CH 1

1. Explain different Object-Oriented Themes.

2. Explain how generalization can be used as extension and restriction.

3. What is model? Explain several purposes of models.

4. What is class and object? Explain with appropriate example.

5. Explain the three models of OMT.

6. Explain the following terms: i) Multiplicity ii) Role Names iii) Qualification

7. Explain multiple inheritance with example.

8. Explain the following advanced dynamic modeling concepts: i) Entry and Exit Actions

ii) Internal Actions iii) Automatic Transitions

9. Explain Object Modeling Technology (OMT) stages.

10. Compare aggregation with Generalization

CH 2

1. Write note on i) Events ii) States

2. Explain the following elements of data flow diagrams: i) Processes ii) Data Flows iii) Actors

3. Write note on Scenarios and event traces.

4. Explain the following elements of data flow diagrams: i) Data Stores ii) Control Flows iii) Nested Data Flow Diagrams

5. Draw and explain the state diagram for phone line.

6. Explain the relation of functional model to object and dynamic models.

7. Draw and explain the data flow diagram for ATM transaction process.

8. List and explain the steps involved in designing the algorithms

9. Write note on “nesting state diagrams".

10. Draw and explain the data flow diagram for windowed graphics display

CH 3

1. Describe the overview of analysis process with neat diagram.

2. List the steps in construction of an Object Model. Explain how to identify the object classes from application domain.

3. Explain the several phases of the OMT Methodology.

4. Explain the impact of an object-oriented approach.

5. Write short note on problem statement used in analysis process.

6. State and explain the different criteria used to keep the right classes and discard unnecessary and incorrect classes.

7. Explain in detail the actions taken by designer in design optimization.

8. Explain the behavioral things in UML.

9. Explain three kinds of controls implementation systems.

10. Explain breaking a system into subsystems with respect to system design.

CH 4

1. Explain structural things in UML.

2. Explain the Conceptual Model of UML.

3. Explain the following terms with respect to UML – i) Generalization ii) Aggregation iii) Multiplicity

4. Explain the architecture of UML

5. Explain different UML diagrams with their purpose.

6. Explain four kinds of relationships in the UML

7. Explain the Class Diagram, its properties , contents and common uses.

8. Draw and explain use case diagram for credit card validation system.

9. Explain the grouping and annotational thing in UML

10. Explain extensibility mechanisms in UML

CH 5

1. Explain interaction diagram, its contents and common uses.

2. Explain different kinds of events with respect to behavioral modelling

3. Explain the following terms with respect to sequence diagram: i) Object lifetime ii) Focus of Control

4. Explain the following terms with respect to Activity diagram: i) Action states ii)Transitions iii) Branching

5. Explain include and extend relationships in use case diagram with suitable example.

6. Explain Activity diagram with example.

7. Explain collaboration diagram with example.

8. Explain types of components and standard stereotypes that apply to components.

9. Draw and explain use case diagram for Cellular Telephone Call system

10. Explain the relationship between use cases and collaborations.

CH 6

1. Explain deployment diagram, its uses and uses.

2. Write note on frameworks.

3. What is component? Give difference between components and classes.

4. Explain patterns and frameworks.

5. What is components? Explain type of components.

6. Explain the following terms with respect to architecture modeling: i) Node ii) Collaboration iii) Pattern

7. Explain types of components and standard stereotypes that apply to components.

8. Explain relationship between a component and its interfaces.

9. Explain the relationship between a node and the components.

10. Write note on organizing collaborations.