Code No: 07A6EC09

 $|\mathbf{R07}|$ 

## Set No. 3

## III B.Tech II Semester Regular/Supplementary Examinations,May 2010 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 a sequence diagram for the use cse Lend Item and explain
  - (b) Draw a component diagram for the library system and explain
  - (c) For coding, the specifications are fetched from which diagrams in the design model? explain [5+5+6]
- 2. (a) Why is use case modeling useful in analysis?
  - (b) Define actor. Contrast actor with user. How are actors identified?
  - (c) What are the contents, common properties and common uses of use case diagrams. [4+7+5]
- 3. (a) Explain the UML approach to software architecture.
  - (b) Why is UML used? Explain the various relationships with UML notation.

[10+6]

- 4. (a) Illustrate the following modeling issues with class diagrams.
  - i. Modeling simple collaborations
  - ii. Modeling logical database schema.
  - (b) Enumerate the steps to reverse engineer class diagrams. [12+4]
- 5. (a) Enumerate the steps to model comments.
  - (b) Enumerate the steps to model new building blocks.
  - (c) Enumerate the steps to model new properties.
  - (d) Define idiom. Enumerate the steps to model new semantics. [5+5+3+3]
- 6. (a) Enumerate the steps to model an executable release.
  - (b) What are the contents, common properties and common uses of component diagrams? Explain briefly. [4+12]
- 7. Consider the usecase "withdraw amount" related to ATM transaction modeling. Draw the interaction diagrams for the usecase. Explain briefly. [16]
- 8. (a) What are the characteristics of a well-structured model with time and space properties.
  - (b) Draw a collaboration diagram that models the migration of a web agent that moves from node to node, collecting information and bidding on resources in order to automatically deliver a lowest-cost travel ticket. Briefly explain.

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(c) Enumerate the steps to model objects that migrate. [4+8+4]

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