

MCA/D-15
OBJECT ORIENTED ANALYSIS & DESIGN USING UML
PAPER-MCA-14-31

Time Allowed: 3 Hours

Maximum Marks: 80

Note: Attempt Five questions in all, selecting at least one question from each Unit.
Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Explain the following :
 - (a) Generalization
 - (b) Purpose of Modeling
 - (c) Relationship between class and state model
 - (d) Trade-off priorities in state design.

UNIT-I

2. What is Unified Modeling Language? Explain history and usage of UML.
3. What do you understand by semantic rules? Explain visibility, Integrity and Execution in UML.

UNIT-II

4. What is Modeling? Explain modularity and encapsulation with example.
5. What are links and associations? Explain different link attributes and link classes with a suitable example.

UNIT-III

6. What are State Diagrams? What is their significance? Explain the usage of nested State diagrams with example.
7. What are Interaction Diagrams and where they are useful? Explain special constructs for activity models.

UNIT-IV

8. What is concurrency in system design? How global resources are handled during system design? Explain.
9. What is the significance of design optimization? Explain different designing algorithms.

