Code No: 07A6EC09 **R07** **Set No. 2**

III B.Tech II Semester Examinations,APRIL 2011
OBJECT ORIENTED ANALYSIS AND DESIGN
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Briefly discuss about boundary classes, control classes and entity classes. Give suitable examples for them.
   (b) Draw an object diagram for a company information system. [8+8]
2. (a) What is meant by constraints and tagged values? Discuss when they can be used, and also give suitable examples to show their usage.
   (b) What is meant by dependency and realization relationships? For what purpose they are used, give suitable examples to describe their usage. [8+8]
3. (a) Draw statechart diagram for unified library application.
   (b) Draw the sequence diagram for library management system. [8+8]
4. (a) How will you model distribution of objects.
   (b) What is an event? What are different types of events? [8+8]
5. (a) What is a synchronization bar? What is its significance?
   (b) How branching is represented in activity diagram. Elaborate on it. [8+8]
6. (a) What do you mean by component? What is component diagram? Explain with an example.
   (b) How will you reverse engineer or forward engineer a component diagram. [8+8]
7. (a) What is meant by a classifier? Discuss how to choose right kind of classifier.
   (b) What are the various kinds of visibilities that can be specified for attributes and operations of a class? Explain them with a suitable example. [8+8]
8. For a railway reservation system, draw possible sequence diagram and convert the same into a collaboration diagram. And also discuss the possibility of forward engineering of it. [16]

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Code No: 07A6EC09 **R07** **Set No. 4**

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OBJECT ORIENTED ANALYSIS AND DESIGN
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Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) What do you mean by component? What is the difference between components and classes?
   (b) What are the different kinds of components? Explain. [8+8]
2. (a) State the four principles of modeling and explain them in detail.
   (b) State and explain various advantages of Object Oriented approach over conventional approach in developing a software project. [8+8]
3. (a) What is an event? What are different types of events?
   (b) What is a signal? Explain with suitable examples. [8+8]
4. (a) State various categories of messages that can be specified in a sequence diagram. Give suitable examples.
   (b) What is meant by message sequencing? Discuss its importance and also explain how it will be done when active objects are involved in an object interaction diagram. [8+8]
5. (a) What are the different ways of organizing use cases?
   (b) Distinguish between action states and activity states. [8+8]
6. (a) Draw activity diagram for unified library application. Explain it.
   (b) Draw a diagram for library system that emphasizes on event-ordered behavior of an object. [8+8]
7. (a) What is meant by abstraction? What are the various levels of abstraction in a software project development? Discuss how to model different levels of abstraction in the UML.
   (b) What is meant by a diagram? How many diagrams that the UML supports? Is this list of diagrams are sufficient for modeling any complex software project? Justify your answer. [8+8]
8. Write a class diagram for a school information system. Specify clearly relationships among classes, attributes and operations in each class. Write the sample code which will be generated by forward engineering of this class diagram. [16]

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Code No: 07A6EC09 **R07** **Set No. 1**

III B.Tech II Semester Examinations,APRIL 2011
OBJECT ORIENTED ANALYSIS AND DESIGN
Common to Information Technology, Computer Science And Engineering, Computer Science And Systems Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) Draw object diagram for a library information system.
   (b) How many object diagrams that may be possible from a class diagram? Justify your answer with a suitable example. [8+8]
2. (a) Explain history states.
   (b) What is a signal? Explain with suitable examples. [8+8]
3. (a) Explain components in detail.
   (b) How do you model a client/server system. [8+8]
4. (a) Discuss how to model flows of control by organization and give a suitable example to it.
   (b) Explain the process of forward and reverse engineering of object interaction diagrams. [8+8]
5. (a) Explain the Association, Generalization and Realization relationships. Give suitable examples on which context these relationships are specified.
   (b) List various diagrams that the UML contains. Explain any four of them briefly. [8+8]
6. (a) What is meant by dependency relationship? State and explain various stereotypes that apply to dependency relationships among classes.
   (b) What are the stereotypes that apply to dependency relationships among packages? Explain their usage with suitable examples. [8+8]
7. (a) What is a synchronization bar? What is its significance?
   (b) Give activity diagram for library management system. [8+8]
8. (a) Draw use case diagram for library management system.
   (b) Draw structural diagrams for library application. [4+12]

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Code No: 07A6EC09 **R07** **Set No. 3**

III B.Tech II Semester Examinations,APRIL 2011
OBJECT ORIENTED ANALYSIS AND DESIGN
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Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) What are the common uses of component diagrams?
   (b) How do you model an embedded system. [8+8]
2. (a) Discuss about structural things and behavioral things of the UML and also give suitable examples.
   (b) Discuss briefly about the UML diagrams which can be used to model the behavioral aspects of a system. [8+8]
3. (a) What are behavioral diagrams in the UML? Discuss them briefly.
   (b) What are the UML diagrams that can be used in the logical view of a system? Explain them briefly. [8+8]
4. State and explain the common modeling techniques of class diagrams. Give appropriate examples. [16]
5. (a) What are the common modeling techniques of interaction diagrams? Explain them with suitable examples.
   (b) Define the terms Message, Link and Sequencing. Draw a sample object interaction by using these concepts. [8+8]
6. (a) Give activity diagram for hospital management system.
   (b) What is object flow? Explain. [8+8]
7. (a) Explain the five parts of transitions(between two states).
   (b) How will you model distribution of objects. [8+8]
8. (a) Draw structural diagrams for library application.
   (b) Draw activity diagram for unified library application. Explain it. [8+8]

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