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Department of Library
 BMS Institute of Technology
 B.S.N. 2nd Stage, BANGALORE-7

06CS71

Seventh Semester B.E. Degree Examination, May/June 2010
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

- 1 a. Explain briefly three models used to describe a system. (06 Marks)
- b. Explain with a diagram, how an association class participates in another association. (04 Marks)
- c. With a neat diagram, explain a class model of a work-station window management system. (10 Marks)
- 2 a. What is an association end? What are the properties of an association end? (06 Marks)
- b. Define reification. Explain it with a diagram. (06 Marks)
- c. Explain with a diagram, the basic UML syntax for state diagrams. (08 Marks)
- 3 a. Explain with a diagram, nested states for a phone line. (06 Marks)
- b. What is a usecase? Explain the guidelines for usecase models. (08 Marks)
- c. What do you mean by a swimlane? Explain briefly an activity diagram with swimlanes for servicing an airplane. (06 Marks)
- 4 a. Explain the sequence of software development stages. (08 Marks)
- b. What do you mean by system conception? Explain devising a system concept. (08 Marks)
- c. List the steps to construct a domain state model. (04 Marks)

PART – B

- 5 a. With a neat sequence diagram, explain process transaction scenario. (08 Marks)
- b. What are the different aspects of reusability? Explain the reusable things. (08 Marks)
- c. What are the steps in designing a pipeline for a continuous transformation? (04 Marks)
- 6 a. Explain the consideration for choosing alternative algorithms. (06 Marks)
- b. When fine-tuning of classes is essential? How is it achieved? (08 Marks)
- c. Compare forward engineering and reverse engineering. (06 Marks)
- 7 a. Explain briefly the properties of patterns for software architecture. (08 Marks)
- b. Explain pattern categories. (06 Marks)
- c. What is a forwarder-receiver design pattern? When is it useful? (06 Marks)
- 8 a. Explain the liabilities imposed by a command processor pattern. (06 Marks)
- b. Why view handler design pattern is used? Explain the scenario of the view handler creating a new view. (08 Marks)
- c. Write the steps to implement the counted pointer idiom. (06 Marks)

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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 treated as malpractice.