

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA - SEMESTER- II EXAMINATION – WINTER 2018

Subject Code: 2620002

Date: 03-01-2019

Subject Name: Object-Oriented Programming Concepts & Programming

Time: 02.30 pm to 5.00 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 friend function with suitable example. **07**
- (b)** What is inheritance? List its types. Which type of inheritance is having ambiguity? How to overcome it? **07**
- Q.2 (a)** i. Explain this pointer with suitable example. **05**
ii. Write a general syntax of destructor. **02**
- (b)** Write a short note on data types available in C++. **07**
- OR**
- (b)** What is a copy constructor? Explain copy constructor with suitable example. **07**
- Q.3 (a)** What is a template class? Explain template class with suitable example. **07**
- (b)** Explain virtual base class with suitable example. **07**
- OR**
- Q.3 (a)** What is a stream? Explain functions seekg(), seekp(), tellg(), tellp() in details. **07**
- (b)** Explain member initialization list with suitable example. **07**
- Q.4 (a)** Explain manipulators with suitable example. **07**
- (b)** What is a namespace? Explain namespace alias with suitable example. **07**
- OR**
- Q.4 (a)** What is the importance of RTTI? Discuss the type_info object and typeid operator. **07**
- (b)** What is a static function? Explain static function with suitable example. **07**
- Q.5 (a)** What is exception handling? Explain catch(...) with example. **07**
- (b)** Write a program which convert Kilometer object to Meter object and Meter object to Kilometer object. **07**
- OR**
- Q.5 (a)** How we can achieve following things? **07**
cin>>student1 [It will ask for data member input]
cout<<student1 [It will print data members of object]
student1 is object of student class.
- (b)** Explain principles behind design of STL. **07**
