

Total No. of Questions: 6

Total No. of Printed Pages:3

Enrollment No.....



Faculty of Engineering  
End Sem Examination Dec-2023  
CS3EW04 Internet & Web Technology

Programme: B.Tech.

Branch/Specialisation: CSE / All

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- Q.1 i. Which HTTP method is used for retrieving data from a server without causing any side effects? **1**  
(a) GET (b) POST (c) PUT (d) DELETE
- ii. What is the primary purpose of SMTP in the context of email communication? **1**  
(a) Receiving emails from the server  
(b) Sending and relaying outgoing emails  
(c) Storing emails on the email server  
(d) Retrieving emails from the server
- iii. Which of the following is the correct way to comment out multiple lines of HTML code? **1**  
(a) <!-- This is a comment -->  
(b) /\* This is a comment \*/  
(c) // This is a comment //  
(d) -- This is a comment --
- iv. What is the DOM used for in web development? **1**  
(a) Defining the structure of an HTML document.  
(b) Styling web pages with CSS.  
(c) Manipulating and interacting with web page elements.  
(d) Managing web server configurations.
- v. What is the root element in an XML document? **1**  
(a) <data> (b) <element>  
(c) <root> (d) <xml>

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|       |  |   |
|-------|--|---|
| vi.   | What does XML stand for?   | 1 |
|       | (a) eXtra Modern Language  |   |
|       | (b) eXtensible Markup Language   |   |
|       | (c) eXperimental Markup Language   |   |
|       | (d) eXtreme Markup Language  |   |
| vii.  | Which symbol is used to denote a variable in PHP?  | 1 |
|       | (a) #            (b) \$            (c) @            (d) &  |   |
| viii. | What is a Servlet in the context of Java web development?  | 1 |
|       | (a) A type of JavaScript.  |   |
|       | (b) A server-side Java program that extends the capabilities of a web server.  |   |
|       | (c) A type of database management system.  |   |
|       | (d) A front-end web framework.   |   |
| ix.   | In JSP, which tags are used to write Java code within a JSP page?  | 1 |
|       | (a) <script>                            (b) <java>   |   |
|       | (c) <% %>                                (d) [ ]   |   |
| x.    | In JSP, what is the purpose of the "session" object?   | 1 |
|       | (a) To store information that is available only during a single HTTP request-response cycle.   |   |
|       | (b) To store information that is available globally to all users.  |   |
|       | (c) To manage database connections   |   |
|       | (d) To define custom JSP tags.   |   |
| Q.2   | i. Explain Architecture of WWW in detail.  | 4 |
|       | ii. Why HTTP is called state less protocol? Enlist various methods for state management and also give advantages and disadvantages of each method. | 6 |
| OR    | iii. With a neat block diagram explain the TCP/IP reference model.   | 6 |
| Q.3   | i. Explain about Cascading Style Sheets with an example.   | 4 |
|       | ii. Define Frameset, Frame Tag. Divide the web page into four equal parts each individual part displays different web page.                        | 6 |
| OR    | iii. Build a JavaScript program to convert temperature from Celsius to Fahrenheit and vice versa.  | 6 |
| Q.4   | i. Define XML? What are the advantages of XML.   | 4 |

[3]

|     |      |   |   |
|-----|------|---|---|
|     | ii.  | Explain XSL and XSLT in detail with example.  | 6 |
| OR  | iii. | Explain the procedure for validating the XML Documents.                               | 6 |
| Q.5 | i.   | Explain the predefined and user defined functions in PHP with an example.             | 4 |
|     | ii.  | Explain database connectivity in PHP with reference to MYSQL.                         | 6 |
| OR  | iii. | Explain about Lifecycle of a Servlet with neat diagram.                               | 6 |
| Q.6 |      | Attempt any two:  |   |
|     | i.   | Explain about the different methods used for Session tracking.                        | 5 |
|     | ii.  | With suitable examples explain the different looping statements used in JSP programs. | 5 |
|     | iii. | Explain about the JSP directive Elements. Explain each of them in detail.             | 5 |

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### Marking Scheme

#### Internet & Web Technology-CS3EW04(T)

|     |         |   |                    |          |
|-----|---------|---|--------------------|----------|
| Q.1 | i)      | a) GET  |                    | <b>1</b> |
|     | ii)     | b) Sending and relaying outgoing emails   |                    | <b>1</b> |
|     | iii)    | a) <!-- This is a comment -->   |                    | <b>1</b> |
|     | iv)     | c) Manipulating and interacting with web page elements.                                     |                    | <b>1</b> |
|     | v)      | d) <xml>  |                    | <b>1</b> |
|     | vi)     | b) eXtensible Markup Language   |                    | <b>1</b> |
|     | vii)    | b) \$   |                    | <b>1</b> |
|     | viii)   | b) A server-side Java program that extends the capabilities of a web server.                |                    | <b>1</b> |
|     | ix)     | c) <% %>  |                    | <b>1</b> |
|     | x)      | a) To store information that is available only during a single HTTP request-response cycle. |                    | <b>1</b> |
| Q.2 | i.      | Explain<br>Diagram  | 2 Marks<br>2 Marks | <b>4</b> |
|     | ii.     | HTTP is called state less protocol<br>Enlist ..... method.                                  | 3 Marks<br>3 Marks | <b>6</b> |
|     | OR iii. | With a neat block diagram<br>explain the TCP/IP reference model.                            | 3 Marks<br>3 Marks | <b>6</b> |
| Q.3 | i.      | Explain<br>Diagram  | 2 Marks<br>2 Marks | <b>4</b> |
|     | ii.     | Define Frameset, Frame Tag.<br>Divide the web page .....web page.                           | 3 Marks<br>3 Marks | <b>6</b> |
|     | OR iii. | Build a JavaScript program ..... vice versa. (As per explanation)                           |                    | <b>6</b> |

|     |      |   |  |          |
|-----|------|---|--|----------|
| Q.4 | i.   | Define XML<br>What are the advantages of XML. | (As per explanation)<br>(As per explanation) | <b>4</b> |
|     | ii.  | Explain XSL<br>XSLT                           | 3 Marks<br>3 Marks                           | <b>6</b> |
| OR  | iii. | The procedure ..... XML Documents.            | (As per explanation)                         | <b>6</b> |
| Q.5 | i.   | Define<br>Example                             | 2 Marks<br>2 Marks                           | <b>4</b> |
|     | ii.  | Database connectivity .....to MYSQL.          | (As per explanation)                         | <b>6</b> |
| OR  | iii. | Explain.<br>Diagram                           | 4 Marks<br>2 Marks                           | <b>6</b> |
| Q.6 |      | Attempt any two:                              |  |          |
|     | i.   | Different methods used for Session tracking.  | (As per explanation)                         | <b>5</b> |
|     | ii.  | Explanation<br>Example                        | 3 Marks<br>2 Marks                           | <b>5</b> |
|     | iii. | Minimum-03<br>Exaplain                        | 3 Marks<br>2 Marks                           | <b>5</b> |

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