



BIT-402

MIDDLEWARE TECHNOLOGIE

UNIT-I

CLIENT/SERVER CONCEPTS: Client – Server – File Server, Database server, Group server, Object server, Web server. Middleware – General middleware – Service specific middleware. Client/Server Building blocks – RPC – Messaging – Peer – to – Peer. Web Services- SOA, SOAP, WSDL, REST Services

UNIT-II

SERVLETS: Servlet Lifecycle, sending HTML information, Session tracking, JDBC API, Applications.

STRUTS: An introduction to Struts Framework, Basic components of struts, Model Layer, view Layer, Controller Layer, and Validator.

UNIT-III

EJB ARCHITECTURE: EJB –EJB Architecture – Overview of EJB software architecture – View of EJB – Conversation – Building and Deploying EJBs – Roles in EJB.

EJB APPLICATIONS: EJB Session Beans – EJB entity beans – EJB clients – EJB Deployment – Building an application with EJB.

UNIT-IV

CORBA: CORBA – Distributed Systems – Purpose – Exploring CORBA alternatives – Architecture overview – CORBA and networking model – CORBA object model – IDL – ORB – Building an application with CORBA.

UNIT-V

COM: COM – Data types – Interfaces – Proxy and stub – Marshalling – Implementing server/Client – Interface pointers – Object Creation, Invocation, Destruction – Comparison

COM and CORBA – Introduction to .NET – Overview of .NET architecture–Marshalling – Remoting

Suggested Reading:

- 1) Robert Orfali, Dan Harkey and Jeri Edwards, “The Essential Client/server Survival Guide”, Galgotia publications Pvt. Ltd., 2002.(Unit 1)
- 2) Tom Valesky, “Enterprise Java Beans”, Pearson Education, 2002.(Unit 2 & 3)
- 3) Jason Pritchard. “COM and CORBA side by side”, Addison Wesley,2000 (Unit 4 & 5)
- 4) Jesse Liberty, “Programming C#”, 2nd Edition, O’Reilly press,2002. (Unit 5)
- 5) Struts: the complete reference By James Holmes Edition: 2, illustrated Published by McGraw-Hill Professional, 2006(added)(unit-2)
- 6) Java Servlet Programming By Jason Hunter, William Crawford Edition: 2, illustrated Published by O'Reilly, 2001(unit-2)(added)
- 7) Arno Puder, kay Romere and Frank pilhofer. Distributed Systems Architecture, Morgan Kaufman 2006
- 8) Mowbray, “ Inside CORBA”, Pearson Education, 2002.
- 9) Jeremy Rosenberger, “Teach yourself CORBA in 14 days”, Tec media,2000