**UNIT-1.**

1. Explain the structure and attributes of complex system.
2. What is UML? Discuss clearly about differentBuilding Blocks of UML.
3. Discuss clearly about the Modeling a System's Architecture with a neat sketch.
4. Describe the various elements of the Object model in detail.
5. What is a class diagram? What are the common properties and uses of classdiagrams?
6. Explain object diagram with an example.
7. Draw and explain the class diagram for an ATM bank system.
8. Explain the structure of Complex Systems and it’s attributes.
9. Describe the various elements of the Object model in detail.
10. Discuss clearly about different Building Blocks of UML
11. Draw and explain the class diagram for an ATM bank system.

**UNIT-2**

1. Discuss the role of classes and objects in analysis and design.
2. Define and explain the following with examples:
   1. Class ii) Object iii) Attributes iv) Operations
3. What is a nature of Class and Object? How to identify Classes and Objectswith suitable Examples.
4. Justify the term “Importance of Proper Classification” with a suitableExample.
5. Write Short Notes On Key Abstractions & Identifications of Key Abstractions.
6. Discuss clearly about the three general approaches used in classification.
7. Discuss about identification of key mechanisms in classification.
8. What is a nature of Class and Object? Explain how to identify Classes and Objects with suitable Examples.
9. Justify the term “Importance of Proper Classification” with a suitable Example.
10. Discuss the types of relationships among the classes.
11. Discuss about identification of key mechanisms in classification.

**UNIT-3**

1. What is meant by use case? Explain about use case description with an example.
2. Explain the following with an example:

i) use case ii) Actor iii) flow of events.

1. Draw the use case diagram for library management system.
2. Draw the use case diagram for online railway reservation system
3. Explain with an example modeling dynamic aspects of a system using interaction diagrams
4. Draw collaboration and sequence diagram for simple telephone call.
5. What are the similarities and differences between sequence and collaborationdiagrams?
6. What is an activity diagram? Explain briefly. Draw activity diagram for making a phone call.
7. Explain about forking and joining concepts in activity diagram with an

Example

1. Draw the activity diagram for online shopping cart.
2. Discuss clearly about different representations used in interaction diagrams.

**UNIT-4**

1. Define the following Terms.

i) Events and Signals ii) Process and Thread iii) Time and Space

2. Explain components of State Chart diagram with example.

3. What is an event? What are different types of events?

4. Define an event and a signal. Explain briefly about the common modelingtechniques of events and signals.

5. Define State Diagrams. Draw and explain Sample State diagram for washingmachine.

6. Describe components of State Chart diagram with example.

7. Define activity diagram. Draw activity diagram for making a phone call.

8. Draw the use case diagram for library management system.

9. Define use case. Explain about use case description with an example.

10. Distinguish between sequence and collaboration diagrams.

**Unit-5**

1. What are components? Show the stereotypes that apply to components.
2. Define Component. What are the differences between components and classes?How are component and interface related?
3. Draw the component diagram for (a) Online quiz system (b) Library management system (c) ATM System
4. Explain about Deployment diagram with an example.
5. Define Node. Draw the deployment diagram for ATM system.
6. Illustrate the standard stereotypes that apply to components.
7. Explain about Deployment diagram with an example.
8. Define component, port, and connectors. Discuss how components are related with interfaces.
9. Draw the component diagrams for Online Quiz System
10. Draw the component diagrams for Library Management System