

**CORE COURSE II - OBJECT ORIENTED ANALYSIS AND DESIGN**

**Unit I**

OBJECT BASIS: Object Oriented Philosophy - Object - Object State, behaviors and methods. Encapsulation and information hiding Class Relationship among classes polymorphism, aggregation, object containment, meta classes.

**Unit II**

OBJECT ORIENTED METHODOLOGIES: Rumbaugh object Model, Booch methodology Jacobson methodology, patterns, frame works and unified approach.

**Unit III**

OBJECT ORIENTED ANALYSIS: Business object analysis use case driven approach - use case model. Object analysis - CRC cards - Noun phrase approach Identifying object relationships and methods.

**Unit IV**

OBJECT ORIENTED DESIGN: On design process - Design axioms - design patterns - designing classes. Case study.

**Unit V**

UML AND PROGRAMMING: Introduction to unified modeling language - UML diagrams - class diagrams and use case diagrams - State and dynamic models. Case study to inventory, sales and banking.

**Text Book**

1. Ali Bahrami, "Object Oriented Systems Development" Irwin-McGraw Hill, New Delhi, International editions, 1999.

**References**

1. Martin Fowler, Kendall Scott, "UML Distilled-Appling the standard Object Modeling Language", Addition Wesley 1977.
2. Grady Booch, "Object Oriented Analysis and Design with applications", II edition, Addition Wesley, 1994.