901: Object Oriented Analysis & Design with UML

Unit : 1   **[25%]**

The object Oriented Paradigm, Management of Object Oriented Software Projects, Object Oriented Analysis: Domain Analysis, Generic components of the Analysis Model, The A Process, The Object-Relationship Model, The Object-Behavior Model, Object Oriented Design: Design for Object Oriented Systems, The System Design Process, The Object Design Process, Design Patterns.

Unit : 2   **[25%]**

Introduction to Web Engineering, Web Engineering team, Analysis for Web Application: Requirements Analysis for Web Apps, The Analysis Model for Web Apps, The content Model, The Interaction Model, The Functional Model, The Configuration Model, Relationship-Navigation Analysis, Design for We Apps: Design Issues for Web Engineering, The Web E-Design Pyramid, Web App Interface Design, Aesthetic Design, Content Design, Architecture Design, Navigation Design, Component level Design, Hypermedia Design Patterns, Object-Oriented Hypermedia Design Method.

Unit : 3   **[25%]**

Introduction to UML, Classes, Advanced Classes, Relationships, Advanced Relationships, Interfaces, types, Roles, Packages, Class Diagram, Use-case Diagram.

Unit : 4   **[25%]**

Interaction Diagram: Sequence Diagram, Collaboration Diagram, Forward and Reverse Engineering, Activity Diagram, State Chart Diagram, Patterns and Frameworks, Component Diagram, Deployment Diagram.

Reference Books:

1. Software Engineering By Roger S. Pressman Fifth Edition McGraw Hill Publications
2. Software Engineering By Roger S. Pressman Sixth Edition McGraw Hill Publications
3. The Unified Modeling Language User Guide By Booch, Rumbaugh, Jacobson Low Price Edition Publication