Set No: 1

**Code No: R32125** 

## III B.Tech. II Semester Regular Examinations, April/May -2013

#### **OBJECT ORIENTED ANALYSIS AND DESIGN**

(Information Technology)

Time: 3 Hours Max Marks: 75

Answer any FIVE Questions
All Questions carry equal marks

- 1. a) Discuss about UML building blocks?
  - b) How is use-case generalized? Explain.
- 2. a) Define an object? Explain object construction and destruction with an example.
  - b) How do you find classes by using CRC analysis?
- 3. What is association? Explain about various aspects of associations in UML.
- 4. a) What is a message? Give syntax and semantics of synchronous message, asynchronous message, found message and message return.
  - b) Draw sequence diagram for processing an order for procuring a product through online.
- 5. a) Differentiate between aggregation and inheritance.
  - b) Discuss about the composition semantics.
- 6. a) Discuss about the provided and requirement interfaces for <<interface>> borrow.
  - b) What are active classes? Explain.
- 7. a) What is a state machine? Explain about various kinds of state machines.
  - b) What is simple composite state? Explain.
- 8. a) What is the need of deployment diagram? Explain.
  - b) Justify how sub-system is a stereotyped component rather than a stereotyped package

Set No: 2

**Code No: R32125** 

### III B.Tech. II Semester Regular Examinations, April/May -2013

### **OBJECT ORIENTED ANALYSIS AND DESIGN**

(Information Technology)

Time: 3 Hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks

- 1. a) Discuss about the common mechanisms of UML?
  - b) Explain <<include>> and <<extend>> mechanisms with examples.
- 2. a) How are the objects and their respective attributes denoted in UML? Explain.
  - b) How do you find classes by using RUP stereotypes?
- 3. a) Differentiate between inheritance and polymorphism.
  - b) What is dependency? Discuss about abstraction and permission dependencies?
- 4. What are activity diagrams? Explain with a suitable example.
- 5. a) What are well-formed design classes? Explain.
  - b) What is design model? Explain.
- 6. a) Discuss about the role of concurrency in sequence diagrams.
  - b) Differentiate between interface realization and inheritance.
- 7. a) What is a state machine diagram? Explain.
  - b) What is a orthogonal composite state? Explain.
- 8. a) What is a node? Explain about various issues related to nodes.
  - b) Hoe do you represent <<manifest>> relationship by artifacts and components.

Set No: 3

**Code No: R32125** 

## III B.Tech. II Semester Regular Examinations, April/May -2013

#### **OBJECT ORIENTED ANALYSIS AND DESIGN**

(Information Technology)

Time: 3 Hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks \*\*\*\*

- 1. a) What is the role requirements in development of a software? Explain about various aspects of requirements?
  - b) What do you understand by the term use-case? Explain with an example
- 2. What is a class? Explain about the UML representation of the classes.
- 3. a) What is advanced generalization? Explain.
  - b) What is a package? Discuss about nested package and package dependencies.
- 4. a) What is a message? Explain about various communications that are involved in messaging.
  - b) What is interaction occurrence? Explain.
- 5. a) What is the purpose of templates? Explain how UML represents templates?
  - b) What is an aggregation? Discuss about aggregation semantics.
- 6. a) What is a timing diagram? Explain.
  - b) What is a component? Explain.
- 7. a) Define a event? Explain various types of events.
  - b) What is sub-machine state? Explain.
- 8. a) What is OCL? Why it is useful? Give the syntax of OCL.
  - b) How are artifacts deployed on node? Explain.

Set No: 4

**Code No: R32125** 

# III B.Tech. II Semester Regular Examinations, April/May -2013

### **OBJECT ORIENTED ANALYSIS AND DESIGN**

(Information Technology)

Time: 3 Hours Max Marks: 75

Answer any FIVE Questions All Questions carry equal marks \*\*\*\*

- 1. a) Define requirements. Explain how requirements are obtained for a specific problem.
  - b) Write a short note on classes and use-cases.
- 2. a) How are classes analyzed? Explain.
  - b) How are the objects and their respective attributes denoted in UML? Explain.
- 3. a) What is polymorphism? Explain.
  - b) What is dependency? Discuss about usage dependencies and abstract dependencies.
- 4. a) What is an activity? Discuss about activity semantics and activity partitions.
  - b) What is a signal? Explain about sending signals and accepting events.
- 5. a) Explain about various types of refined relationships?
  - b) What are well-formed designed classes? Explain.
- 6. a) Define concurrency and explain about modeling concurrency.
  - b) Explain the following
    - (i) One-to-one associations
    - (ii) One-to-many associations
    - (iii) Many-to-one associations
    - (iv) Many-to-Many associations.
- 7. a) Define a transaction. Discuss about connecting and branching transitions.
  - b) What is sub-machine communication? Explain.
- 8. What is deployment? Explain about various aspects of deployment.