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10CS71

Seventh Semester B.E. Degree Examination, June/July 2018
Object Oriented Modeling and 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 OO development? Explain object oriented themes briefly.   (06 Marks)
   b. Define model. Describe the relationship among three models.   (06 Marks)
   c. What is generalization? Discuss generalization with an example.   (08 Marks)

2 a. Define the following terms with an example:
       i) Multiplicity
       ii) Visibility
       iii) Abstract class   (08 Marks)
   b. Draw the state diagram for telephone system and explain in detail.   (12 Marks)

3 a. What is concurrency? Explain the aggregation concurrency with an example.   (06 Marks)
   b. What are sequence models? Give the guidelines for sequence models.   (06 Marks)
   c. Explain use case description with an example.   (08 Marks)

4 a. Briefly discuss the software development stages.   (10 Marks)
   b. List and explain the steps to construct domain class model.   (10 Marks)

PART – B

5 a. Describe in detail application state model.   (08 Marks)
   b. Define the following terms:
       i) Libraries
       ii) Frameworks
       iii) Patterns   (06 Marks)
   c. Explain the architecture of ATM system with schematic diagram.   (06 Marks)

6 a. What are the steps in class design? Explain.   (10 Marks)
   b. Describe in detail an implementation model, explaining the steps in construction of it.
                                                                                   (10 Marks)

7 a. What is a pattern? Explain the model view controller design for software architecture with OMT diagram.   (06 Marks)
   b. Describe the relationships between patterns.   (04 Marks)
   c. Explain client-dispatcher-design pattern with schematic diagram.   (10 Marks)

8 a. Explain command processor design pattern.   (10 Marks)
   b. What are idioms and styles? Explain counted pointer example.   (10 Marks)

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