

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA– SEMESTER –III EXAMINATION –SUMMER-2019

Subject Code:2630001**Date: 15-05-2019****Subject Name: Structured & Object Oriented Analysis & Design Methodology****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)** Write a short note on- **07**
- (1) JAD
 - (2) data dictionary
 - (3) abstract class
 - (4) do activity(1)
- (b)** State Whether the following statements are True or False, justify your answer **07**
- (1) Knowledge work system supports data workers.
 - (2) Lower CASE Tools allows the analyst to create and modify the system design.
 - (3) Decision tree is one of the methods of process specification.
 - (4) In 0 level DFD we can represent data stores as well.
 - (5) Generalization represents “is-a” relationship.
 - (6) The dynamic aspect of the UML model is modeled using structural things.
 - (7) A sequence diagram is an interaction diagram that emphasizes on time ordering of messages.
- Q.2 (a)** Draw the Use case diagram for Online Mobile recharge system. **07**
- (b)** Prepare the data flow diagram (DFD) to represents data flow for school management system. **07**
- OR**
- (b)** Prepare the decision table for university grading system. **07**
- Q.3 (a)** Discuss SDLC with suitable example. **07**
- (b)** Discuss various types of user interface. **07**
- OR**
- Q.3 (a)** Write a short note on **07**
- (1) Role of System Analysts.
 - (2) Five steps of conducting an interview.
- (b)** List and explain different data entry methods. **07**
- Q.4 (a)** Discuss the building blocks of UML. **07**
- (b)** Draw Class diagram of online shopping system with proper explanation of classes and relationships. **07**
- OR**
- Q.4 (a)** What are the common mechanisms in UML? Explain extensibility mechanism. **07**
- (b)** What do you mean by state diagram? Draw the state chart for Telephone line. **07**
- Q.5 (a)** Differentiate sequence and communication diagram with example. **07**
- (b)** Explain forking joining with example for activity diagram. **07**
- OR**
- Q.5 (a)** Prepare the activity diagram for use cases issue/return and fine calculation in library management system. **07**
- (b)** Explain structured control in sequence diagram. **07**
