



## **SRI VENKATESHWARAA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University, Puducherry.)  
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### **CS E61 OBJECT ORIENTED ANALYSIS AND DESIGN**

#### **UNIT-I**

#### **TWO MARKS**

1. What is system development?
2. What are the activities in system development?
3. What is Object-Oriented (OO) systems development? (May 2012)
4. Define the phases in object-oriented development?
5. What is system life cycle model?
6. What is frame Work?
7. Define the term Inception?
8. Define the term Elaboration?
9. Define the term Construction?
10. Define the term Transition?
11. What is the seamless process in Object oriented approach?
12. What is RUP? (Nov 2012) , (May 2014)
13. What are six 'Best Practices' followed in RUP in industrial software projects?
14. What is UML? (May 2014) (April 2015)
15. What is The 4 + 1 view in UML?
16. What are the different Object Oriented methodologies?
17. Write note on Rumbaugh et al.'s Object Modeling Technique.
18. What are the three models in Object Modeling Technique?
19. What is an Object model?
20. What is an Dynamic model?
21. What is an Functional model?
22. Write note on Booch Methodology
23. What are the diagrams available in Booch methodology?
24. What is Macro Development Process?
25. What are the steps available in Macro Development Process?
26. What is Micro Development Process?
27. What are the steps available in Micro Development Process?
28. Write note on Jacobson Methodology.
29. What is the use case? (April/May 2012)
30. What is the design view?
31. What is the process view?
32. What is the deployment view?
33. List some of the traditional life cycle models (Nov 2014)

#### **11 Marks**

1. Explain Various Traditional Life Cycle Models
2. Explain Software System Life Cycle
3. Explain Booch methodology for Object modeling Techniques **April-2017**
4. Explain Jacobson Methodology for Object modeling Techniques
5. Explain Rumbaugh et al.'s Object Modeling Technique.
6. Explain Rational Unified Process **April-2017**

## UNIT-II

### TWO MARKS

1. List the graphical diagrams defined by UML.
2. Define use case.
3. Define actor and scenario.
4. List the types of actors.
5. What are the uses of use case.
6. Define primary actor and supporting actor.
7. What are the basic procedures for use case.
8. Define extension point.
9. What is the need of an Interaction diagram?
10. What is the need of a Class diagram? (Dec 2014)
11. What is Behavior of an object? (April 2014)
12. What are the characteristic features of an Interaction diagram?
13. What is role of association?
14. Define Multiplicity.
15. Define attributes with example. (Dec 2014)
16. When to show attributes?
17. Define Association With Example.
18. Why Should We Avoid Adding Many Associations?
19. How to name an association in UML?
20. What is derived attribute?
21. How to apply activity diagrams?
22. Define generalization.
23. What is Aggregation? (April 2014)
24. Define Composition.
25. How to identify composition?
26. Guidelines for writing activity diagram. (April 2015)
27. What is meant sequence diagram?
28. What are the two types of interaction diagram?
29. What is the strength and weakness of sequence diagram?
30. Define classifier
31. Define dependency
32. Define constraints
33. List the relationships used in class diagram?
34. Define Component diagrams.
35. What are Deployment diagrams?

### **11 Marks**

1. Explain class Diagram Draw ATM banking system **April-2017**
2. Draw Interaction Diagram for online shopping System **April-2017**
3. Explain activity diagram for banking system
4. Construct state chart for online Money transfer system
5. Construct UML diagrams for ATM banking system **April-2017**

### UNIT-III

#### TWO MARKS

1. Explain use case model?
2. When will be Extends association used?
3. When uses association will occur?
4. Explain the steps for finding use cases.
5. List the guidelines for selecting classes in an application.
6. What are the guidelines for selecting candidate classes from the relevant & Fuzzy Categories of classes?
7. What is common class pattern strategy?
8. How would you name classes?
9. What is the place class source?
10. What are the tangible things and device classes?
11. Why is an identifying class an incremental process?
12. What are the guidelines for identifying the tentative associations?
13. List the guidelines for identifying super -sub relationships?
14. What is an association?
15. What is Generalization?
16. Is association different from a part of a relationship?
17. Why do we need to identify the system's responsibility?
18. How would you identify attributes?
19. How would you identify methods?
20. Differentiate good design and bad design.
21. Define corollary? Name the two axioms.
22. Define coupling.
23. Name the two types of coupling in the object oriented design.
24. Define cohesion.
25. Name the types of attributes.
26. Define Low Coupling?
27. Define High Cohesion?
28. Differentiate coupling and cohesion.
29. How can you achieve multiple inheritances with single inheritance?
30. What is the task of design?

#### **11 Marks**

1. Explain object oriented analysis. **April-2017**
2. Discuss all the approaches for identifying classes in detail **April-2017**
3. Explain guideline for identifying association.
4. Explain relationship analysis for the ATM banking system
5. Explain the design axioms in detail
6. Explain six corollaries and its relationship with the two axioms.

## UNIT-IV

### TWO MARKS

1. What is Object-Oriented Design?
2. Write about Multidatabase System.
3. What are the steps for the view layer macro process?
4. What are the applications responsible for the view layer?
5. What are the Interfaces of the Database?
6. What are the challenges in design with inheritance? What is single and multiple inheritances?
7. Mention the modes that can be used in the user interface.
8. What is the purpose of view layer?
9. What do you mean by Database Models? Mention its types.
10. What are the tasks of Access Layer
11. What are the benefits of the Access Layer Class?
12. What are the categories for the data lifetime?
13. Write down the ways to design UI.
14. What are different types of
15. Describe Class visibility
16. What is meant by encapsulation leakage
17. What is meant by persistence
18. What is meant by transient data
19. What are the components of client-server application
20. Discuss the major activities of designing view layer classes
21. Define DDL
22. Discuss the designing process activities
23. Write the UML Attribute presentation
24. Describe each attribute type briefly.
25. What are different types of methods provided by class during design
26. Distributed processing versus cooperative processing
27. What is meant by client-server computing
28. Describe each type of client-server architecture
29. Define CORBA
30. What are the advantages of Object oriented databases
31. Differentiate reverse engineering and forward engineering
32. Define relational data maps

### **11 Marks**

1. How to Design Classes? Explain in detail
2. How to Design Methods and Protocols? Explain in detail.
3. Explain briefly the functions of Access Layer in detail. **April-2017**
4. Explain in detail the functions of View Layer. **April-2017**
5. Explain Prototyping the User Interface in Detail.

## UNIT V

### TWO MARKS

1. What is a Design Pattern?
2. What are the four essential elements for design pattern?
3. What does design pattern provide?
4. Briefly discuss about the purpose criteria in design patterns.
5. Briefly discuss about the scope criteria in design patterns.
6. What is meant by abstract class?
7. What is meant by delegation?
8. Define toolkit.
9. Define framework
10. What is meant by creational design pattern
11. Describe Abstract Factory
12. Define Adapter
13. Define Chain of Responsibility
14. Discuss the consequences of abstract factory pattern
15. When to use abstract factory pattern
16. Describe briefly about structural patterns
17. What is meant by behavioral patterns
18. What are the benefits of chain of responsibility
19. What is the disadvantage of chain of responsibility
20. How will you Select a Design Pattern
21. How to Use a Design Pattern
22. What are the different techniques used for implementing abstract factory
23. When can the adapter pattern be used
24. What is a class adapter
25. What is an object adapter
26. What are the issues in implementing
27. What are the implementation approaches of narrow interface
28. When to Use Chain of
29. What are the implementation issues in Chain of Responsibility
30. What is meant by Pluggable adapters?

### **11 Marks:**

1. Explain creational pattern with an example **April-2017**
2. Explain structural pattern with an example **April-2017**
3. Explain behavioral pattern with an example **April-2017**
4. Explain design catalog to solve the design patterns

**STAFF INCHARGE**

**HOD**