**DHANALAKSHMI SRINIVASAN**

**COLLEGE OF ENGINEERING AND TECHNOLOGY**

**MAMALLAPURAM, CHENNAI**

***(Affiliated to Anna University, Chennai, Approved by AICTE and Accreditated by NACC with B++)***

**DEPARTMENT OF INFORMATION TECHNOLOGY**

**QUESTION BANK**

COURSE CODE : C304

SUBJECT CODE : IT8501 (Regulation 2017)

SUBJECT NAME : WEB TECHNOLOGY

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BATCH : 2020 – 2024

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**QUESTION BANK**

**UNIT – 1**

**PART – A**

1. List any four common browsers.(Remember) – BTL1
2. Define URI.(Remember) – BTL1
3. State the use of web server logs and list the contents of a message log.(Understand) – BTL2
4. List the different basic protocols used in Internet.(Remember) – BTL1
5. What do you mean by Relative URLs? (Understand) – BTL2
6. Write the functions of a Web Server.(Understand) – BTL2
7. Explain the way in which a DNS server resolves addresses.(Understand) – BTL2
8. State the uses of Internet Protocol.(Understand) – BTL2
9. Write short notes on basic Internet protocols.(Understand) – BTL2
10. List and explain the three flavors of HTML.(Remember) – BTL1
11. State the function of DNS and the protocol used.(Understand) – BTL2
12. List and explain any two HTML elements.(Remember) – BTL1
13. Express two rows of horizontal frames using HTML frames.(Understand) – BTL2
14. Write HTML code to display an image.(Understand) – BTL2
15. How will you create a password field in a HTML form? (Remember) – BTL1
16. Express HTML code to create the following table,(Understand) – BTL2

|  |  |
| --- | --- |
| W | X |
| Y | Z |

1. Differentiate HTML and XHTML.(Understand) – BTL2
2. Explain canvas in HTML.(Understand) – BTL2
3. Write the syntax to display the following statement “I am learning Web Programming” (Understand) – BTL2
4. Identify how a scripting language differs from HTML? (Remember) – BTL1

**PART – B**

1.(i) Explain TCP/IP in detail. (7) (Understand) – BTL2

(ii) Explain the purpose and way of creating lists in HTML documents. (6)

2. Recall in detail about Internet and World Wide Web. (13) (Remember) – BTL1

3. Explain in detail the working of the following Internet Protocols. (Understand) – BTL2

(i) TCP/IP (7)

(ii) HTTP (6)

4. (i) List and explain any four HTML elements in detail. (7) (Remember) – BTL1

(ii) State the types of lists supported by HTML and explain them in detail. (6) (Understand) – BTL2

5. Illustrate a HTML document for a company home page. (13) (Understand) – BTL2

6. (i) Explain the capabilities of web client and web server. (7) (Understand) – BTL2

(ii) Write and explain HTTP request message format. (6) (Understand) – BTL2

7. Explain the significance of XHTML with the help of a real time application. Write

necessary code snippets. (13) (Understand) – BTL2

8. How do you create frames? Why do we need them? Develop an application to

explain the same. (13) (Remember) – BTL1

9. (i) Explain the use of relative URL’s with an example. (7) (Understand) – BTL2

(ii) Explain how tables can be inserted into a HTML document with an example. (6)

10. (i) List any two differences between HTML respects to elements and XHTML with

Also explain about the XHTML DTD. (7) (Remember) – BTL1

(ii) Discuss on any four HTTP request methods. (6) (Understand) – BTL2

11. Explain HTML forms in detail along with form elements, attributes and methods.

Write an HTML document to provide a form that collect name and telephone

numbers. (13) (Understand) – BTL2

12. Explain the basic XHTML syntax and semantics. (13) (Understand) – BTL2

13. (i) Explain in detail the functions of a web server. (7) (Understand) – BTL2

(ii) Give the structure of HTTP request and response messages. (6) (Understand) – BTL2

14. Define HTML 5.0. List and explain some of the HTML 5.0 tags with

examples. (13) (Remember) – BTL1

**PART – C**

1.(i) Give the HTTP request message structure and explain it in detail. (8)

(Understand) – BTL2

(ii) List and explain the steps involved in a web based client server

communication. (7) (Remember) – BTL1

2. (i) Explain the most significant HTML elements in detail. (8) (Understand) – BTL2

(ii) Explain the way in which data can be presented in a tabular form using

HTML. (7) (Understand) – BTL2

3. Illustrate an interactive web page for student registration using HTML form

elements. (15) (Understand) – BTL2

4. Express & discuss the HTML frame and table tags. (15) (Understand) – BTL2

**UNIT – II**

**PART – A**

1.Give the syntax of a CSS rule. (Understand) – BTL2

2. Mention the need for cascading style sheets. (Understand) – BTL2

3. Give example for inline style sheet. (Understand) – BTL2

4. How will you include CSS in a web site? (Remember) – BTL1

5. Give some advantages of using Cascading Style Sheets. (Understand) – BTL2

6. How external style sheet is useful in web page design? (Remember) – BTL1

7. Write short notes on text properties in CSS with suitable example. (Remember) – BTL1

8. What is Normal Flow Box Layout in CSS? (Remember) – BTL1

9. List the two forms of style rules with an example. (Remember) – BTL1

10. What is meant by DHTML? (Remember) – BTL1

11. List the ways of positioning an element within a browser window. (Remember) – BTL1

12. What is a JavaScript statement? Give an example. (Remember) – BTL1

13. Explain array creation in JavaScript with example. (Understand) – BTL2

14. List the different methods defined in document and window object of JavaScript. (Remember) – BTL1

15. List and explain any two JavaScript built in objects. (Remember) – BTL1

16. State the types of JavaScript statements with examples. (Understand) – BTL2

17. Write the JavaScript to print “Good Day” using IF-ELSE condition. (Remember) – BTL1

18. Illustrate Write code to return the full URL of a document. (Understand) – BTL2

19. Express Compile the limitations of CSS. (Understand) – BTL2

20. Write CSS to a web page with the following requirements. (Remember) – BTL1

(i) Add a background image of a submarine.

(ii) Set a color to the span elements (different color for each class)

**PART – B**

1. (i) Discuss about JavaScript debugging. (7) (Understand) – BTL2

(ii) Explain in detail CSS border and CSS outline. (6) (Understand) – BTL2

2. (i) Explain any eight CSS text properties. (7) (Understand) – BTL2

(ii) Discuss JavaScript Array object in detail. (6) (Understand) – BTL2

3. (i) List and explain in detail various selector strings. (7) (Remember) – BTL1

(ii) Explain the features of cascading style sheets. (6) (Understand) – BTL2

4. (i) Write a CSS which adds background images and indentation. (7) (Remember) – BTL1

(ii)Explain external style sheet with an example. (6) – (Understand) – BTL2

5. (i) Explain in detail the CSS Box model in detail. (7) (Understand) – BTL2

(ii)List and explain the various positioning schemes in detail. (6) (Remember) – BTL1

6. List and describe the CSS Border Style Properties in detail with illustration. (Remember) – BTL1

7. Write CSS to a web page with the following requirements (Remember) – BTL1

(i) Paint the background gray (2)

(ii) Paint the sidebar yellow (2)

(iii) Set the artist h1 to be only uppercase (2)

(iv) Set the title h2 to be uppercase-first letter (2)

(v) Set a line spacing between the lines (2)

(vi) Set letter spacing between the letters in each span of type instruction

(3)

8. (i) State and explain the types of statements in JavaScript. (6) (Understand) – BTL2

(ii) Explain how functions can be written in JavaScript with an example. (7) (Understand) – BTL2

9. Summarize about debugging in JavaScript. (13) (Understand) – BTL2

10. What are the various JavaScript objects? Explain each with an example. (13) (Understand) – BTL2

11. Show in detail about JavaScript variables and operators. (13) (Remember) – BTL1

12. Write the registration form for the creation of email account with all possible validations using JavaScript. (13) (Remember) – BTL1

13. (i) Explain the JavaScript array handling and array methods. (7) (Understand) – BTL2

(ii) Explain the following JavaScript objects. (6) (Understand) – BTL2

a. RegExp

b. Math

14. (i) Illustrate JavaScript to find sum of first ‘n’ even numbers and display

the result. Get the value of ‘n’ from user. (7) (Understand) – BTL2

(ii) Express JavaScript to find factorial of a given number. (6) (Understand) – BTL2

**PART – C**

1. Express the various aspects of Normal Flow Box Layout in the context of CSS. (Understand) – BTL2 (15)

2. Explain in detail about CSS3. Give the illustration for CSS3 animation. (15) (Understand) – BTL2

3. (i) Explain the way in which JavaScript handles arrays with example. (8) (Understand) – BTL2

(ii) Explain how local and global functions can be written using JavaScript. (7) (Understand) – BTL2

4. (i) Illustrate how do you use JavaScript for form validation? Develop a complete

application that would include information functions to validate the user data.

(Understand) – BTL2

(10)

(ii)Express short notes on JavaScript built-in objects. (5) (Understand) – BTL2

**UNIT – III**

**PART – A**

1. Define host objects. (Remember) – BTL1

2. List the types of event listeners in DOM2. (Remember) – BTL1

3. Illustrate Event Bubbling and Event Capturing. (Understand) – BTL2

4. What is meant by intrinsic event handling? (Remember) – BTL1

5. List and explain any four HTML intrinsic event attributes. (Remember) – BTL1

6. List the various levels of DOM. (Remember) – BTL1

7. Write the usage of DOM style property. (Remember) – BTL1

8. List some of the window object properties. (Remember) – BTL1

9. Express any two mouse events. (Understand) – BTL2

10. Define any two keyboard events. (Remember) – BTL1

11. Summarize Client Side Scripting from Server Side Scripting. (Understand) – BTL2

12. Write a short note on java servlet life cycle. (Remember) – BTL1

13. List the different life cycle methods of Java Servlets. (Remember) – BTL1

14. What is a cookie? (Understand) – BTL2

15. What is the purpose of cookies? (Understand) – BTL2

16. Write the purpose of URL rewriting. (Remember) – BTL1

17. How is session tracking achieved by URL rewriting? (Remember) – BTL1

18. State the use of ServletContext object. (Understand) – BTL2

19. Explain in brief the interaction between a web server and a servlet. (Understand) – BTL2

20. Identify the difference between get request and post request type. (Apply) – BTL3

**PART – B**

1.Explain in detail DOM event handling. Also explain with an example of creating a context menu. [Note: A context menu is one that that is shown when the user right-clicks anywhere in the document]. (13) (Understand) – BTL2

2. (i) Explain about the document tree in detail. (7) (Understand) – BTL2

(ii) Explain DOM event handling in detail. (6)

3. (i) List and explain the various types of document nodes. (7) (Understand) – BTL2

(ii) Explain in detail about event object and event listeners with an

example. (6) (Understand) – BTL2

4. With a suitable example discuss about event propagation. (13) (Remember) – BTL1

5. List the properties of mouse events associated with DOM2 with an example. (13) (Remember) – BTL1

6. What are the various levels of DOM? Explain each of them in detail. (13) (Understand) – BTL2

7. Make use of some of the style object in DOM to modify the elements’ style. (13) (Apply) – BTL3

8. (i) Explain about architecture of servlet. (7) (Understand) – BTL2

(ii) Explain the purpose of the following DOM method and properties, (6)

a.get Element by Id

b.create Element

c.create Text Node

d.append child

e.parent Node

9. Illustrate a servlet to illustrate the principle of Cookies and explain. (13) (Understand) – BTL2

10. Explain the Servlet operation in detail with a sample Servletprogram. (13) (Understand) – BTL2

11. What is a session? Explain how client state is maintained using session and also explain about session tracking and session management using an example. (13) (Understand) – BTL2

12. Explain the servlet life cycle with an example. (13) (Understand) – BTL2

13. Write a Java code for getting the details of the items to be purchased from a client and to update the inventory of the shop after selling. Also bill should be prepared for the client. Maintain the transaction table also just by inserting these purchase itemdetails at the shop use JDBC for transactions. (13) (Remember) – BTL1

14.(i) Write a code for creating cookies with name of person and secret code at the server, after getting these details from client using HTML form. How these details at the server side using HTTP servlet are displayed? (7) (Remember) – BTL1

(ii)Write a code to display the current and yesterday’s gold rate using session object. (6) (Remember) – BTL1

**PART – C**

1. Describe the process of generating dynamic content using servelts. Briefly explain the importance of Document Object Model. (15) (Understand) – BTL2

2. Illustrate With a simple example illustrate how the elements of the HTML document tree structure can be accessed using JavaScript. (15) (Understand) – BTL2

3. Discuss the ways of storing and accessing information using cookies and handling associated issues. (15) (Understand) – BTL2

4. Illustrate a Java Servlet to display net salary of employee, use JDBC connectivity to get employee details from database. (15) (Understand) – BTL2

**UNIT – IV**

**PART - A**

1. Give the advantages of using JSP for server side programming. (Understand) – BTL2

2. Write two basic differences between JSP and servlet. (Remember) – BTL1

3. List the types of directives in JSP. (Remember) – BTL1

4. Explain in brief about Java Scriplet. (Understand) –BTL2

5. Define current date using Java Scriplet. (Remember) – BTL1

6. What is MVC paradigm? (Understand) –BTL2

7. Write short notes on some implicit objects in JSP. (Apply) – BTL3

8. Identify the steps involved in JSP. (Apply) – BTL3

9. Write down the JSP elements? (Remember) – BTL1

10. Explain JSTL? (Understand) – BTL2

11. What is the purpose of namespace? (Understand) –BTL2

12. What is meant by XML namespace? (Understand) – BTL2

13. Define DTD. (Remember) – BTL1

14. What is an XPATH? (Understand) – BTL2

15. List the advantages of XPATH. (Remember) –BTL1

16. How is XML parsing done with SAX? (Remember) – BTL1

17. Compare DOM and SAX in XML processing. (Understand) – BTL2

18. What does XSLT mean? (Understand) – BTL2

19. What is the purpose of XSLT? (Understand) – BTL2

20. Discuss CDATA and PCDATA. (Understand) – BTL2

**PART – B**

1. State and explain the information in a JSP document in detail. (13) (Remember) – BTL1

2. (i) Illustrate a client server JSP program to find simple interest and display the

result in the client. (7) (Understand) – BTL2

(ii)Write about the JSP tag libraries. (6) (Apply) – BTL3

3. Identify the objects associated with JSP and highlight the features of each object.

Explain the various JSP elements. (13) (Understand) – BTL2

4. Explain in detail the creation, instantiation and usage of java beans objects. (13) (Understand) – BTL2

5. What is a JavaBeans component? How will you use the JSP language elements foraccessing Beans in your JSP pages? (13) (Remember) – BTL1

6. Write a JSP code to access a table and records from a student database to

obtain the result of a student. (13) (Apply) – BTL3

7. Classify the implicit objects involved in JavaScript Expression Language. (13) (Understand) – BTL2

8. (i) Explain the role of XML name spaces with examples. (7) (Understand) – BTL2

(ii) Explain the features of XML path language. (6)

9. Explain a XML document to store voter ID, voter name, address and date of birth details and validate the document with the help of DTD. (13) (Understand) – BTL2

10. Write XSLT code to display employee details in a Table form which is stored is

XML. (13) (Apply) – BTL3

11. (i) Explain XPATH nodes in detail. (7) (Understand) – BTL2

(ii) Explain about the object that helps AJAX reload parts of a web page without

reloading the whole page. (6) (Understand) – BTL2

12. (i) List and explain the XML syntax rules in detail. (7) (Remember) – BTL1

(ii) Explain how a XML document can be displayed on a browser. (6) (Understand) – BTL2

13. Explain in detail the XML schema, built in and user defined data type detail. (13) (Understand) – BTL2

14. (i) Explain in detail about XSL. (7) (Understand) – BTL2

(ii) Explain about DOM based XML processing. (6) (Understand) – BTL2

**PART – C**

1(i) What is the significance of JavaBeans classes in the context of JSP? Discuss. (8) (Understand) – BTL2

(ii)Explain about MVC architecture in detail. (7) (Apply) –BTL3

2. Illustrate a Servlet program to display the waiting list status, given the PNR number of a train. Create a JSP to display the information at the client end. (15) (Understand) – BTL2

3. Get the students’ details like name, register number and mark using form. Generate DTD for this XML document. (Understand) – BTL2

Name Regno Mark XYZ 1000 90

ABC 1001 80

RST 1002 89

PQR 1003 87

Generate the collected information in the descending order of marks using XSLT. Results should be displayed in the above format. Write a source code and explain the same. (15)

4. (i) Explain how XSLT transforms the document from one (Word) type to other type (HTML). (8) (Understand) – BTL2

(ii)Describe the basic java bean classes and JSP tag libraries. (7) – (Understand) – BTL2

**UNIT – V**

**PART – A**

1. Explain AJAX. (Understand) – BTL2

2. Write down the advantages of AJAX. (Remember) – BTL1

3. Write down the disadvantages of AJAX. (Remember) – BTL1

4. Identify the technologies used by AJAX. (Apply) – BTL3

5. List all the features of AJAX. (Remember) – BTL1

6. Compare AJAX and JavaScript? (Understand) – BTL2

7. Analyze where AJAX cannot be used? (Analyze) – BTL4

8. Define: AJAX object. (Remember) – BTL1

9. What is web service? (Understand) – BTL2

10. Why do you want to describe a Web Service? (Remember) – BTL1

11. Mention some of the disadvantages of Web Service. (Understand) – BTL2

12. List some examples of web services. (Remember) – BTL1

13. Define serialization. (Understand) – BTL2

14. List the basic concepts behind JAX-RPC technology. (Remember) – BTL1

15. What is UDDI? (Understand) – BTL2

16. Explain the term XML Schema. (Understand) – BTL2

17. What is the purpose of XML schema? (Understand) – BTL2

18. Define the need for SOAP. (Remember) – BTL1

19. State the significance of a WSDL document. Give some uses of WSDL. (Remember) – BTL1

20. Give an example of a web service registry and its function. (Understand) – BTL2

**PART – B**

1. (i) Discuss the various aspects of JAX-RPC. (7) (Understand) – BTL2

(ii) Develop a Java Web Service that would do arithmetic operations. (6) (Apply) – BTL3

2. (i) What do you mean by AJAX? Write the advantages of AJAX. (7) (Remember) – BTL1

(ii)Write short notes on Event-oriented Parsing. (6) (Understand) – BTL2

3. (i) Discuss AJAX architecture and compare it with DOM and SAX. (7) (Understand) – BTL2

(ii)What languages are used to represent data in web? Explain any two of them. (6) Apply) – BTL3

4. Explain about the development of a web application to illustrate the basics of AJAX. (13) (Apply) – BTL3

5. Explain about the XMLHttpRequest Object in detail. (13) (Understand) – BTL2

6. Brief the Return Document Forms in AJAX. (13) (Remember) – BTL1

7. Explain why the callback function is written as an anonymous function in the request phase function. (13) (Apply) – BTL3

8. (i) Explain in detail the steps involved in writing a web service. (7) (Understand) – BTL2

(ii)Explain the basic concepts of RPC. (6) (Understand) – BTL2

9. Describe the significance and working of WSDL with an example. (Apply) – BTL3

(13)

10. Describe the major elements of SOAP. (13) (Remember) – BTL1

11. Explain the role of XML schema in building web services in detail.

(13) (Understand) – BTL2

12. Illustrate a railway reservation system using UDDI and WSDL for the following case study. Railway could register their services into an UDDI directory for checking the train rate and reservation. Travel agencies could then search the UDDI directory to find the railwayreservation interface for ticket booking. (13) (Understand) – BTL2

13. Model a web service for calculator application. (13) (Apply) – BTL3

14. (i) Explain the JDBC database access in detail. (7) (Understand) – BTL2

(ii)Explain the SOAP elements in detail. (6)

**PART – C**

1. Explain JAX-RPC concept with suitable example. (15) (Understand) – BTL2

2. Express the creation of a Java Web Service in detail with examples. (15) (Understand) – BTL2

3. (i) Explain the elements of a SOAP message. (8) (Understand) – BTL2

(ii) How do you store Java objects? Describe. (7) (Remember) – BTL1

4. Express the principles of WSDL, XML and SOAP and their interaction between them in web service applications. (15) (Understand) – BTL2