MCA/D-16
OBJECT ORIENTED ANALYSIS AND DESIGN USING UML
Paper : MCA-14-31
(Group-I)
Opt. (i)

Time Allowed: 3 Hours   Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. Explain the following:

    (i)   Sequence Diagram
    (ii) Link attributes and Link classes
    (iii) Relationship between class and state model
    (iv) Handling global resources in system design.

Unit-I

2. Explain the following relationships in UML :
    (a) Association
    (b) Generalization
    (c) Dependency

3. What are Actors ? What is the significance of use-case diagrams? Explain their different characteristics with example.

Unit-II

4. How modeling is useful in design? Explain with suitable case study.
5. Explain and differentiate Generalization and Inheritance with suitable example.

Unit-III

6. What are State Diagrams? What is their significance? Explain transitions and conditions available in state modeling

7. What are use case relationships? Explain procedural sequence models.

<div align="center">Unit-IV</div>

8. Explain system development model stages in system analysis and design.

9. Explain the followings:
   (a) Handling boundary conditions in system design
   (b) Organizing classes and associations in class design.