# **Question bank**

#### UNIT 1 INTRODUCTION, MODELING CONCEPTS, CLASS MODELING

- 1. Explain the models in OO development. Bring out the relationships among the models (Dec.09/Jan.10)
- 2. With the help of a sample class model explain the following (Dec.09/Jan.10)
- 3. What is Object-Orientation? Explain four aspect of OO approach.( Dec 10/Jan 11)
- 4. What is UML? What is the importance of UML? (Dec 10/Jan 11)
- 5. Explain briefly 3 models used to describe a System? (May/June 2010)
- 6. Explain with diagram, how Association class Participated in another association? (May/June 2010)
- 7. Explain Models and its Purposes? (May/June 2010)
- 8. Explain with a diagram, how an association class participates in another association.
- 9. (Dec 08)
- 10. Explain the models in OO development. Bring out the relationships among the models (Dec 08)
- 11. Explain how systems are modeled from different viewpoints. (June 2012)
- 12. Elaborate on the major themes that are well supported in object oriented technology (June 2012)

### UNIT 2 ADVANCED CLASS MODELING, STATE MODELING

1 Explain the properties of association ends.( Dec.09/Jan.10)

2 Define an event in state modeling. Explain the kinds of events.( Dec.09/Jan.10)

3 List the three kinds of models used in OOMD to describe a system. Also explain the relationship among them (Dec 10/Jan 11)

4 What is the association? Write a brief note on qualified association(Dec 10/Jan 11)

5 Define Reification? Explain it with diagram?(May/June2010)

6 Explain with the diagram basic UML syntax for State Diagrams? ?(May/June2010)

7 Explain an event and different types of events?(May/June 2010)

8 List and explain the various restructuring techniques used with respect to workarounds (June 2012)

9 What is a constraint with respect to a class modeling? Explain.

- i. Constraints on generalization sets
- ii. Constraints on links.(June 2012)
- 10 Explain Models and its Purposes? (Dec 08)

11 Explain with the diagram basic UML syntax for State Diagrams? (Dec 08)

12 Explain the properties of association ends. (Dec 08)

#### UNIT 3 ADVANCED STATE MODELING, INTERACTION MODELING

- 1. Explain the properties of association ends. (Dec.09/Jan.10)
- 2. Define an event in state modeling. Explain the kinds of events. (Dec.09/Jan.10)
- 3. Give the general UML system for state diagram and explain.(June 2012)
- 4. How an activity diagram differs from a traditional flowchart? Give the activity diagram for stock trade processing. .(\_June 2012)
- 5. What is the association? Write a brief note on qualified association(Dec 08)
- 6. What is an event? Explain its types with example(Dec 08)
- 7. What is the association? Write a brief note on qualified association. ( Dec 10/Jan 11)
- 8. What is an event? Explain its types with example( Dec 10/Jan 11)
- 9. Explain briefly the concept of class diagram with its notation.( Dec 10/Jan 11)
- 10. Explain with the diagram, Nested state for a Phone line? (May/June 2010)
- 11. What is a Use Case? Explain the Guidelines for Use case Models? (May/June 2010)
- 12. What do you mean by Swim Lane? Explain briefly activity diagram with swim lanes for servicing an aero plane? (May/June 2010)

### UNIT 4

#### PROCESS OVERVIEW, SYSTEM CONCEPTION, DOMAIN ANALYSIS

- 1. Explain the stages in software development process. Which life cycle wouldyou prefer in the development? Why? (Dec.09/Jan.10)
- 2. Identify the classes of an ATM for a bank. What criteria would you take into consideration to select the right classes? Explain. (Dec.09/Jan.10)
- 3. What is system conception? List and explain questions that must be answered by a good system concept(June.12)
- 4. Describe the steps performed in constructing a domain state model. (June 12)
- 5. Explain sequence of Software Development Stages?(Dec 08)
- 6. Explain the stages in software development process. Which life cycle would you prefer in the development? Why?(Dec 08)
- 7. Explain sequence of Software Development Stages?(May/June 2010)
- 8. Explain the stages in software development process. Which life cycle would you prefer in the development? Why? (May/June 2010)
- 9. Explain briefly the concept of class diagram with its notation. (Dec 10/Jan 11)
- 10. What is the difference between sequence diagrams and class diagrams? (Dec10/Jan11)
- 11. What is the purpose of the activity model? Give one example. ( Dec 10/Jan 11)

### UNIT 5

#### APPLICATION ANALYSIS, SYSTEM DESIGN

- 1. What is an activity diagram? Explain the special construct for activity models.(Dec.09/Jan.10)
- 2. What are use case models? Give the guidelines for constructing a use case model.(Dec.09/Jan.10)
- 3. What are the steps involved in constructing an application state model. (Dec.09/Jan.10)
- 4. Describe the steps involved to allocate each concurrent subsystem to a hardware unit, either a general purpose processor or a fractional unit. (June.12)
- 5. What is an interactive interface? Explain in brief steps in designing an interactive interface(June.12)
- 6. What is an activity diagram? Explain the special construct for activity models.(Dec 08)
- 7. Draw a State and Sequence diagram for telephone talk process. State Diagram(Dec 08)
- 8. Explain different aspects of re-usability? Explain reusable things? (May/June 2010)
- 9. What are the Steps in designing pipeline for continuous transformation? (May/June 2010)
- 10. Draw a State and Sequence diagram for telephone talk process.(Dec 10/Jan 11)
- 11. What are the Steps in designing pipeline for continuous transformation? (Dec 10/Jan 11)

## UNIT 6

## CLASS DESIGN, IMPLEMENTATION MODELING, LEGACY SYSTEMS

- 1. How would you improve the organization of a class design? (Dec 10/Jan 11)
- 2. How would you choose association traversal? Explain the following(Dec 10/Jan 11)
- 3. Elaborate three tasks involved in design optimization.(June 2012)
- 4. What are the outputs from reverse engineering? In brief, discuss reverse engineering tips.(June 2012)
- 5. Elaborate three tasks involved in design optimization.(Dec 08)
- 6. Explain the considerations for choosing alternative algorithms?(Dec 08)
- 7. Explain the considerations for choosing alternative algorithms? (May/June 2010)
- 8. List adjustment of Inheritance? ?(May/June 2010)
- 9. Explain Structure, Dynamics and Implementation of View Handler pattern with Diagrams?( Dec 10/Jan 11)
- 10. Explain Dynamics and Implementation for Forward-Receiver Pattern with diagrams.?( Dec 10/Jan 11)

## UNIT 7

## **DESIGN PATTERN 1**

- 1. What is a pattern? Explain the model view controller design pattern for software architecture, with OMT diagram. (Dec.09/Jan.10)
- 2. Explain client-dispatcher-server design pattern .(Dec.09/Jan.10)
- 3. What is a pattern? Explain the model view controller design pattern for software architecture with OMT class diagram.(June 12)
- 4. Describe the three categories of Pattern?(June 12)
- 5. How would you choose association traversal? Explain the following DEC 08
- 6. What is a pattern? Explain the model view controller design pattern for software architecture, with OMT diagram. DEC 08
- 7. List the Properties of pattern in SA? (May/June 2010)
- 8. Explain Pattern Categories? (May/June 2010)
- 9. What is Forwarder-Reciever Pappern?How its helpful? (May/June 2010)
- 10. When a software system uses servers distributed over a network it must provide a means for communication between them. Clients should not need to know where servers are located. To solve this which pattern is used and explain the dynamics and implementation of the pattern? (Dec 10/Jan 11)
- 11. Explain structure, dynamics and implementation of Command processor pattern.? (Dec 10/Jan 11)

#### UNIT 8

#### **DESIGN PATTERN 2**

- 1 Explain the command processor design pattern (Dec.09/Jan.10)
- 2 Explain publisher-subscriber design pattern (Dec.09/Jan.10)
- 3 What are idioms and styles? Explain with an example, a style guide idiom (Dec.09/Jan.10)
- 4 Briefly describe the management and Command processor (June 2012)
- 5 What is IDIOMS and view handler.( June 2012)
- 6 What are the steps to implement the pattern? (DEC 08)
- 7 Describe communication pattern (DEC 08)
- 8 Explain the liabilities imposed by Command Processor Pattern? (May/June 2010)
- 9 Explain View Handler Design Pattern?( May/June 2010)
- 10 What is a pattern? Explain the Pattern description template? (Dec 10/Jan 11)
- 11 Consider any example problem definition design and implement proxy pattern.(Dec 10/Jan 11)