# Paper- V(MCA-405) : Client Server Computing

**UNIT- I**

**Overview:** definition, history, myths, transition to client server computing, database architectures, advantages and disadvantages of client server architecture.

**Components** : client, server, network, role and services of client-server, selection of operating system as client & server, types of client & servers, connectivity, peer-to-peer communication

**Middle-ware** : definition, role, 2 tier v/s 3 tiers, network file system, network operating system, API, RPC model & implementation

**UNIT- II**

**Communication in client-server**: Using OSI layer, TCP/IP networks.

**Client/Server processing and application development**: transaction processing, remote processing, distributed processing, distributed databases, development tools

**UNIT- III**

**Distributed Objects**: CORBA architecture and services, COM, DCOM, Java-RMI

**Database Drivers**: ODBC driver, JDBC driver.

**Linking and Embedding**: OLE and DDE

**UNIT- IV**

**Data warehousing**: operational data & analytical data, characteristics, architecture, Data warehouse options.

**Oracle as database server**: Memory architecture, Process architecture

**Introduction to PL/SQL Programming**: Data types, Control statements, cursors, triggers, exception handling, procedure and functions

**UNIT- V**

**Managing C/S Applications**: network management, database backup, database recovery, Data integrity, Data security.

**Latest technology and tools used for Client Server Computing**

**Text/Reference books:**

1. Client server Computing: Patrick Smith
2. Client Server survival guide, 3 rd Edition : Robert Orfali
3. Client server unleashed