Seventh Semester B.E. Degree Examination, December 2011 Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting at least TWO questions from each part.

PART - A

- a. What is a model? Give an example. What purpose does it serve? Explain
 b. What are the link and association? Write and explain UML notation for links and association, with an example.

 (08 Marks)
 - c. Explain qualified association, with an example.

(04 Marks)

- 2 a. What is aggregation and composition? Give their respective UML notations, with an example. (10 Marks)
 - b. What is an event? Explain different types of events, with an example.

(10 Marks)

- 3 a. Draw the use case diagram, for vending machine. What are the guidelines needed to be followed while drawing use—case models. (10 Marks)
 - b. Explain activity diagram, with the UML notation. Give an example.

(05 Marks)

c. Mention the guidelines for activity models.

(05 Marks)

- 4 a. What is software development process? Explain the stages of software development process.
 (10 Marks)
 - b. Write and explain the steps performed in constructing a domain state model, with an example. (10 Marks)

PART - B

- 5 a. With a neat block diagram, explain the steps followed in constructing application class model. (10 Marks)
 - b. Describe the architecture of an ATM system, with the help of a neat block diagram.

(10 Marks)

6 a. Explain the different tasks involved in design optimization.

(10 Marks)

- b. Write short notes on:
 - i) Reverse engineering Vs forward engineering
 - ii) Wrapping.

(10 Marks)

7 a. Describe the three categories of pattern.

- (10 Marks)
- b. With a neat diagram, explain the dynamics of client: Dispatcher server design pattern.
 - (10 Marks)
- 8 a. Define forward receiver design pattern.

(02 Marks)

b. Write and explain the steps to implement a forward receiver design pattern.

(10 Marks) (08 Marks)

c. Write the steps to implement the counted pointer idiom.

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