

# CRASH COURSE

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10CS71

## Seventh Semester B.E. Degree Examination, May 2017 Object Oriented Modeling and Design

Time: 3 hrs.

Max. Marks: 100

**Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.**

### PART – A

- 1 a. What is OO system development methodology? Explain the five stages in OO methodology. (05 Marks)  
b. Explain three kinds of model which separates a system into distinct views. (10 Marks)  
c. Define and give UML notation for  
(i) Object with values and classes with attributes  
(ii) Qualified association. (05 Marks)
- 2 a. Explain advanced object and class concept with example. (07 Marks)  
b. Define and give UML notation for  
(i) Meta data (ii) Reification (iii) Derived data (iv) Packages. (06 Marks)  
c. Define event. Explain different types of events in state modeling. (07 Marks)
- 3 a. Define concurrency. Explain Aggregation concurrency with example. (07 Marks)  
b. With suitable example, explain the concept of signal generalization. (06 Marks)  
c. Explain activity diagram for the stock trade processing. (07 Marks)
- 4 a. Explain software development life cycle by considering OO approach. (08 Marks)  
b. For what kind of Questionaries a good system concept must answer? Justify with example. (08 Marks)  
c. List the steps required to construct a domain class model. (04 Marks)

### PART – B

- 5 a. List and explain the steps required for constructing application class model. (07 Marks)  
b. How to organize a decomposition of a system into subsystem? Explain in brief. (06 Marks)  
c. Explain how to choose a software control strategy in brief. (07 Marks)
- 6 a. Mention and explain steps involved in designing algorithms with respect to class design. (07 Marks)  
b. Explain Fine-Tuning classes with respect to implementation modeling. (06 Marks)  
c. List and explain the input to and output from Reverse engineering. (07 Marks)
- 7 a. Define patterns. Explain the relationship between the patterns. (10 Marks)  
b. Explain forwarders-Receiver design patterns. (10 Marks)
- 8 a. With an example of multi-document editors explain view handler. (10 Marks)  
b. Explain how counted pointer idiom makes memory management of dynamically-allocated shared objects on C++ easier. (10 Marks)

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