

**S.G.M. Bank English Medium College of Commerce and Management
Course Plan**

BBA (Information Technology Management)

Semester-VII

Paper Code & Title: UM07CBB102 (Object Oriented Analysis & Design)

Total Credit: 3 (45 Sessions)

Faculty: Ami Trivedi, Jat Nanavati, Kamlesh Vaishnav

1. Course Objective

Student will be able to

1. describe Object Oriented Concepts
2. do Object Oriented Analysis and Design of System using the concept of Classes, Objects, Inheritance, Polymorphism, etc.
3. use various UML diagrams to describe complex system.

2. Course Plan

UNIT-I: Software Complexity and its Development	12
Complex Systems and its structure	3
Software Complexity	2
Attributes of a Complex System	1
The Role of Decomposition	1
The Role of Abstraction	1
The Role of Hierarchy	1
The Evolution of the Object Model	3
UNIT-II: Object Oriented Concepts	11
Object Oriented Programming	1
Object Oriented Design	1
Object Oriented Analysis	1
Elements of the Object Model	4
The Nature of an Object	2
Relationships among Objects	2
UNIT-III: Introduction to UML	09
The Nature of a Class	2
Relationships among Classes	3
The Unified Modeling Language	2
Package Diagrams	1
Component Diagrams	1
UNIT-IV: Diagrams	13
Deployment Diagrams	1
Use Case Diagrams	3
Activity Diagrams	3
Class Diagrams	3
Sequence Diagrams	3

3. Course Outcome

Student can

1. describe Object Oriented Concepts
4. perform Object Oriented Analysis and Design using the concept of Classes, Objects, Inheritance, Polymorphism, etc.
2. implement analysis and design of complex system using UML notations (diagrams)

Basic Text & Reference Books:

1. Object Oriented Analysis and Design with Applications By Grady Booch
Publisher: Addison Wesley
2. Learning UML 2.0: By Kim Hamilton, Russell Miles, Publisher: O'Reilly
3. SAMs: Teach yourself UML in 24 Hours By Joseph Schmuller, Publisher: SAMS Publishing.