SARDAR PATEL UNIVERSITY
Programme: MCA
Semester: V
Syllabus with effect from: June 2015

Paper Code: PS05EMCA02	**Total Credit: 4**
Title Of Paper: Advanced Java Programming	

Unit	Description in detail	Weighting (%)
1	**Java Servlets and Java Sever Pages(JSP) - I** Introduction to Java servlets, The servlet life cycle Using generic servlets and HTTP servlets, Introduction to Java Server Pages JSP Architecture and life cycle, Developing simple JSP pages Introduction to security in servlets/JSP environment, Case studies	
2	**Java Sever Pages(JSP) - II** JSP directives, JSP scripting elements JSP action elements, JSP implicit objects Introduction to internationalization, Case studies	
3	**The Struts Framework** Introduction to the struts framework and the MVC architecture, Struts actions, interceptors, Struts tag libraries Struts validators, Struts configuration, Case studies	
4	**Hibernate** Understanding object relational persistence, Hibernate mapping Managing entity identity, Mapping class inheritance Integrating Hibernate with Struts, Case studies	
5	**Enterprise Java Beans (EJB)** Introduction to Java EE architecture, EJB Overview Entity Beans, Session Beans, Message Driven Beans, Integrating EJB and Hibernate, Case studies	
6	**Java EE Design Patterns** Introduction to design patterns, Using design patterns in Java EE Generic patterns, Presentation tier patterns Business tier patterns, Persistence patterns, Case studies	

Basic Text & Reference Books

- Bayross Ivan, Shah Sharanam, Bayross Cynthia and Shah Vaishali: Java Server Programming, 2nd Edition, Shroff Publishers and Distributors Pvt. Ltd., 2008
- Brown, Chad and Stanlick : Struts 2 in Action, Dreamtech Press, 2011
- Bauer Chritian and King Gavin : Java Persistence with Hibernate, Dreamtech Press, 2010
- Panda, Rahman and Lane : EJB 3 in Action, Dreamtech Press, 2010
- Bond, Law, Longshaw, Haywood and Roxburgh : Teach yourself J2EE, 2nd Edition, Pearson Education, 2007
- Shah Sharanam and Shah Vaishali : Struts 2 for beginners, 2nd Edition, Shroff Publishers and Distributors Pvt. Ltd., 2009
- Koegh Jim : The Complete Reference J2EE, Tata McGraw - Hill, 2006