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06CS71

**Seventh Semester B.E. Degree Examination, June/July 2015**  
**Object Oriented Modeling & Design**

Time: 3 hrs.

Max. Marks:100

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

**PART – A**

- 1 a. What is object oriented development? Explain the stages of object oriented methodology. (06 Marks)
- b. Explain the following terms, with examples  
i) Value and Attributes ii) Operations and Methods. Iii) Links and Associations. (09 Marks)
- c. Write a class model of a graphic figures. Briefly describe the inheritance of graphic figures. (05 Marks)
- 2 a. Explain the following terms with examples.  
i) Multiplicity ii) Association End iii) N-array association  
iv) Aggregation v) Composition. (10 Marks)
- b. What do you mean by multiple inheritance? Explain the kinds of multiple inheritance, Give an example for each kind. (10 Marks)
- 3 a. Explain the guidelines for use-case models and sequence models. (10 Marks)
- b. Draw and explain the sequence diagrams of passive objects and transient objects. (10 Marks)
- 4 a. Define software development process. Explain development stages in detail. (10 Marks)
- b. What is domain class model? Explain the steps to construct a domain class model. (10 Marks)

**PART – B**

- 5 a. What decisions can be taken by the developer during system design? Explain. (10 Marks)
- b. Explain the different architectural styles of system design in detail. (10 Marks)
- 6 a. Explain the steps for designing algorithms in detail. (10 Marks)
- b. What are the steps involved in implementation modeling? Explain. Give an example for each step. (10 Marks)
- 7 a. What is pattern? Explain the categories of pattern and give an example for each category. (10 Marks)
- b. Explain the structure of Forwarder-Receiver design pattern. (10 Marks)
- 8 a. Explain the structure of following management patterns:  
i) Command processor pattern. ii) View handler. (10 Marks)
- b. What are idioms? Explain the necessary steps for implementation of idioms, in detail. (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.