

**PAPER - 8: ELECTIVE - I –C: COM /DCOM**

**Unit 1 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 2 Implementing a COM Client and Server:**

Building the IFortune Teller Interface –Unicode and Internationalized Strings – CfortuneTeller Rebuilt as ComFortuneTeller –ComfortuneTeller Factory class – Completing the In-Process Server –Building the Client –Registering the Server.

COM Programming with MFC

**Unit 3 Building COM objects using the Active X:**

**Template Library:** ATL Architecture –New ATL Version of Pizzaorder Taker- Registry Scripting and the Registrar.

**A Distributed objects Overview:**

The Evolution of Distributed systems-Distributed COM

**Unit 4 Security :**

The Security Support Provider Interface-Overview of NT Security –COM Security –COM object Identity - process wide Security-Security Blankets and Impersonation-DCOM and CAPI

Using Different COM Threading Models:

Thread Functions-Thread Types –Thread Synchronization-The COM Threading Model.

**Unit 5 Automation:**

Automation Features-Automation and Events Support –Automation support in MFC and ATL –Special –Meaning DispidIDs Using Distributed Objects:

Remote Object Instantiation-Designing the Distributed object Application –The Distributed Pizza-Ordering System-The PizzaMaker Server-The PizzaMaker Server Spy.

**TEXT BOOK:**

COM/DCOM Primer Plus –Corry, Mayfield, Cadman-Techmedia First Indian Edition-1988.