PCA 103 WEB TECHNOLOGIES				
	L	T	P	Cr
	3	0	2	4.0

Course Objective: To learn, understand and create different techniques related to the development of web pages, web sites and web applications

Web Essentials: Clients, Servers and communication, Concepts, Architecture of Internet, Design of Crawler, Ranking Algorithms – PageRank, HITS, and their modifications, Web Pages, HTML, DHTML.

Introduction to Semantic Web: Web 2.0, Web 3.0, XML - Grammar rules, namespaces, and schemas, RDF, RDFS, OWL, Ontologies.

Understanding Web Services: Managing the web services specifications, key components, tools and vendors, Advantages of web services, Disadvantages and pitfalls of Web Services, Comparison of web services and other technologies. SOA, Major components of the architecture SOAP, XML, HTTP, Cookies, WSDL, XML schema, UDDI, Interactions between components

Building Web Services: Creating web services with state-of-the-art tools like Apache Axis, Java Server Pages programming,

E-commerce- E business model, E-marketing, Online payments and security, Online transactions, Web servers.

E-Governance: Phases of E-Governance, Transition from E- Business to E-Governance, Vision of E-Governance, E-Governance and digital divide, E-Governance business model, Partnering, Outsourcing and E-Procurement, , E-Governance web site design, Evaluation and interoperability frameworks, Trust and security in E-Governance. E-Government in global perspectives, Other E-Governance Applications like E-Health, E-Learning.

Laboratory work: Development of web pages in HTML, DHTML and XML. Programming for web in Java and JSP. Building and implementing Web services.

Recommended Books

1. Jackson Jeffrey C., Web Technologies: A Computer Science Perspective, Pearson Education Inc (2008).
2. Newcomer Eric, Lomow Greg, Understanding SOA with Web Services , Pearson Education Inc (2008).
3. Whiteley Devid, E-Commerce, McGraw Hill (2000).
4. Joseph, P. T., E-Commerce: An Indian Perspective, PHI (2006).