USN										
-----	--	--	--	--	--	--	--	--	--	--

06CS71

## 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)
- a. What is aggregation and composition? Give their respective UML notations, with an example.
  - b. What is an event? Explain different types of events, with an example. (10 Marks)
- 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)
- What is software development process? Explain the stages of software development process.
   (10 Marks)
  - Write and explain the steps performed in constructing a domain state model, with an example.

## PART-B

- 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)
  - c. Write the steps to implement the counted pointer idiom. (08 Marks)

Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be to

\* \* \* \* \*