



**SIDDHARTH GROUP OF INSTITUTIONS::PUTTUR**  
Siddharth Nagar, Narayanavanam Road – 517583  
**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code: Object Oriented Analysis and Design (16CS526)**

**Course & Branch: B.Tech - CSE**

**Year & Sem: III B.Tech & II Sem**

**Regulation: R16**

**UNIT –I**

1. a) Explain the importance of modeling. [L2,6M]  
b) List out the principles of modeling in detail and explain it. [L4,6M]
2. a) Explain object oriented modeling. [L2,5M]  
b) Elaborate the conceptual model of the UML? [L3,7M]
3. a) Categorize the software development life cycle in detail. [L4,6M]  
b) Explain the structural modeling. [L2,6M]
4. a) Compare and evaluate the behavioural things in the model. [L5,6M]  
b) Distinguish and classify the grouping things in UML [L4,6M]
5. a) Explain the relationships in the UML. [L2,6M]  
b) Summarize the diagrams in the UML? [L2,6M]
6. a) Explain the common mechanisms in the UML. [L2,8M]  
b) Assess an overview of UML. [L5,4M]
7. a) What are rules of the unified modeling language? [L1,4M]  
b) Explain the Modeling system architecture of UML? [L2,8M]
8. Define a model. Explain the (a)importance (b)principles of modeling. [L1,12M]
9. Compare software development life cycle models with suitable example? [L5,12M]
10. Explain the building blocks of the UML [L2,12M]

**UNIT-II**

1. a) Recall the terms and concepts of classes. [L1,6M]  
b) Summarize responsibilities of classes. [L2,6M]
2. List out the common modeling techniques for classes? [L4,12M]
3. a) Explain Modeling the Distribution of Responsibilities in a System. [L2,6M]  
b) Explain Modeling of Non software Things . [L2,4M]
4. List out the Terms and Concepts of relationships [L4,12M]
5. a) Explain Modeling Single Inheritance. [L2,6M]  
b) Explain the Modeling Structural Relationships [L5,6M]
6. Explain Stereotypes, tagged values, and constraints with examples. [L2,12M]
7. a) What is Modeling in new semantics? [L1,6M]  
b) Explain the Modeling New Building Blocks. [L2,6M]
8. a) Compare advanced structural modeling with basic structural modeling? [L5,8M]  
b) Explain the importance of advanced classes? [L2,4M]
9. a) Explain advanced relationships with examples. [L2,8M]  
b) Identify the importance of interfaces and their roles? [L3,4M]
10. a) Explain the Interfaces, types, roles, and realization. [L2,8M]  
b) Explain the importance of packages in the UML with examples. [L2,4M]

**UNIT-III**

1. Explain the terms and concepts of Class diagram with suitable examples. [L2,12M]
2. Explain the terms and concepts of Object diagram with suitable examples [L2,12M]
3. a) Explain Roles, links, messages, actions, and sequences of interactions. [L2,6M]  
b) Build the Modeling flows of control. [L6,4M]
4. a) Explain the terms and concepts of interaction diagrams. [L2,6M]  
b) Distinguish between sequence and collaboration diagram [L4,4M]
5. a) Explain sequence diagram with an example? [L2,6M]  
b) Explain collaboration diagram with an example? [L2,6M]
6. a) Explain in details of Use cases, actors, include, and extend with suitable example? [L2,7M]  
b) Design an use case diagram to show ATM system [L5,5M]
7. a) Explain the terms and concepts of Use Case diagrams. [L2,8M]  
b) Design an use case diagram to show a cellular phone system [L5,4M]
8. a) Explain in details of activity diagram [L2,7M]  
b) Design an Activity diagram for hostel management [L5,5M]
9. Build a of Use case diagram in detail with suitable example? [L2,12M]
10. Explain in details of activity diagram with suitable example? [L2,12M]

**UNIT-IV**

1. Explain the terms and concepts of events? [L2,12M]
2. a) What is States, transitions, and activities? [L1,6M]  
b) Explain the importance of modeling the lifetime of an object. [L2,6M]
3. a) Explain the Active objects, processes, and threads. [L2,6M]  
b) List out modeling multiple flows of control. [L4,6M]
4. a) List the term and concepts of processes and threads [L4,6M]  
b) List the Common modeling techniques for processes and threads [L4,6M]
5. a) Explain the terms and concepts of state machines? [L2,6M]  
b) Explain the Advanced States and Transitions. [L2,6M]
6. a) justify and describe the terms and concepts of Time and Space? [L5,4M]  
b) explain modeling timing constraints? [L5,6M]
7. a) How many types of Modeling objects that migrate? [L1,6M]  
b) What is Transitions and explain it clearly. [L1,6M]
8. a) Explain Modeling interposes communication? [L2,6M]  
b) Make use the Synchronization and justify the technique behind it? [L3,6M]
9. a) Explain the terms and concepts of state chart diagrams? [L2,6M]  
b) Explain the common modeling techniques for state chart diagrams [L2,6M]
10. Explain the common modeling techniques for state chart diagrams with suitable example. [L2,12M]

**UNIT-V**

1. a) What are the Components, interfaces, and realization? [L1,6M]  
b) Explain the Modeling executables and libraries. [L2,6M]
2. a) Distinguish and explain Modeling tables, files, and documents? [L3,6M]  
b) Apply the technique behind Modeling source code and explain? [L3,6M]
3. a) Elaborate Modeling an API? [L5,6M]  
b) Explain Mapping between logical and physical models. [L2,6M]
4. a) Explain the terms and concepts of Component diagrams? [L2,6M]  
b) Explain the importance of Deployment diagram. [L2,6M]
5. a) Explain terms and concepts of Deployment diagram. [L2,6M]  
b) Explain the importance of Component diagrams. [L2, 6M]
- 6 . Explain the common modeling techniques for Component diagrams [L2,12M]
7. Explain the common modeling techniques for Deployment diagrams [L2,12M]
8. a) Justify the term Standard Elements in Components? [L5,6M]  
b) Design an Component diagram for hostel management [L5,6M]
9. a) Design an Component Diagram for ATM System [L5,6M]  
b) Design an Deployment Diagram for College Management System [L5,6M]
10. Explain the unified library application in detail. [L2,12M]