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10CS71

**Seventh Semester B.E. Degree Examination, Dec.2019/Jan.2020**  
**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. What is OO development? Explain the major themes that are well supported in object oriented technology. (10 Marks)
- b. What is model? What are its advantages? Briefly discuss about their models. (10 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. Explain nested states and nested state diagrams, with example. (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. Explain the various software control strategies that can be applied in the system design. (10 Marks)
- b. Describe application analysis, with an example of ATM. (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. What are idioms and styles? Explain with the help of an example, a style guide idiom. (10 Marks)
- b. Write short notes on :
  - i) Command processor design pattern
  - ii) View handler design pattern. (10 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.