ENTERPRISE COMPUTING IN JAVA

Paper Code: ETIT-421	**L**	**T/P**	**C**
Paper: Enterprise Computing in JAVA	**3**	**0**	**3**

INSTRUCTIONS TO PAPER SETTERS: **MAXIMUM MARKS: 75**

1. Question No. 1 should be compulsory and cover the entire syllabus. This question should have objective or short answer type questions. It should be of 25 marks.
2. Apart from Question No. 1, rest of the paper shall consist of four units as per the syllabus. Every unit should have two questions. However, student may be asked to attempt only 1 question from each unit. Each question should be of 12.5 marks.

Objective: In this course student will learn about J2EE technology and will be able to develop dynamic websites. This course will explain how Enterprise JavaBeans (EJBs) contain the application's business logic and business data.

Pre-requisites: Core java

UNIT I

Introduction to J2EE and building J2EE applications, MVC architecture, Introduction to servlets and its life cycle , problems with cgi-perl interface , generic and http servlet , servlet configuration, various session tracking techniques, servlet context, servlet configuration, servlet collaboration.

[T1, T2] [No. of Hours: 10]

UNIT II

JSP Basics and Architecture: JSP directives, Scripting elements, standard actions, implicit objects, JSP design strategies.

Struts: Introduction of Struts and its architecture, advantages and application of Struts.

[T1, T2] [No. of Hours: 12]

UNIT III

EJB Fundamentals: Motivation for EJB, EJB Echo system, J2EE technologies, Enterprise beans and types, distributed objects and middleware, developing EJB components, remote local and home interface, bean class and deployment descriptor.

[T1, T2] [No. of Hours: 10]

UNIT IV

Introducing session beans: Session beans life time, statefull and Stateless session beans, lifecycle of session beans.

Introducing Entity beans: Persistence concepts, features of entity beans, entity context,
Introduction to JMS & Message driven beans.

[T1, T2] [No. of Hours: 10]

Text Books:

[T1] Ed Roman, Scott W Ambler, Tyler Jewell, "Mastering Enterprise Java Beans", Wiley, 2nd Ed., 2005.

[T2] Govind Sesadri , "Enterprise Java Computing: Application and Architectures", Cambridge University Publications, 1999.

Reference Books:

[R1] Ted Neward, "Effective Enterprise Java", Eddison -Wesley, 2004.

[R2] Jim Farley, William Crawford, " Java Enterprise in a Nutshell", O'Reilly and Associates, 3rd Ed.

[R3] Austin Sincock , "Enterprise Java for SAP" , A Press Publications.

[R4] Joe Wigglesworth and McMilan Paula, "Java Programming: Advanced Topic", Thomson, 3rd Ed., 2003.

[R5] Subrahamanyam Allamaraju, Cedric Buest, "Professional Java Server Programming, J2EE, Apress, 1.3 Ed., 2005.

[R6] Ivan Bayross and Sharanam Shah, "Java Server Programming", Shroff.

[R7] John Hunt and Chris Loftus, "Guide to J2EE: Enterprise Java" Springer Verlag Publications.

[R8] Govind Seshadri, "Enterprise Java Computing: Application and Architectures", Cambridge University Press, 1999.