

**CORE COURSE VIII**  
**OBJECT ORIENTED SYSTEM ANALYSIS AND DESIGN**

**Unit I**

Introduction to object oriented Development – Object oriented themes- Modeling – the object modeling technique objects and classes links and associations concepts

**Unit II**

Advanced object modeling Aggregation – Abstract classes – Extension and Restriction – Multiple Inheritance – Metadata – candidate keys – constraints

**Unit III**

OMT as a Software Engineering Methodology – The OMT Methodology – Impact of an object oriented approach. Analysis – overview of Analysis – Problem statement - Automated Teller machine example

**Unit IV**

System design – Overview of system design – Breaking a system into subsystem – Identifying concurrency – Allocating subsystems to processors and tasks – object design – overview of object design – Combining the three models

**Unit V**

Implementation: Implementation using a programming language – Implementation using a Database system programming style: Object oriented style – Reusability – Extensibility

**Text Book:**

Object oriented modeling and design – James Rumbough, Michael Blaha, William premerlani – PHI Twelfth printing 2001

**Reference Book:**

Object oriented Analysis and Design with Application – Grady Booch second Edition – Pearson Education Asia publications.