

ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY, CHIRALA
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
ASSIGNMENT QUESTIONS

Subject: OOAD using UML
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UNIT-1

1. What is object-oriented analysis and design?
2. Write about the five attributes of complex systems?
3. Explain the evolution of object model?
4. Explain the structure of complex system in detail?
5. Explain about the inherent complexity of the software in detail?
6. Write the differences between the organized and disorganized complexity?
7. Explain about the bringing order to chaos?
8. Write about the designing complex systems?
9. Explain in detail about the foundation of object model?
10. What are the elements of object model and explain how to apply object model?

UNIT-2

1. List the relationships used in class diagram(objects and classes)?
2. Explain common modeling techniques of a class diagram?
3. Consider the following system for Online Theatre Booking (for multiplex).
Following are the minimum requirement of the system from the perspective of a user who is going to use this online system.

- User should be a registered member.
- User can book any number of tickets on availability.
- User should be able to search for the availability of tickets on selecting a particular movie.
- Once user books the ticket a token number will be generated so that on providing this token he will be able to collect tickets before show from theatre premises.
- User can cancel all or some seats of the ticket by providing token number before 1 Hr of scheduled time for that movie.

(I) describe the system boundary for this application in a few sentences.
(II) Identify the actors for the application and draw the use case diagram.

4. Explain about the nature of class?
5. Explain about the nature of object?
6. Explain about the interplay procedure of classes and objects?
7. How to identify classes and objects explain with examples?
8. What is the importance of proper classification?
9. What are the key abstractions and mechanisms in class diagram?
10. Identify the classes and objects for library management system?

UNIT-3

1. Explain the architecture of UML?
2. Write about the relationships in UML with examples?
3. What is the importance of the model explain in detail?
4. Explain the conceptual model of the UML?
5. What are the common mechanisms used in UML class diagrams?
6. Explain about the class diagrams in detail?
7. Explain about the object diagrams in detail?
8. Draw the class diagram and identify relationships for library management system?
9. Draw the class diagram and identify relationships for point of sale system?
10. Draw the object diagram and identify relationships for library management system?

UNIT-4

1. What are similarities and differences between sequence and collaboration diagrams?
2. How to model flows of control by organization?
3. What is communication diagram and explain with example diagram?
4. Explain about the interaction diagram and explain interactions in the diagram?
5. Explain about the use cases and use case diagram in detail?
6. Explain about the activity diagram in detail?
7. Identify the use cases and draw the use case diagram for point of sale system?
8. Draw the sequence diagram for online shopping and identify sequences?
9. Draw the collaboration diagram for point of sale system and identify interactions?
10. Draw the activity diagram for online shopping and explain in detail?

UNIT-5

1. Explain the various parts of a transition.
2. Explain steps to modeling the Lifetime of an object.
3. List out the types of Events with example project.
4. What is meant by State chart Diagrams and draw the diagram for online shopping?
5. What are the differences between the basic and advanced behavioral modeling of UML?
6. Define the events and signal state with examples?
7. Explain about the state machines and how they were used in UML?
8. Explain the processes and threads with examples?
9. Explain the utilization of time and space in UML?
10. Draw the state chat diagram for any two projects?

UNIT-6

1. Write about modeling source code with examples?
2. Write about modeling a client/server system?
3. Define the Architectural modeling in UML in detail manner?
4. What is the component and how it utilized in UML?
5. Define the deployment and how it utilized in UML?
6. Draw the component diagram for LMs?
7. Draw the software diagram for POS?
8. Draw the hardware diagram for LMs?
9. Draw the deployment diagram for POS?
10. Differences between the component and deployment diagrams?