

3/4 B.Tech. SECOND SEMESTER

IT6L2 OBJECT ORIENTED ANALYSIS AND DESIGN LAB Credits: 2

Lecture: --

Internal assessment: 25 marks

Lab: 3 periods /week

Semester end examination: 50 marks

Objectives:

- To demonstrate project plans and explain the formulation of problem statements.
- To impart the benefits of visual modeling.
- To discuss various UML diagrams in a real world application.

Outcomes:

Student will be able to:

- Plan software project development life cycle.
- Write System Requirements Speciation (SRS) for given problem
- Document use case, activity, Sequence and Collaboration Diagrams etc.(all the required UML Diagrams) for a given problem.

Exercises

Case Study 1: Banking Application.

Case Study 2: Business Application.

I. ANALYSIS

1. Requirements elicitation, System Requirement Specification.

II. USECASE VIEW

1. Identification of Actors, Identification of Use cases, Flow of Events, Construction of Use case diagram.

2. Building a Business Process model using UML activity diagram.

III. LOGICAL VIEW

1. Identification of Analysis Classes, Identification of Responsibilities of each class, Identification of attributes of each class, Identification of relationships of classes. Construction of UML static class diagram.

2. Construction of Sequence diagram.

3. Construction of Collaboration diagram.

4. Analyzing the object behavior by constructing the UML State Chart diagram.

IV. DESIGN

1. Refine attributes, methods and relationships among classes and model the Final Class Diagram.

V. DEPLOYMENT

1. Model the deployment diagrams.

Reference Book:

1. Rob Pandey, Pauline Wilcox Applying UML Advanced Application, Elsevier.