Paper -IV(2) (MCA-542):Advanced Java Programming

UNIT- I

J2EE Platform: Enterprise architecture style(2 tier, 3 tier, N tier), J2EE run time, J2EE APIs, J2EE technology, web components, EJB, Developing J2EE applications.

Database Programming with JDBC: Database drivers, java.sql package, javax.sql package, connection pooling, distributed transactions, RowSet operations.

UNIT-II

Servlet Programming: Servlet implementation, Servlet configuration, Servlet life cycle, Requests and Responses, Servlet Session, HTTP protocol, Web Containers and Web applications.

Directory Services and JNDI: Naming and directory services, using JNDI, JNDI service providers, Java and LDAP, LDAP operations.

UNIT-III

Distributed Computing using RMI: RMI architecture, RMI exceptions, developing applications with RMI, parameter passing in RMI, custom sockets and SSL.

Mail protocols: SMTP, POP3, IMAP, MIME, JavaMail overview, JavaMail API, working with mail (reading a mail, sending a mail, deleting a mail, working with attachments).

UNIT-IV

JSP Basics and Architecture: JSP directives, Scripting elements, Standard actions, implicit objects, JSP tags, Tag Library, Tag Handlers

UNIT-V

EJB Architecture and Design: What are EJBs, EJB Components, Session beans, Entity beans, Message Driven beans, Life Cycle of Beans, EJB container and its services, working with EJB, design of the EJB tier

Suggested Book:

1. S. Allamaraju and C. Buest: Professional Java Server Programming J2EE 1.3 Editions, SPD.