

**PAPER – XXXIII – ELECTIVE – IV – COM/DCOM.**

**UNIT – I**

Object Revolution : Objects and Classes – Encapsulation – Inheritance – Polymorphism – Abstract base classes – Objects from C++ perspective – Objects from a COM perspective – Inheritance in COM – Building COM Objects and Interfaces: Clients and Servers – Identifying Classes with GUIDs – The HRESULT return type – Anatomy of an interface – Exploring IUnknown.

**UNIT – II**

Implementing a COM Client and Server : Building the Ifortune Teller Interface – Unicode and Internationalized Strings – Cfortune Teller Rebuilt as ComFortune Teller – ComFortune Teller Factory Class – Completing the In-Process Server – Building the Client – Registering the Server.

COM Programming with MFC.

**UNIT – III**

Building COM Objects using the ActiveX: Template Library: ATL Architecture – New ATL Version of PizzaOrder Taker – Registry Scripting and the Registrar – A Distributed Overview: The Evolution of Distributed Systems – Distributed COM

**UNIT – IV**

Security : The Security Support Provider Interface – Overview of NT Security – COM Security – COM Object Identity – Processwide Security – Security Blankets and Impersonation – DCOM and CAPI – Using Different COM Threading Models: Thread Functions – Thread Types – Thread Synchronization – The COM Threading Model.

**UNIT – V**

Automation: Automation Features – Automation and Events Support – Automation Support in MFC and ATL – Special – Meaning Dispid Using Distributed Objects: Remote Object Instantiation – Designing the Distributed Object Application – The Distributed Pizza – Ordering System – The Pizza Maker Server Spy.

**Text Book:**

COM/DCOM Primer Plus – Corry, Mayfield, Cadman – Techmedia First Indian Edition, 1999.