



Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-IV(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2142005****Date:25/05/2019****Subject Name: Programming Methodology using 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

- Q.1** (a) Define the Following: 03  
       1. Local Class  
       2. Type Cast Operator  
       3. Abstract Class
- (b) Differentiate: OOP Vs POP . 04  
 (c) Explain Function Overloading with example. 07
- Q.2** (a) Explain reference operator & in C++. 03  
 (b) Explain Memory Management Operators. 04  
 (c) Explain features of Object Oriented Programming. 07
- OR**
- (c) Explain Static data members and member function in detail. 07
- Q.3** (a) Explain Inline Function with example. 03  
 (b) Explain Copy Constructor with example. 04  
 (c) Explain Binary Plus Operator Overloading for addition of two complex numbers. 07
- OR**
- Q.3** (a) Explain destructor with example. 03  
 (b) Explain macro with example. 04  
 (c) Explain Friend function with example. 07
- Q.4** (a) Explain 'this' pointer with example. 03  
 (b) Explain put(), get(), getline() and write() functions. 04  
 (c) Explain type conversion with example. 07
- OR**
- Q.4** (a) Explain iterators in detail. 03  
 (b) Explain access specifiers in detail. 04  
 (c) What is Inheritance? Explain Multiple and Hybrid Inheritance in detail. 07
- Q.5** (a) Explain ios format functions in detail. 03  
 (b) What is class hierarchy? Explain with example. 04  
 (c) Explain Containers in detail. 07
- OR**
- Q.5** (a) Explain pure virtual function with example. 03  
 (b) Differentiate: Call By Value Vs Call By Reference. 04  
 (c) Define – exception. Explain C++ exception handling mechanism with example. 07

\*\*\*\*\*