III Year MCA I Semester   L   T   P   To   C

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MC303   MIDDLEWARE TECHNOLOGIES

Objective of the Course:

The main objective of this course is to get on awareness of a the various technologies which can help in the implementation of the various live project

UNIT - I   **(12 Hrs)**
CORBA with Java: Remote Method Invocation-RMI API-JDBC-Client/Server CORBA-style, The Object web: CORBA with Java**.**

UNIT - II   **(12 Hrs)**
Fundamentals of C# and .NET Platform: Comprehensive .NET Assemblies; OOP with C#-Callback Interfaces, Delegates and events.
Implementing C# Applications: Type Reflection, Late Binding, and Attribute-Based programming; Object Serialization and the .NET Remoting Layer; Data Access with ADO.NET; XML Web Services.

UNIT - III   **(12 Hrs)**
Core CORBA/JAVA: Two types of Client/Server invocations-static, dynamic. The static CORBA, first CORBA program, OR Blets with Applets, Dynamic CORBA-The portable count, the dynamic count multicount**.**
Existential CORBA: CORBA initialization protocol, CORBA activation services.

UNIT - IV   **(12 Hrs)**
Java Bean Component Model: Events, Properties, Persistency, Interspection of beans, CORBA Beans.

UNIT - V   **(12 Hrs)**
EJB 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 DanHarkey, 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. C# and the .NET Platform Andrew Troelsen, Apress Wiley-dreamtech, India Pvt.Ltd.;
2. Distributed Computing, Principles and Applications, M.L.Liu,Pearson Education
3. Client/server survival Guide 3rd edition Robert Orfali Dan Harkey and Jeri Edwards, John Wiley & Sons
4. Client/Server Computing D T Dewire, TMH**.**