

Code: 9F00503

## MCA V Semester Regular & Supplementary Examinations November/December 2016

## **OBJECT ORIENTED ANALYSIS & DESIGN (USING UML)**

(For students admitted in 2011, 2012, 2013 & 2014)

Time: 3 hours Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

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- (a) Elaborate on software development life cycle.
  - (b) Explain the importance of the modeling.
- 2 (a) Explain the concept of advanced relationships in structural modeling.
  - (b) What is relationship? Explain common modeling techniques of relationship.
- 3 (a) Explain the terms and concepts of object diagram.
  - (b) What is class diagram? With reference to class diagrams, enumerate the steps to forward engineer.
- 4 Explain terms and concepts of interaction diagrams and discuss with neat diagrams.
- 5 (a) Contrast use case with algorithm. Give two examples for use cases.
  - (b) Write briefly about use case diagram. Explain with an example.
- 6 (a) Give the sketch of a state machine for the controller in a home security system, which is responsible for monitoring various sensors around the perimeter of the house. Briefly explain.
  - (b) Explain the following parts of transition:
    - (i) Event trigger.
    - (ii) Guard condition.
- 7 (a) What is a component? Explain briefly about component diagrams.
  - (b) Explain briefly about terms and concepts of deployment diagrams.
- 8 (a) What is a pattern? Explain different types of patterns.
  - (b) Draw a neat object diagram for library system.

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