DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
QUESTION BANK

SUBJECT   : CS8651 - INTERNET PROGRAMMING
SEM/YEAR: VI / III

UNIT I - WEBSITE BASICS, HTML 5, CSS 3, WEB 2.0

Web Essentials: Clients, Servers and Communication – The Internet – Basic Internet protocols – World Wide Web – HTTP Request Message – HTTP Response Message – Web Clients – Web Servers; **HTML5:** Tables – Lists – Image – HTML5 control elements – Semantic elements – Drag and Drop – Audio – Video controls; **CSS3:** Inline, embedded and external style sheets – Rule cascading – Inheritance – Backgrounds – Border Images – Colors – Shadows – Text – Transformations – Transitions – Animations.

	PART - A		
Q.No	Questions	BT Level	Competence
1.	**List** some of the collaboration tools.	BTL 1	Remember
2.	**Discuss** on how RIA differ from a traditional web application.	BTL 2	Understand
3.	**Tabulate** the difference between internet and intranet.	BTL3	Apply
4.	**Point out** the difference between websites and web server.	BTL 4	Analyze
5.	What is web 2.0? **Give** an example.	BTL 2	Understand
6.	**List** any two rich internet applications.	BTL 1	Remember
7.	**Predict** the benefits of intranet.	BTL 2	Understand
8.	**Assess** advantages of internet.	BTL 5	Evaluate
9.	**Discuss** Extranet.	BTL 2	Understand
10.	When users enter URL address, into a web browser, **assess** how the specific document retrieved from a web server?	BTL 5	Evaluate
11.	**Show** the structure of HTML5.	BTL 3	Apply
12.	**Tell** about difference between HTML and XHTML.	BTL 1	Remember
13.	What do you **infer** from XHTML?	BTL 4	Analyze
14.	**Classify** different table tag**.**	BTL 3	Apply
15.	**Define** CSS and list the features.	BTL 1	Remember
16.	**Name** the three ways of inserting a style sheet.	BTL 1	Remember
17.	**Classify** the need for cascading style sheet**.**	BTL 4	Analyze
18.	**Prepare** a simple code using image map.	BTL 6	create
19.	**List** the different types of style sheet.	BTL 1	Remember
20.	**Create** simple code snippets for inline style sheet.	BTL 6	Create

Q.No	Questions		BT Level	Competence
	PART – B			
1.	**Demonstrate** in detail the RIA architecture. Give the merits and demerits of also.	(13)	BTL 3	Apply
2.	**Summarize** the overview of internet technologies.	(13)	BTL 5	Evaluate
3.	(i) **Explain** the functionalities of Webserver and Webclient in detail. (ii) **Express** the information provided by URL.	(7) (6)	BTL 2	Understand
4.	(i) **Examine** the enhanced features in HTML 5.0 with a neat example. (ii) **Create** an XHTML document that marks up your resume.	(7) (6)	BTL 1	Remember
5.	**Illustrate** the three ways of inserting a CSS to a document with example.	(13)	BTL 3	Apply
6.	(i) **Write** short notes on Internet, Intranet and Extranet. (ii) **Differentiate** GET and POST method.	(7) (6)	BTL 1	Remember
7.	(i) **Describe** the structure of the HTTP request and response message. (ii) **Explain** about the XHTML DTD with an example.	(7) (6)	BTL 6	Create
8.	(i) **Discuss** the basic structure of HTML5. (ii) Write and **discuss** a program in HTML using image tag, font tag, hyperlink tag.	(7) (6)	BTL 2	Understand
9.	Write and **discuss** an HTML script which creates a web page which should display some of the egg. Colleges in Tamil Nadu in a tabular form with name, address and URL of the web site of the college. A candidate should select the required department which is listed as items from a form. Candidate's selection should be consolidated and displayed finally.	(13)	BTL 2	Understand
10.	(i) State and **explain** the various HTML elements in detail. (ii) **Explain** the way in which data can be presented in a tabular form using HTML.	(7) (6)	BTL 4	Analyze
11.	(i) **Summarize** the difference between HTML and XHTML. (ii) **Create** a webpage using background-image property where the code has to written in XHTML.	(7) (6)	BTL 1	Remember
12.	(i) **Explain** the working principle of web server with neat sketch. (ii) **Compare** and **contrast** between embedded stylesheet and external style sheet.	(7) (6)	BTL 4	Analyze
13.	(i) **Describe** the core syntax of CSS with the help of some suitable example. (ii) **List** and explain in detail the types of selector strings.	(7) (6)	BTL 1	Remember
14.	**Explain** the significance of XHTML with the help of a real time application. Write necessary code snippets to display data in a table.	(13)	BTL 4	Analyze

	PART - C			
Q.No	**Questions**		**BT Level**	**Competence**

1.	**Compose** a brief notes on each one of the following RIA technologies
	   i) AJAX and Flex
	   ii) Silverlight and JavaFx
		(15)	BTL 5	Evaluate

2.	**Create** the HTML5 code for creating a feedback form as shown here. Include comments in code to highlight the markup elements and its purpose. The HTML form should use POST for submitting the form to a program *ProcessContactForm.php*. Name* Email Address* Telephone Enquiry* Message* **Submit** *indicates a required field	(15)	BTL 6	Create
3.	**Create** a form in HTML5 to provide the list of grocery for the month from the list in the website. Create using forms, lables, text boxes, lists. Allow the user to enter his details to get the grocery delivered to his house.	(15)	BTL 6	Create
4.	**Summarize** a XHTML program to display data in a table.	(15)	BTL 5	Evaluate

UNIT II - CLIENT SIDE PROGRAMMING

Java Script: An introduction to JavaScript – JavaScript DOM Model – Date and Objects – Regular Expressions – Exception Handling – Validation – Built-in objects – Event Handling – DHTML with JavaScript – JSON introduction – Syntax – Function Files – Http Request – SQL.

	PART - A		
Q.No	**Questions**	**BT Level**	**Competence**
1.	**Evaluate** various Java Script Object models.	BTL5	Evaluate
2.	**Define** DOM.	BTL1	Remember
3.	**Give** any four methods of Date objects.	BTL2	Understand
4.	**Write** the JavaScript methods to retrieve the data and time based on the computer locale.	BTL6	Create
5.	Can you **list** the different methods defined in document and window object of JavaScript.	BTL1	Remember
6.	**Name** which parser is best in parsing in large size documents. Why?	BTL1	Remember
7.	**Summarize** benefits of using JavaScript code in an HTML document.	BTL2	Understand
8.	**Predict** the need for client and server side scripting.	BTL2	Understand
9.	**Interpret** how exceptions are handled in Java script.	BTL2	Understand
10.	**Define** JavaScript statement with an example.	BTL1	Remember

11.	**Point out** any two techniques of event programming.		BTL4	Analyze
12.	**What** is DHTML?		BTL1	Remember
13.	**Differentiate** HTML and DHTML		BTL3	Apply
14.	**Point** out the key features of DHTML.		BTL4	Analyze
15.	**Classify** the data types in JSON		BTL4	Analyze
16.	**How** to convert text into a JavaScript object using JSON?		BTL3	Apply
17.	**Evaluate** the syntax to create arrays in JSON.		BTL5	Evaluate
18.	**How** will you make a request with JSON?		BTL3	Apply
19.	**Define** DDL and DML		BTL1	Remember
20.	**Write** SQL query to find minimum and maximum marks in a table.		BTL6	Create

PART - B				
Q.No	Questions		BT Level	Competence
1.	i) **Examine** variables and data types in JavaScript. ii) **Give** various Operators in JavaScript.	(7) (7)	BTL1	Remember
2.	(i) **Summarize** about DOM Model. (ii) **Describe** the concepts of Popup Boxes.	(7) (6)	BTL2	Understand
3.	(i) **Write** short notes on Date and Objects. (ii) **Explain** in detail about Regular expressions.	(7) (6)	BTL1	Remember
4.	(i) **Describe** the control statements in Java. (ii) **Discuss** any two validation functions in java script.	(7) (6)	BTL2	Understand
5.	(i) **Write** a Java script to find the Prime number between 1 and 100. (ii) **Write** a Java Script to find factorial of a given number.	(7) (6)	BTL6	Create
6.	(i) **Demonstrate** a java script for displaying the context menu. (ii) **Demonstrate** a java script to display the welcome message using the alert whenever button of a html form is pressed.	(7) (6)	BTL3	Apply
7.	(i) Evaluate how DOM Nodes and Trees can be used. (ii) Evaluate the way of Traversing and modifying a DOM Tree.	(7) (6)	BTL5	Evaluate
8.	(i) **Discuss** the concepts of Registering Event handlers. (ii) **Discuss** the concepts of Event Handling.	(7) (6)	BTL3	Apply
9.	**Analyze** a web page to create a clock with timing event.	(13)	BTL4	Analyze
10.	(i) **Write** short notes on DHTML with JavaScript. (ii) **Classify** moving elements.	(7) (6)	BTL1	Remember
11.	**Explain** the concept of JSON with example.	(13)	BTL1	Remember
12.	**Describe** in detail about JSON Objects and Arrays.	(13)	BTL2	Understand
13.	**Analyze** about Function files and Http Request with sample program.	(13)	BTL4	Analyze
14.	**Summarize** about (i) SQL Data Definition Commands (ii) Data Manipulation Commands.	 (7) (6)	BTL2	Understand

	PART – C			
Q.No	**Questions**		**BT Level**	**Competence**
1.	**Analyze** the merits and demerits of DOM parser with neat example.	(15)	BTL4	Analyze
2.	**Consider** a java script and HTML to create a page with two panes. The first pane (on left) should have a text area where HTML code can bet typed by the user. The pane on the left should have a text area where HTML code can be typed by the user. The pane on the right side should display the preview of the HTML code typed bythe user, as it would be seen on the browser.	(15)	BTL5	Evaluate
3.	**Develop** a DHTML program to handle the user click event.	(15)	BTL6	Create
4.	**Formulate** a JavaScript program that work with JSON.	(15)	BTL6	Create

UNIT III - SERVER SIDE PROGRAMMING

Servlets: Java Servlet Architecture – Servlet Life Cycle – Form GET and POST actions – Session Handling – Understanding Cookies – Installing and Configuring Apache Tomcat Web Server; DATABASE CONNECTIVITY: JDBC perspectives, JDBC program example; **JSP:** Understanding Java Server Pages – JSP Standard Tag Library (JSTL) – Creating HTML forms by embedding JSP code.

	PART - A		
Q.No	**Questions**	**BT Level**	**Competence**
1.	**What** are servlets?	BTL1	Remember
2.	**List** the application of servlets.	BTL1	Remember
3.	**Summarize** the advantages and disadvantages of servlets.	BTL2	Understand
4.	**Show** how is session tracking is achieved by the URL rewriting?	BTL3	Apply
5.	**Compare** GET and POST request type.	BTL4	Analyze
6.	**Summarize** the servlet interface and its methods.	BTL5	Evaluate
7.	**Sketch** the Servlet life cycle.	BTL3	Apply
8.	**Show** the use of 'param' variable in JSP.	BTL3	Apply
9.	**Quote** the uses of cookies.	BTL1	Remember
10.	**Analyze** about java scriplet.	BTL4	Analyze
11.	**Express** appropriate java script code to remove an element (current element) from a DOM.	BTL2	Understand
12.	**Define** JSP.	BTL1	Remember
13.	**List** any three advantages of java servlet over JSP.	BTL1	Remember
14.	**Rewrite** the code segment to store current server time in session using Java Servlet API.	BTL6	Create
15.	**Compare** the difference between JSP and servlet.	BTL4	Analyze
16.	**Summarize** briefly about the interaction between a webserver and a servlet.	BTL5	Evaluate
17.	**Define** JDBC.	BTL1	Remember
18.	**Formulate** the three methods that are central to the life cycle of the servlet.	BTL6	Create
19.	**Distinguish** between servlets and JSP.	BTL2	Understand
20.	**Discuss** the need to use JSTL tags?	BTL2	Understand

	PART - B			
Q.No	**Questions**		**BT Level**	**Competence**
1.	(i) **Integrate** how servlets work and its life cycle. (ii) Explain and **develop** the Servlet API.	(7) (6)	BTL6	Create
2.	(i) **Analyze** a JavaScript to find factorial of a given number. (ii) **Differentiate** GET and POST method.	(7) (6)	BTL4	Analyze
3.	**Demonstrate** the Servlet architecture and explain its working principle.	(13)	BTL2	Understand
4.	**Consider** a database that has a table Employee with two columns Employee Id and Name. Assume that the administrator user id and password to access to access the database table are Scott and Tiger. Write a JDBC program that can query and print all entries in the table employee. Make the database using type 2 driver database.driver and connection string jdbc :db.oci.	(13)	BTL5	Evaluate
5.	**Describe** in detail the session handling in server side programming.	(13)	BTL1	Remember
6.	(i) **Discuss** about JSTL. (ii) **Summarize** a client server JSP program to find simple interest and display the result in client.	(7) (6)	BTL2	Understand
7.	**Explain** the use of cookies for tracking for tracking requests with a program.	(13)	BTL4	Analyze
8.	(i) **Explain** about the standard actions in JSP. (ii) **Analyze** MVC architecture of JSP.	(7) (6)	BTL4	Analyze
9.	**Explain** in detail about Servlet database connectivity with an example of student database.	(13)	BTL1	Remember
10.	**Demonstrate** the procedure of installing and configuring Apache Tomcat.	(13)	BTL3	Apply
11.	(i) **Discuss** about the Servlet life cycle. (ii) **List** JSP advantages.	(8) (5)	BTL2	Understand
12.	(i) **Explain** and write a simple JDBC program. (ii) **List** various JSP scripting components.	(7) (6)	BTL1	Remember
13.	(i) **Demonstrate** with suitable example for core and formatting tags in JSTL. (ii) **Demonstrate** with suitable example for SQL and XML tags in JSTL.	(7) 6)	BTL3	Apply
14.	**Define** HTML and JSP. Use the same and design a scientific calculator.	(13)	BTL1	Remember
	PART – C			
Q.No	**Questions**		**BT Level**	**Competence**
1.	**Design** a HTML forms by embedding JSP code for submission of a resume to a job portal website with appropriate database connectivity.	(15)	BTL6	Create

2.	**Evaluate** a complete query application for books database using JDBC.	(15)	BTL5	Evaluate
3.	**Write** a program that allows the user to **select** a favorite programming language and post the choice to the server. The response is a web page in which the user can click a link to view a list of book recommendations. The cookies previously stored on the client are read by the servlet and form a web page containing the book recommendation. Use servlet cookies and HTML.	(15)	BTL4	Analyze
4.	**Develop** a JSP program to display the grade of a student by accepting the marks of five subjects.	(15)	BTL6	Create

UNIT IV - PHP and XML

PHP: An introduction to PHP – Using PHP – Variables – Program control – Built-in functions – Form Validation – Regular Expressions – File handling – Cookies – Connecting to Database; **XML:** Basic XML – Document Type Definition – XML Schema DOM and Presenting XML, XML Parsers and Validation, XSL and XSLT Transformation, News Feed (RSS and ATOM).

PART - A

Q.No	Questions	BT Level	Competence
1.	**Define** PHP. List the features.	BTL1	Remember
2.	**List** the rules for creating variables in PHP.	BTL1	Remember
3.	**Illustrate** a PHP program to determine the type of browser that a web client is using.	BTL3	Apply
4.	**Name** any four built-in functions in PHP.	BTL1	Remember
5.	**Infer** when should the super global arrays in PHP be used? Which super global array in PHP would contain a HTML form's POST data?	BTL4	Analyze
6.	**Classify** the difference between echo() & print() functions.	BTL3	Apply
7.	**List** any two advantages of XML document.	BTL1	Remember
8.	**Give** the difference between DTD and XML schema for defining XML document structure with appropriate examples.	BTL2	Understand
9.	**Analyze** about Query String in PHP.	BTL4	Analyze
10.	**Show** an example for XML namespace.	BTL3	Apply
11.	**Define** XML parse tree.	BTL1	Remember
12.	**Identify** why XSLT is an important tool for development of web applications.	BTL1	Remember
13.	**Assess** the data types in XML schema.	BTL5	Evaluate
14.	**Explain** DTD for XML Schemas.	BTL2	Understand
15.	**Evaluate** the process of displaying XML document in browser.	BTL5	Evaluate
16.	**Summarize** about the need for Namespace in XML.	BTL2	Understand
17.	**Analyze** on ATOM in RSS.	BTL4	Analyze
18.	**Summarize** the advantage of RSS documents?	BTL2	Understand
19.	**Rewrite** the declaration for elements in XML.	BTL6	Create
20.	How would you **prepare** the steps to get the RSS file on web?	BTL6	Create

Q.No	Questions		BT Level	Competence
PART - B				
1.	(i) **Describe** about the introduction and installation of PHP. (ii) **Design** simple calculator using PHP.	(7) (6)	BTL1	Remember
2.	**Explain** about control statements and data types in PHP with example.	(13)	BTL2	Understand
3.	(i) **Create** an XML document that marks up various sports and their descriptions. Use XSLT to tabulate neatly the elements and attributes of the document. (ii) **Illustrate** a JSP page that enables the user to input the first name and in response outputs the last name.	(7) (6)	BTL3	Apply
4.	**Create** a webserver based chat application using PHP. Theapplication should provide the following functions Login, Send message (to one or more contacts) and Receive messages (from one or more contacts)	(13)	BTL6	Create
5.	(i) **Write** a PHP program that tests whether an email address is input correctly. Test your program with both valid and invalid email addresses. (ii) **List** out the various activities involved in MySQL and PHP connectivity.	(7) (6)	BTL1	Remember
6.	**Identify** and explain about database connectivity illustrate PHP connectivity with any of the databases.	(13)	BTL1	Remember
7.	(i) **Discuss** on methods for using cookies in PHP. (ii) **Give** a note on regular expressions.	(7) (6)	BTL2	Understand
8.	**Summarize** in detail the XML schema, built in and user defined data types.	(13)	BTL5	Evaluate
9.	(i) **Demonstrate** the building blocks of DOM. (ii) **Classify** the types of DTD.	(7) (6)	BTL3	Apply
10.	How do you **infer the significant** differences between DID and XML schema for defining XML document structures with appropriate examples.	(13)	BTL4	Analyze
11.	(i) **List** out data types data types of XML (ii) **Explain** about the attributes of XML.	(7) (6)	BTL1	Remember
12.	**Summarize** on the following (i) DOM based Parsing. (ii) SAX based Parsing.	(7) (6)	BTL2	Understand
13.	(i) **Compare and contrast** RSS & ATOM. (ii) **Explain** in detail about XSL elements.	(7) (6)	BTL4	Analyze
14.	**Explain** in detail about (i) XSL and XSLT transformation (ii) Comparison of DOM & SAX	(7) (6)	BTL4	Analyze

PART – C

Q.No	Questions		BT Level	Competence
1.	**Explain** how you shall carry out String Manipulations using a PHP Program.	(15)	BTL4	Analyze
2.	**Design** a PHP application for College Management System with appropriate built-in functions and database.	(15)	BTL6	Create
3.	**Design** application to send an email using PHP.	(15)	BTL6	Create
4.	**Summarize** about XML schema and XML Parsers and Validation.	(15)	BTL5	Evaluate

UNIT V - INTRODUCTION TO AJAX and WEB SERVICES

AJAX: Ajax Client Server Architecture – XML Http Request Object – Call Back Methods; **Web Services:** Introduction – Java web services Basics – Creating, Publishing, Testing and Describing a Web services (WSDL) –Consuming a web service, Database Driven web service from an application – SOAP.

PART - A

Q.No	Questions	BT Level	Competence
1.	**Describe** AJAX Control Extender Toolkit.	BTL1	Remember
2.	**Discuss** the advantages of AJAX.	BTL2	Understand
3.	**Identify** the role of a callback function in performing a partial page update in an AJAX application.	BTL1	Remember
4.	**Differentiate** AJAX forms with HTML5 forms.	BTL4	Analyze
5.	What is XML Http Request object? **List** its properties.	BTL1	Remember
6.	**Summarize** the need of SOAP and show its structure.	BTL2	Understand
7.	Can you **develop** the service end point interface in RPC?	BTL6	Apply
8.	**List** any four examples of web services.	BTL1	Remember
9.	**Discover** an example for web service registry along with its functions.	BTL3	Apply
10.	**Analyze** the need for web service.	BTL4	Analyze
11.	**Give** the uses of WSDL along with its definition.	BTL2	Understand
12.	**Compare** SOAP and HTTP.	BTL4	Analyze
13.	**Summarize** the need for enhancing security in web services.	BTL5	Evaluate
14.	**Name** the types of indicators along with the definition.	BTL1	Remember
15.	**Classify** the basic concepts behind JAX-RPC technology.	BTL3	Apply
16.	Can you **illustrate** on Complex types?	BTL3	Apply
17.	**Summarize** the steps for empty element.	BTL5	Evaluate
18.	**Rewrite** the definition for UDDI.	BTL6	Create
19.	**Give** the usage of UDDI in web service.	BTL2	Understand
20.	**Define** WSDL.	BTL1	Remember

	PART - B			
Q.No	Questions		BT Level	Competence
1.	(i) **Describe** in detail about the AJAX architecture. (ii) **List out** the call back methods.	(7) (6)	BTL1	Remember
2.	(i) **Analyze** various concepts of RPC. (ii) **Explain** the basic concepts behind JAX-RPC.	(7) (6)	BTL4	Analyze
3.	**Explain** in detail with an example of Java Web Services.	(13)	BTL6	Create
4.	**Discuss** in detail about creating, publishing and testing of web services.	(13)	BTL2	Understand
5.	(i) **Deduce** any two elements of WSDL. (ii) **Explain** the steps for writing web service.	(7) (6)	BTL5	Evaluate
6.	**Describe** briefly about the elements of WSDL.	(13)	BTL1	Remember
7.	(i) **Summarize** on the structure of SOAP. (ii) **Describe** briefly about SOAP & HTTP.	(7) (6)	BTL2	Understand
8.	(i) **Demonstrate** the building blocks of SOAP. (ii) **Classify** the encoding of struct data and array.	(7) (6)	BTL3	Apply
9.	**Analyze** the various steps in database driven web service with some example.	(13)	BTL1	Remember
10.	**Illustrate** on web services for writing web service client along with the description of WSDL.	(13)	BTL3	Apply
11.	(i) **List out** the installation steps of JWSDP. (ii) **Describe** on Simple Object Access Protocol.	(7) (6)	BTL1	Remember
12.	(i) **Discuss** the XMLHttpRequest Object with example. (ii) **Describe** about Java web service basics.	(7) (6)	BTL2	Understand
13.	(i) **Explain** in detail about SOAP encoding. (ii) **Point out** the RPC representation model.	(7) (6)	BTL4	Analyze
14.	**Explain** the structure of a WSDL document, its elements and their purposes with appropriate examples.	(13)	BTL4	Analyze

PART – C

Q.No	Questions		BT Level	Competence
1.	**Create** an XML HttpRequest to retrieve data from an XML file and display the data in an HTML table. The data to be retrieved is a collection of stationary items stored in an XML file.	(15)	BTL6	Create
2.	**Summarize** Ajax Client server architecture in detail.	(15)	BTL5	Evaluate
3.	**Give** the basic structure of a WSDL and show how they are used to create, publish, test and describe web services.	(15)	BTL6	Create
4.	**Compare** and **contrast** the additional web application architecture and AJAX Based web application architecture.	(15)	BTL4	Analyze