Fifth Semester MCA Degree Examination, June/July 2019
Objected Oriented Modeling and Design Patterns

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a.   What is object oriented development? Explain evidence for usefulness of OO development.
(10 Marks)
    b.   Explain object oriented methodology and OO themes.
(10 Marks)

2   a.   What is a model? What purpose does it serve? Draw the class model for windowing management system.
(10 Marks)
    b.   Explain different kinds of multiple inheritances and workarounds of advanced class modeling.
(10 Marks)

3   a.   Define state and events. Discuss the different kinds of events with an example.
(10 Marks)
    b.   Explain concurrency of an object in the advanced state modeling.
(10 Marks)

4   a.   Define use-case models? Explain use-case diagram for vending machine. Hence describe guidelines.
(10 Marks)
    b.   Explain sequence diagram for online stock brokerage system. Hence describe the guidelines for sequence diagram.
(10 Marks)

5   a.   Explain different stages of software development.
(10 Marks)
    b.   What do you mean by system conception? What are the ways to find new system conception? Explain in detail what a good system concept must answer.
(10 Marks)

6   a.   Explain the steps to construct a domain class model.
(10 Marks)
    b.   Explain the steps to construct a domain application interaction model.
(10 Marks)

7   a.   Explain common Architectural styles of system design.
(10 Marks)
    b.   Write short notes on the following :
         (i) Recursive downward   (ii) Design optimization.
(10 Marks)

8   a.   What is pattern? Explain categories of pattern.
(10 Marks)
    b.   Explain procedure to implement forward-receiver design.
(10 Marks)

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