YMCA UNIVERSITY OF SCIENCE AND TECHNOLOGY, FARIDABAD
B.Tech Examination7th semester (under CBS)
Object Oriented System Design (CE-405)

Time: 3 hours   MM: 60

Part A: Question 1 is compulsory

1. a) How are good systems built?
    b) What is an object? Describe the characteristics of the same.
    c) What is Rational Rose?
    d) Differentiate between instances and abstractions?
    e) Are use cases are same as functional requirements?
    f) What is a sequence diagram?
    g) What are the different types of message arrows?
    h) What do you understand by forking and joining?
    i) How UML is iterative and incremental in nature?
    j) How do you represent boundary, entity and control class in UML?

                                                          (2X10= 20)

Part B: Attempt any four out of six questions:

2. a) Write the steps of creating a class in Rational rose?   5
    b) What are the characteristics of a good actor?   5

3. a) What are swimlanes? Draw an appropriate activity diagram to show the
    swimlanes?   5
    b) What are expansion regions? In which UML diagrams they fall into? Explain them
    with the help of suitable example?   5

4. a) What are state machines? Draw a UML Behavioural state machine diagram
    describing Bank Automated Teller Machine (ATM).   5
    b) What is the importance of relationships in UML? Describe the simple and
    advanced relationships pertaining to use-case diagrams, class diagrams and
    package diagrams.   5

5. What is objectory? State the characteristics and the different phases of
    objector?   10

6. a) What is an Iteration planning process? What is its need?   3
    b) What is the need of homogenisation of classes?   3
    c) Describe the importance of 'Architecture' in software development lifecycle?
                                                                              4

7. Draw a detailed Class diagram for student admission process.   10