

Tribhuvan University
Institute of Science and Technology
Bachelor of Computer Science and Information Technology
Course Title: Web Technologies
Model Question Paper

CSc. 353

Time : 3 Hours

Full Marks : 60

Pas Marks : 24

Candidates are required to answer the questions in their own word as far as practicable

Group 'A'

Attempt any Two Questions :

(2*10=20)

- 1.) Describe in details about the Tier Technology and its Architecture.
2. Write the structure of a XML file with example. Write an XML and DTD to describe "weather_report" as an element and "date, location, city, state, and temperature_range" as its attributes.
3. Make a simple Web site that takes information about the user and stores the information in a database. Use client-side script to validate the user input.

Group 'B'

Attempt any Eight Questions :

(8*5=40)

4. What is Internet? Discuss some of its services.
5. Discuss different ways of inserting style sheets in HTML documents.
6. Discuss the use of Cookies with suitable example.
7. What are HTTP Protocol Methods? Explain.
8. What is HTML DOM? Explain some DOM methods used in web technology.
9. What is XSLT? Explain the XSL<xsl:choose> Element.
10. What is Session? Explain its use with suitable example.
11. What are anti-overload techniques in web Server?
12. Discuss about Tag Libraries.
13. Discuss file handling with suitable example.

2068 (I)

Group 'A'

Attempt any Two Questions :

(2*10=20)

1. Explain the web server concept. Why internet is a client/server technology?
2. Define DTD. What are its applications? Create the HTM2 document with the paragraph using <p>, <h1>, for the first word for every sentence and for all the capital letters.
3. Design DOM for the time table of your classes in the present semester. Save at web server that is local or on the Internet. Later view it using the browser.

Group 'B'

Attempt any Eight Questions :

(8*5=40)

4. List the common application of web server.
5. Explain the functions of web caches.
6. What are the different types of headers in an HTTP message from a client? Explain.
7. What are the attributes of list tag? Explain.
8. What are the advantages of XML over the HTML?
9. How XSL is different from CSS? Explain.
10. Why is it important to specify a DTD for an XML document? Explain.
11. What are the components of an XML file? Explain.
12. Differentiate between domain name and domain name system.
13. Explain the form handling with example.

2068(II)

Group 'A'

Attempt any Two Questions :

(2*10=20)

1. How does a web server link physically on the Internet? How do we navigate from one URL to another from a page displayed at a browser? Explain.
2. List the protocols and their use at the application layer in the Internet. Why World Wide Web is use? Explain.
3. What is DOM Hierarchy? Explain the use of *, ? and t in defining a DOM element.

Group 'B'

Attempt any Eight Questions :

(8*5=40)

4. What are the tags and attributes for a table in HTML document?
5. Write short notes on various services offered by the Internet.
6. What is the functionality and purpose of HTTP?
7. Explain the XML syntax and structure rules.
8. Mention the application of XSL.
9. What are the benefits and drawbacks of using XML name space?
10. What is the syntax of declaring an attributes in a DTD?
11. Explain briefly, how the domain names are translated to IP addresses.
12. Explain the client/server concepts of web.
13. What do you mean by cookies? Explain with example.

2069

Group 'A'

Attempt any Two Questions :

(2*10=20)

- 1.) Explain the 2-Tier, 3-Tier and n-Tier technology with it's architecture.
- 2.) Create a small XML file designed to contain information about student performance on a module. Each student has a name, roll no, a subject mark and an exam mark.
- 3.) Using test structuring toys, create a homepage for the curriculum vitae. Save at web server that is local or on the internet. Later view it using the browser.

Group 'B'

Attempt any Eight Questions :

(8*5=40)

- 4.) Explain the uses of a web server.
- 5.) Explain the SMTP with example.
- 6.) What are the color attributes in HTML ? Explain.
- 7.) What are the important uses of cookies? Give some examples.
- 8.) Explain the client/server concepts of web.
- 9.) How is XML defined? What are the benefits of using XML namespace ?
- 10.) What are the various contents of an element in a DTD? Explain.
- 11.) What are the essential features of web browser ? Explain .
- 12.) Describe the significance of IP addresses and their types.
- 13.) Differentiate between file handling and form handling.

2071

Group 'A'

Attempt any Two Questions :

(2*10=20)

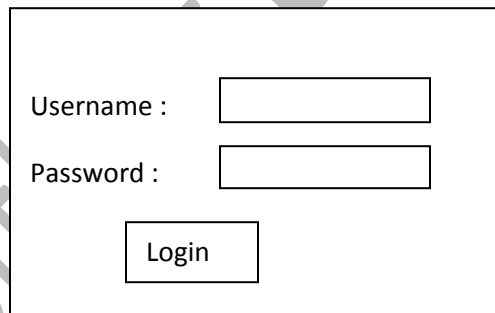
- 1.) Develop a website that checks validity of a user during the log-in process . Assume that the login data (username and password) are already stored in a database. Use client-side script to validate the user input during login process.
- 2.) What is FTP ? Discuss it's functions in detail.
- 3.) Discuss the benefits of using XML. Differentiate XML schema with DTD. Write an XML DTD to describe "person" as an element and "Name, address, phone-no, and Age" as it's attributes.

Group 'B'

Attempt any Eight Questions :

(8*5=40)

- 4.) Discuss internet as a client/server technology.
- 5.) Discuss the structure of HTML document with suitable example.
- 6.) Write an HTML code to display the following :



A login form with two input fields for Username and Password, and a Login button.

```
Username :   
Password :   

```

- 7.) How can you insert internet stylesheet in your HTML document? Discuss with example.
- 8.) Write an example of client side script to validate a form.
- 9.) What is HTTP ?
- 10.) Discuss the rules of writing XML document.
- 11.) Why do we need session ? Explain with suitable example.
- 12.) Discuss server side file handling with example.
- 13.) Write short notes on :
 - a.) Tag Libraries
 - b.) Anonymous access