RAJIV GANDHI PROUDYOGIKI VISHWAVIDYALAYA, BHOPAL

Credit Based Grading System

Information Technology, VI-Semester

Elective –II IT-6005(3): Web Technology

UNIT I

History of the internet, internetworking concepts, architecture, and protocol: switch, router, protocols for internetworking, internet address and domains. Introduction to World Wide Web (WWW), working of web browser and web server, Web server and its deployment, N-tier architecture, services of web server, Common gateway interface (CGI), Uniform Resource Locator (URL), format of the URL, Hyper Text Transfer Protocol (HTTP), feature of HTTP protocol HTTP request-response model, Hyper Text Transfer Protocol Secure (HTTPS).

UNIT II

Introduction to Hyper Text Markup Language (HTML), HTML elements, XHTML syntax and Semantics, eXtensible Markup Language (XML), element, attributes, entity declarations, DTD files and basics of Cascading Style Sheet (CSS).Document object Model (DOM) history and levels, Document tree, DOM event handling.

UNIT III

Introduction to Java Script, Basic concepts, variables and data types, functions, conditional statements, Loops, Operators, Arrays, Standard Objects and form processing in Java.

UNIT IV

Evaluation of web applications, type of web documents, feature of web pages, multitier web applications, introduction to Apache web server, Security in application: authentication, authorization, auditing, security issues, security on the web, proxy server, Firewall. Middleware Concepts, CORBA, Java Remote Method Invocation (RMI), Message Oriented Middleware (MOM), EJB, Microsoft's Distributed Component Object Model(DCOM) Web Servers HTTP request types System Architecture Server side Scripting. Web server and its deployment, Web client, services of web server, mail server proxy server, multimedia server.

UNIT V

Introduction to servlet, Overview Architecture Handling HTTP Request, Get and post request, redirecting request multi-tier applications, Introduction to JSP, basic JSP, Java Bean class and JSP. Setting up an Open Data Base Connectivity (ODBC) data source.

References:-

1. J. C. Jackson, Web Technologies: A computer science perspective, Pearson Education.
2. A. S. Godbole & A. Kahate, Web Technologies: TCP/IP Architecture, and Java Programming, TMH.
3. Paul S. Wang Sanda, S Katila, An Introduction to Web Design, Programming, CENGAGE Learning.
4. N.P.Gopalan, J.Akilandeswari, Web Technology: A developer's Perspective, PHI Learning.