructor? What is the purpose of parameterized constructor? Explain it with example. **07**
(b) What is operator overloading? What are the rules for operator overloading. **07**
- Q.4** (a) Write a C++ program to check that the given integer number is prime or not. **07**
(b) What is object model? Explain it with example. **07**
- OR**
- Q.4** (a) Write a C++ program to find an average value of n integers stored in array. **07**
(b) What is Inheritance? Explain different types of Inheritance. **07**
- Q.5** (a) Write a program to add private members variables of two classes using friend function. **07**
(b) Explain Virtual function and abstract class with example. **07**
- OR**
- Q.5** (a) What do you mean by type conversion? Write a C++ program to explain basic to user defined data type conversion. **07**
(b) Explain the looping structures used in C++ program with example. **07**
