

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA - SEMESTER– II EXAMINATION – WINTER 2019****Subject Code: 3620004****Date: 26/12/2019****Subject Name: Object-Oriented Unified Modelling****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)** Do as Directed. **07**
- 1) What is Model?
 - 2) Multiplicity.
 - 3) Define Note.
 - 4) Define Instance.
 - 5) Collaborations.
 - 6) UML
 - 7) Define:-Time Event.
- (b)** Write Short note on Relationship in UML. **07**
- Q.2(a)** Explain Behavioral diagrams available in UML. **07**
- (b)** Define Use case. Draw Use Case diagram for Hotel Management System. **07**
- OR**
- (b)** Explain the term Relationship with its types. **07**
- Q.3(a)** What is package? Explain import, export and generalization in package with example. **07**
- (b)** Define Action state and Activity state. Draw activity diagram for Computing a restaurant bill. There should be a charge for each delivered item. The total amount should be subject to tax and a service charge of 15% for groups of six or more. For smaller groups, it should be 10%. Any coupons or gift certificates submitted by the customer should be subtracted. **07**
- OR**
- (a)** Explain Object Diagram with example. **07**
- (b)** Define Interface. What is the use of interface and explain the relationship between Class and Interface. **07**
- Q.4(a)** Define Class Diagram and Draw class diagram for online shopping system. **07**
- (b)** What are classifiers? Explain different kinds of classifiers in detail. **07**
- OR**
- (a)** Explain various component of Activity diagram. **07**
- (b)** 1) Explain various purpose of Modeling. **03**
- 2) What do you mean by object orientation? Briefly explain concept of OO. **04**
- Q.5(a)** Define component. Explain characteristic of component. Write the difference between component and classes. **07**
- (b)** Explain Following Terms.
- 1) <<include>> and <<extends>> relationship in UseCase. **04**
 - 2) Forward and backward Engineering. **03**
- OR**
- (a)** Define Event. Explain Different types of event in detail. **07**
- (b)** Define deployment diagram. Write the difference between component and node. How deployment diagram will use? **07**
