

Code No: 09A60501

**R09****Set No. 2****III B.Tech II Semester Examinations, April/May 2012****OBJECT ORIENTED ANALYSIS AND DESIGN****Computer Science And Engineering****Time: 3 hours****Max Marks: 75**

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

\*\*\*\*\*

1. Consider a modelling problem statement. Draw the class diagram and object diagram. [15]
2. (a) Enumerate the steps to model primitive types.  
(b) Explain various activities in Requirement Engineering Process. [7 + 8]
3. Draw the behavioral diagrams for unified library application and explain them briefly. [15]
4. (a) Model the context of a credit card validation system.  
(b) Discuss the significance of activity diagram in object oriented modeling with illustrations. [7+8]
5. (a) How to model an application programming interface? Explain an example.  
(b) What is a component? Distinguish three kinds of components. [7+8]
6. Explain the eight stereotypes that apply to dependency relationships among classes and objects in class diagrams. [15]
7. (a) Can a transition have multiple sources? Discuss suitable examples to support your argument.  
(b) Discuss synchronous events in detail. [7+8]
8. How the recursion will be represented in a sequence diagram? Explain with an example. [15]

\*\*\*\*\*

Code No: 09A60501

**R09****Set No. 4****III B.Tech II Semester Examinations, April/May 2012****OBJECT ORIENTED ANALYSIS AND DESIGN****Computer Science And Engineering****Time: 3 hours****Max Marks: 75**

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

\*\*\*\*\*

1. (a) Explain modeling the distribution of components .  
(b) Explain the common properties, common contents and common uses of deployment diagram. [8+7]
2. What are the categories of building blocks in the UML? Explain any one category of building blocks. [15]
3. With reference to class diagrams, enumerate the steps to forward engineer. [15]
4. Explain the following:
  - (a) Software architecture
  - (b) Active class and its UML notation
  - (c) Liskov's substitution principle
  - (d) Using relationship
  - (e) Runtime polymorphism
  - (f) UML
  - (g) Role. [15]
5. (a) Explain modeling the distribution of objects.  
(b) Differentiate between a process and a thread? How are they represented in UML? [7+8]
6. Discuss object oriented designing of unified library application in detail. [15]
7. (a) Can a usecase diagram be directly forward or reverse engineered? Justify your answer.  
(b) Differentiate between action state and activity state. Give suitable examples. [6+9]
8. Explain forward engineering and reverse engineering in respect of interaction diagrams. [15]

\*\*\*\*\*

Code No: 09A60501

**R09****Set No. 1****III B.Tech II Semester Examinations, April/May 2012****OBJECT ORIENTED ANALYSIS AND DESIGN****Computer Science And Engineering****Time: 3 hours****Max Marks: 75**

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

\*\*\*\*\*

1. Discuss the significance of state chart diagram for object oriented analysis and design. Explain its common content and common uses in detail. [15]
2. Contrast the following:
  - (a) Actors Vs. Stakeholders
  - (b) Usecase Vs. Algorithm. [7+8]
3. Identify usecases and actors for “online auction system”. Discuss flow of events and scenarios for this system. [15]
4. Discuss object oriented analysis of unified library application in detail. [15]
5.
  - (a) Explain reverse engineering of a deployment diagram.
  - (b) Enumerate the steps to model an API. [7+8]
6.
  - (a) What are swimlanes? Explain with an activity diagram.
  - (b) Enumerate the steps to model a workflow? [8+7]
7.
  - (a) What do you understand by object model? What is object? What is class?
  - (b) Draw a class diagram for a school information system
  - (c) How do you identify classes and objects, given a problem description. [6+6+3]
8. Giving appropriate illustrative UML diagrams, enumerate the steps to model the following:
  - (a) Physical data base
  - (b) source code. [8 + 7]

\*\*\*\*\*

Code No: 09A60501

**R09****Set No. 3****III B.Tech II Semester Examinations, April/May 2012****OBJECT ORIENTED ANALYSIS AND DESIGN****Computer Science And Engineering****Time: 3 hours****Max Marks: 75****Answer any FIVE Questions****All Questions carry equal marks**

\*\*\*\*\*

1. Discuss the significance of state chart diagram in object oriented analysis and design and its common modeling techniques. [15]
2. Draw a class diagram of business objects in the design model and explain. [15]
3. (a) Enumerate the steps to model the objects that migrate. Explain briefly with a UML diagram.  
(b) Enumerate the steps to model the distribution of objects. [7+8]
4. (a) Draw a sequence diagrams that specifies the flow of control involved in initiating a simple, two-party phone call.  
(b) Draw a collaboration diagram that specifies the flow of control involved in registering a new student at a school. [15]
5. (a) Discuss various kinds of components with examples.  
(b) What is meant by binary replaceability?  
(c) What is an extended component? [6+5+4]
6. (a) Draw the object interaction diagrams for unified library application.  
(b) Identify the events and signals in unified library application. [7+8]
7. (a) "usecase diagrams are essential for managing the system requirements". Substantiate this statement.  
(b) Compare and contrast interaction diagrams with activity diagram. [10+5]
8. (a) What is object diagram?  
(b) What are the contents and common properties and uses of an object diagram?  
(c) Enumerate the steps to reverse engineer an object diagram. [5 +5 +5]

\*\*\*\*\*