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

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 Add title use case
   (b) For coding, the specifications are fetched from which diagrams in the design model? explain
   (c) Draw class diagram for user interface classes in the functions menu and explain [4+6+6]

2. (a) What is semantic equivalence between sequence and collaboration diagrams.
   (b) Explain the following illustrating interaction diagrams.
      i. Focus of control
      ii. object lifeline
      iii. path
      iv. Dewey decimal numbering. [4+12]

3. (a) Explain the following:
      i. Role
      ii. Multiplicity
      iii. has-a relationship
      iv. Generalization
   (b) Define idiom. Enumerate the steps to model structural relationships.
   (c) Define the following:
      i. Stereotype
      ii. Tagged value [8+6+2]

4. (a) Enumerate the steps to model interprocess communication (IPC).
   (b) Draw a UML diagram which models IPC in a distributed reservation system with processes spread across four nodes. Briefly explain.
   (c) What are the characteristics of a well-structured active class and active object? [5+5+6]

5. (a) What are swimlanes? Explain with an activity diagram.
   (b) Enumerate the steps to model a workflow? [8+8]

6. Giving appropriate illustrative UML diagrams, enumerate the steps to model the following:

(a) Physical data base

(b) source code. [16]

7. (a) Enumerate the steps to model logical database schema.

   (b) Draw a class diagram for a school information system.

   (c) What is object diagram? [6+8+2]

8. What are the building blocks that comprise the UML vocabulary. Give UML notation. [16]

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