

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V(NEW) EXAMINATION – SUMMER 2022****Subject Code:3151604****Date:04/06/2022****Subject Name:Object Oriented Analysis and Design****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.
4. Simple and non-programmable scientific calculators are allowed

	MARKS
Q.1 (a) Explain the structural things in UML.	03
(b) Discuss various uses of object diagram.	04
(c) Explain Following Terms:	07
a)Identity b) Classification c) Polymorphism	
d) Inheritance e) Abstraction f) Encapsulation	
 Q.2 (a) Write the uses of interaction diagram.	03
(b) What are the four aims of modeling?	04
(c) Discuss Generalization.	07
OR	
(c) Explain Inheritance with examples.	07
 Q.3 (a) Differentiate Aggregation and Composition.	03
(b) Differentiate Aggregation and Association.	04
(c) What is Concurrency? Explain Aggregation concurrency and Synchronization of concurrent activities in detail with example.	07
OR	
Q.3 (a) Discuss the Strength and Weakness of the Use case Diagram.	03
(b) What is Actor and Use case in Use case diagram? Draw an example.	04
(c) Define an Object. Illustrate the probable attributes that will be modeled in a library database for the object BOOK.	07
 Q.4 (a) Draw sequence diagram for hospital information system.	03
(b) What is Multiplicity? Explain with example.	04
(c) Compare Activity and state chart diagram with example. Mention the elements of an Activity Diagram.	07
OR	
Q.4 (a) What is an event? What are different types of events?	03
(b) Explain steps of constructing of Domain Interaction model and write little description for each step.	04
(c) What is Scenario? How it is used in Sequence Diagram? Draw an example.	07
 Q.5 (a) Discuss Development Stages in Detail.	03
(b) Explain briefly about boundary, control and entity classes. Give suitable examples.	04

(c) How to model requirements of a system. Explain with an example. **07**

OR

Q.5 (a) Explain steps of constructing of Application State model and write little description for each step. **03**

(b) Discuss Development Lifecycle in detail. **04**

(c) Draw and explain the class diagram for an ATM bank system. **07**
