

4/4 B.Tech. FIRST SEMESTER

IT7T5A

**CLIENTSERVER COMPUTING
(Common to CSE/IT)**

Credits: 4

Lecture: 4 periods/week

Internal assessment: 30 marks

Tutorial: 1 period /week

Semester end examination: 70 marks

Objectives:

Students will be introduced to

- Apply their programming skills to use in constructing a complete end to-end information system solution.
- Get exposure on important technologies and components (e.g., networks, database systems and languages, clients, middleware development tools).
- Explore the technologies in detail, improving their ability to tailor their degree.

Outcomes:

Students will be able to:

- Identify the importance of HTML, XHTML, MySQL & PHP.
- Understand the differences between PHP Web & HTML Controls
- Use different Web controls in building web pages.
- Connect Web pages with Databases.

Syllabus:

UNIT-I

Introduction to client server computing: Evolution of corporate computing models from centralized to distributed computing, client server models, Benefits of client server computing, pitfalls of client server programming.

UNIT-II

CORBA with Java: Review of Java concept like RMI, RMI API and JDBC, Client/Server CORBA-style, the object web CORBA with Java.

UNIT III

Core CORBA / Java: Two types of Client/ Server invocations-static, dynamic, The static CORBA, first CORBA program, ORBlets with Applets.

UNIT IV

Dynamic CORBA: The portable count, dynamic count and multi count.

UNIT-V

Existential CORBA: The introspective CORBA/Java object, CORBA initialization protocol, CORBA activation services.

UNIT-VI

Existential CORBA: CORBAIDL mapping CORBA java- to- IDL mapping.

UNIT-VII

Java Bean Component Model: Events, properties, persistency, Introspection of beans, CORBA Beans.

UNIT-VIII

EJBs and CORBA: Object transaction monitors CORBA OTM's, EJB and CORBA OTM's, EJB container frame work, Session and Entity Beans, The EJB client/server development Process The EJB container protocol, support for transaction EJB packaging EJB design Guidelines.

Text Books:

1. Client/Server programming with Java and CORBA Robert Orfali and Dan Harkey, John Wiley & Sons ,SPD 2nd Edition.
2. Java programming with CORBA 3rd Edition, G.Brose, A Vogel and K.Duddy, Wiley-dreamtech, India John wiley and sons.

Reference Books:

1. Distributed Computing, Principles and Applications, M.L.Liu, Pearson Education.
2. Client/Server Survival Guide 3rd edition Robert Orfali Dan Harkey&Jeri Edwards, John Wiley & Sons.
3. Client/Server Computing D T Dewire, TMH.