CRASH COURSE

USN ☐☐☐☐☐☐☐☐☐☐

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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