

Code: 9F00503

MCA V Semester Regular & Supplementary Examinations October/November 2017

OBJECT ORIENTED ANALYSIS & DESIGN (USING UML)

(For 2012, 2013, 2014 & 2015 admitted batches only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What are the building blocks of UML? Explain in detail.
(b) Explain software system architecture.
- 2 (a) Differentiate between attribute and association. How will you model single inheritance?
(b) Prepare a class diagram for a graphical document editor that supports grouping. State clearly your assumptions.
- 3 (a) Distinguish between class diagrams and object diagrams.
(b) State and explain common modeling technique of class diagrams.
- 4 Draw a collaboration diagram to specify the flow of control involved in registering a new student at school and explain it.
- 5 Write short notes on Use-cases. Draw the use-case diagram for Hotel information system. There are two types of customers: Tour-group customers and individual customers. Both can book, cancel, check-in and check-out of a room by phone or via the internet. There are booking process clerk and reception staff who manages it. A customer can pay bill by credit card or pay utility bill.
- 6 Explain the following with respect to state transition diagram:
 - (a) Event.
 - (b) State.
 - (c) Transition.
 - (d) History states.
- 7 What is meant by a component diagram? Discuss common modeling techniques of it.
- 8 (a) Write short notes on patterns and architecture.
(b) Draw and explain object diagram for unified library system.
