Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MCA INTEGRATED - SEMESTER– IV• EXAMINATION – SUMMER 2017

Subject Code:4440604 **Date:15/05/2017**

Subject Name: UML & OBJECT ORIENTED MODELING

Time:10:30 AM to 1:00 PM **Total Marks: 70**

Instructions:

1. **Attempt any five questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1 **(a)** Answer in short **07**

1. What is UML?
2. Which are three main building blocks of the conceptual model?
3. Which are the four relationships in UML?
4. What is stereotype?
5. What is tagged value?
6. What is Active Class?
7. What is Dependency?

(b) Define Terms **07**

- Class
- Interface
- Component
- State
- Event
- Transition
- Generalization

Q.2 **(a)** Write a short note on SDLC. **07**

(b) Describe in detail : Software Architecture **07**

OR

(b) Describe in detail: Things (Structural, behavioral, Grouping, A notational) of Conceptual Model. **07**

Q.3 **(a)** Describe about Class diagram and draw a class diagram of student registration system. **07**

(b) What is Classifier? Describe any four classifiers. **07**

OR

(a) Describe visibility, multiplicity and attributes of a class in detail. **07**

(b) What is forward and reverse engineering? Explain in detail. **07**

Q.4 **(a)** Describe about object diagram with example. **07**

(b) Explain Sequence diagram with an example and Explain how it defers from collaboration diagram. **07**

OR

(a) Explain Activity diagram and draw an activity diagram of online shopping. **07**

(b) Explain Use case diagram in detail with example. **07**

P.T.O.

Q.5	**(a)**	What is State machine diagram? Explain types of states and draw a state diagram of ATM machine.	**07**
	(b)	What is Component? Explain three kinds of component and basic stereotypes used for Component diagram.	**07**

OR

	(a)	What is deployment diagram? Draw a deployment diagram of any client server architecture application.	**07**
	(b)	What is component diagram? Draw a component diagram of application which uses source files, header file, database, tables, dll file.	**07**

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