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

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) Draw the use case diagram for the library system and explain the relationships.
   (c) Draw a class diagram of business objects in the design model and explain [4+6+6]

2. (a) What is genericity?
   (b) Enumerate the principle of modeling.
   (c) Enumerate any six artifacts.
   (d) Briefly explain the extensibility mechanisms in UML. [3+4+3+6]

3. (a) Enumerate the steps to model the distribution of responsibilities in a system.
   (b) Enumerate the steps to model non-software things.
   (c) Enumerate the steps to model primitive types. [8+4+4]

4. (a) Explain the forward engineering and the reverse engineering processes for statechart diagrams.
   (b) Explain the following:
      i. event, actions and guard conditions
      ii. History states
      iii. substrates: sequential and concurrent
      iv. Reactive object.
   (c) What area the contents, common properties and common uses of statechart diagrams. [4+8+4]

5. (a) Describe about polymorphism in collaboration diagrams.
   (b) Explain iterated messages and use of self in messages.
   (c) List out any four differences between the two kinds of interaction diagrams. [6+6+4]

6. (a) What is the use of forward engineering and reverse engineering UML diagrams?
   (b) Enumerate the steps to model logical data base schema.
   (c) Contrast object diagram with class diagram. [6+6+4]

7. (a) Enumerate the steps to model the following:

i. Adaptable systems
ii. Executable release
iii. Source code
iv. client/server system.

(b) What are the characteristics of deployment diagrams? [12+4]

8. (a) Draw a use case diagram that depicts the context of a credit card validation system. Explain briefly.

(b) Draw the UML diagram to model the requirements of a system.

(c) What is the significance of use cases and collaborations. [8+4+4]

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