MARIS STELLA COLLEGE, VIJAYAWADA-8

(An autonomous college affiliated to Krishna University)

Department of Computer Science

Academic Year 2019 - 2020

Title   **: Internet Technologies**

Semester   **: V**   **Paper Code: COMPC077**

Course Objectives:

- To provide students with a fundamental understanding as to how an HTML, DHTML, XML -compliant web site is developed, implemented, and maintained.
- To provide knowledge on XHTML, Cascading Style Sheets, and JavaScript whereby students are able to program, in these languages, without the aid of web-development software.
- To provide knowledge on web architecture, web services, client side and server side scripting technologies to focus on the development of web-based information systems and web services.
- To provide skills to design interactive and dynamic web sites.

Course Outcome: Upon successful completion of the course, a student will be able:

1. Describe the components of the Internet and Web technology;

2. Analyse common Internet applications such as marketing, collaboration, electronic commerce and document management;

3. Explain the basics of Internet technology, such as http and the World Wide Web, HTML, and Java Scripts;

4. Create WWW pages to serve as front-end to client/server, Internet applications;

5. Effect client-side programming using tools such as JavaScript;

6. Be skilled, at a beginners' level, at analysing and designing Internet applications; implementing the design using the client/server model; testing and documenting the solutions developed.
7. To understand the web architecture and web services.
8. To practice latest web technologies and tools by conducting experiments.

9. To design interactive web pages using HTML and Style sheets.

Syllabus

UNIT – I   **8 Hours**

Introduction to Web Design: Introduction to Hypertext Mark-up Language (HTML), document Type Definition (DTD), creating web pages, Graphical Elements, Lists, Hyperlinks, Tables, Web Forms, inserting images, frames.

Customized Features: Cascading Style Sheets (CSS), Font Attributes, Color and Background Attributes, Text Attributes, Border Attributes, Margin Related Attributes, List Attributes.

UNIT – II   **10 Hours**

Java Script: Data Types and Literals, Operations and Expressions in JavaScript, Conditional Checking, Super Controlled-Endless loops, Functions: Built-in Functions, User defines Functions, dialog boxes.

Dynamic HTML: Introduction, DHTML document object model and collections, Event handling, filters and transitions, data binding.

UNIT - III   **10 Hours**

Extensible Mark-up Language (XML): Introduction, HTML Vs. XML, Syntax of the XML Document, XML attributes, XML Validation.

JDBC: The concept of JDBC, JDBC Driver Types, JDBC Packages, A Brief Overview of the JDBC Process: Loading the JDBC Driver, Connect to DBMS, Create and Execute a SQL Statement, Process Data Returned by the DBMS, Terminate the connection to the DBMS. Database Connection: The connection, Time Out, Result Set.

UNIT IV   **10 Hours**

Introduction to Java Server pages (JSP): What is Java Server Pages, HTTP and Servlet Basics: The HTTP Request/ Response Model, Servlets, JSP Overview: The Problem with Servlets, The Anatomy of a JSP Page, JSP Processing, JSP Application Design with MVC, Setting Up the JSP Environment, Implicit JSP Scripting Objects, Conditional Processing, Displaying Values. Using an expression to set an Attribute, Declaring Variables and Methods, Error Handling and Debugging, Sharing Data between JSP Pages, Requests, and Users, Database Access.

UNIT- V   **8 Hours**

Introduction to Active Server pages (ASP): Introduction, Advantages of Using ASP, First ASP Script, Process of ASP Script With forms, Variables and Constructs, Subroutines, Include/Virtual, ASP control Structure: Branching Structure, If… Then, Select Case, Looping Structure, for… Next, for Each Next, Do while, Do Loop while, jumping statement, Procedures, Functions.

Prescribed book:

1. Web Enabled Commercial Application Development Using Html, Dhtml, javascript, Perl Cgi By Ivan Bayross, BPB Publications, 2009.

2. BIG Java Cay Horstmann, Wiley Publication , 3rd Edition., 2009

3. Java 7 ,The Complete Reference, Herbert Schildt, 8th Edition, 2009.

4. The Complete Reference J2EE, TMH, Jim Keogh, 2002.

5. Java Server Pages, Hans Bergsten, Third Edition, O'Reilly Media December 2003.
6. N.P Gopalan, J.Akilandesari, "Web Technology – A Developer's perspective", PHI (2008).

Reference Books: N.P. Gopalan, J. Akilandesari, "Web Technology – A Developers perspective", PHI (2008).

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BLUE PRINT OF MODEL PAPER

❖ The paper consists of two sections.

❖ All questions are compulsory from all parts.

SECTION – A

❖ Consists of Ten short answer questions from five units.

❖ Each question carries **1 Mark.**

SECTION – B

❖ Consists of five essay answer questions from **five units** with internal choice.

❖ Each question carries **10 Marks.**

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Department of Computer Science
Model Question Paper

Title   :   Internet Technologies

Paper Code: COMPC0 77   **Max. Marks: 60**

Semester   : V   **Time: 3 Hrs**

Section – A

Answer all the questions.   **10*1=10M**

1.
- a. What is List tag?
- b. What Border Attributes in CSS?
- c. Write the DataTypes in JavaScript?
- d. Write a short data binding in DHTML?
- e. What are XML attributes?
- f. Write about Database Connection in JDBC?
- g. What are Java Server Pages?
- h. Hoe to Declaring Variables in JSP?
- i. Write the Advantages of Using ASP?
- j. Write about jumping statement in ASP?

Section – B

Answer the following: **5*10=50M**

2. (a). Write a brief note on DTD.
   (b). Explain about Hyperlinks and its Types.
OR
   (c). Explain in detail about CSS.

3. (a). Explain about the Conditional Checking and Super Controlled-Endless loops
OR
   (b). Explain about DHTML document object model and collections and Event handling.

4. (a). What is the Syntax of the XML Document and what are XML Validations
OR
   (b). Describe Overview of the JDBC Process?

5. (a) Explain about HTTP and Servlet Basics.
   (b) Explain in detail about JSP overview.
OR
   (c). How to declare the variables in JSP.
   (d). Explain how a user share Data between JSP Pages

6. (a). What are the Advantages of Using ASP.
   (b) Explain about the Variables and Constructs with examples in ASP
OR
   (c). List the ASP Control Structures with syntaxes and respective Examples.