

2008 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

**III B.TECH I SEMESTER REGULAR EXAMINATIONS
OBJECT ORIENTED ANALYSIS AND DESIGN
(COMPUTER SCIENCE ENGINEERING, IT)**

NOVEMBER 2008

**TIME:3HOUR
MARK:80**

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

1. (a) What are the various views considered in modeling a system's architecture? Explain.
(b) What is the UML approach to software development life cycle? Explain the various phases.
2. (a) Enumerate the steps to model webs of relationships.
(b) Contrast simple aggregation with composite aggregation. What is association class?
(c) Illustrate with examples how realization is used to specify the relationships between the following.
 - i. Interface Vs. Class
 - ii. Interface component.
3. (a) Enumerate the steps to model simple collaborations. Give an example class diagram.
(b) What are the contents in class diagram?
4. (a) What are interaction diagrams? What are their contents and common proper- ties? Define semantic equivalence between two kinds of interaction diagrams.
(b) Enumerate the steps to model flows of control by time ordering.
5. (a) What are the properties of well-structured use cases?
(b) Enumerate the steps to model the requirements of a system.
(c) Consider a retail system that interacts with customers who place and track orders. In turn, the system will ship orders and bill the customers. Model the behavior of the system will ship orders and bill the customers. Model the behavior of the system by declaring the behaviors as use cases.
6. (a) Enumerate the steps to model the distribution of objects. Explain briefly considering a UML diagram.
(b) Enumerate the steps to model interprocess communication.
7. (a) Define component. What are the differences between components and classes? How are component and interface related?
(b) What are the properties of components?
(c) What are standard stereotypes UML defines that apply to components.
8. (a) Draw the use case diagram for the library system and explain the relationships.
(b) What are the packages in the Library system? explain