

**CA9133 OBJECT ORIENTED SYSTEM DESIGN**

**L T P C  
3 0 0 3**

**UNIT I 10**

Introduction to System Concepts - Managing Complex Software — Properties – Object Oriented Systems Development – Object Basics – Systems Development Life Cycle - Rumbaugh Methodology - Booch Methodology - Jacobson Methodology – Unified Process

**UNIT II 8**

Unified Approach – Unified Modeling Language – Static behavior diagrams – Dynamic behavior diagrams – Object Constraint Language

**UNIT III 9**

Inception – Evolutionary Requirements – Domain Models – Operation Contracts - Requirements to Design – Design Axioms – Logical Architecture - Designing Objects with Responsibilities – Object Design – Designing for Visibility

**UNIT IV 9**

Patterns – Analysis and Design patterns – GoF Patterns - Mapping designs to code – Test Driven development and refactoring – UML Tools and UML as blueprint

**UNIT V 9**

More Patterns – Applying design patterns – Architectural Analysis – Logical Architecture Refinement – Package Design – Persistence framework with patterns

**REFERENCES**

1. Craig Larman. “Applying UML and Patterns – An introduction to Object-Oriented Analysis and Design and Iterative Development”, 3rd ed, Pearson Education, 2005.
2. Fowler, Martin. UML Distilled. 3<sup>rd</sup> ed. Pearson Education. 2004.
3. Michael Blaha and James Rumbaugh, “Object-oriented modeling and design with UML”, Prentice-Hall of India, 2005.
4. Booch, Grady. Object Oriented Analysis and Design. 2<sup>nd</sup> ed. Pearson Education. 2000.
5. Ali Bahrami, “ Object Oriented Systems Development”, Tata McGrawHill, 19