

GUJARAT TECHNOLOGICAL UNIVERSITY

BE-6 SEMESTER – OLD PAPER – S22 TO W25 – QUESTION BANK

Subject Name & Code: **WEB PROGRAMMING- 3160713**

Unit 1: Introduction to WEB

Repeated Questions:

1. **What is HTTP? Explain HTTP Request and Response.**
(S25 - Q1b, 04 marks)
(W24 - Q1a, 03 marks)
(S23 - Q1a, 03 marks)
(S22 - Q1c, 07 marks)
2. **Differentiate between Client Side Scripting and Server Side Scripting.**
(S25 - Q4a, 03 marks)
(S24 - Q1b, 04 marks)
(W22 - Q1b, 04 marks)
(W23 - Q4a, 03 marks)
(S22 - Q4a, 03 marks)
3. **Differentiate GET and POST method.**
(S25 - Q1a, 03 marks)
(W24 - Q5a, 03 marks)
(S23 - Q3a, 03 marks)
(S24 - Q2a, 03 marks)
4. **Differentiate between synchronous and asynchronous web programming.**
(S25 - Q5a OR, 03 marks)
(W24 - Q5b, 04 marks)
(S23 - Q5a, 03 marks)
(W22 - Q4a, 03 marks)
(W23 - Q5a, 03 marks)
(S22 - Q5b, 04 marks)

Other Important Questions:

1. **Briefly discuss : Client Server Architecture.** (S25 - Q1a, 03 marks)
2. **Give the full form of the following acronym: (i)WWW (ii)HTTP (iii)URL.** (W24 - Q1a, 03 marks)
3. **Give full name of following acronym: 1) WWW 2) CSS 3) AJAX.** (S22 - Q1a, 03 marks)
4. **Define following: 1. URL 2. HTTP 3. Web Server.** (S24 - Q1a, 03 marks)
5. **Explain HTTP Request and Response with header details. Also explain various http status codes.** (W23 - Q1a, 03 marks)
6. **What is AJAX? State the advantages of using AJAX.** (S25 - Q5a, 03 marks)
7. **What are web services? Explain role of SOAP in Web services.** (S25 - Q4b OR, 04 marks)
8. **What are web services? Explain role of SOAP in Web services.** (W22 - Q3a OR, 03 marks)
9. **Write a note on Web services.** (S24 - Q4a OR, 03 marks)
10. **What is AJAX?** (S24 - Q5b, 04 marks)
11. **Write a note on AJAX.** (S24 - Q5b, 04 marks)
12. **Write AJAX code to demonstrate the use AJAX request-response mechanism.** (S23 - Q5c, 07 marks)
13. **Write AJAX code that creates a simple XMLHttpRequest to retrieve data from a TXT**

- file.** (W23 - Q5c, 07 marks)
14. **Describe the role of the XMLHttpRequest object in AJAX.** (W24 - Q5a, 03 marks)
 15. **Explain the concept of classic web-application model.** (W23 - Q5a, 03 marks)
 16. **Explain the concept of AJAX web-application model.** (W23 - Q5a OR, 03 marks)
 17. **What are APIs? How to use them?** (S23 - Q5a OR, 03 marks)
 18. **What is an API service? Write advantages and disadvantages of API services.** (W23 - Q5c OR(iii), 07 marks)
 19. **Develop API using PHP to display a student's record whose Enrollment Number is passed as an argument.** (S25 - Q5b, 04 marks)
 20. **What is FTP? Demonstrate functionality of various FTP commands in brief.** (W22 - Q3b OR, 04 marks)
 21. **What is query string? How is it transmitted to the server with the GET and POST methods?** (W22 - Q5c OR, 07 marks)
 22. **Explain the concept of state management using query string in PHP.** (S23 - Q5b OR, 04 marks)
 23. **What PHP can do with header () function?** (W22 - Q5a OR, 03 marks)
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Unit 2: Web Design

Repeated Questions:

1. **Explain different design issues at the time of designing an effective website.**
(S25 - Q1c, 07 marks)
(W24 - Q2b, 04 marks)
(S23 - Q1b, 04 marks)
(S24 - Q2b, 04 marks)
(S22 - Q1b, 04 marks)
2. **Discuss website design principles in detail.**
(S25 - Q1b, 04 marks)
(W23 - Q1a, 03 marks)
3. **What is navigation? List the characteristics of effective navigation.**
(S25 - Q2a, 03 marks)
(W22 - Q1c, 07 marks)

Other Important Questions:

1. **Explain the points which should be considered for planning a website and also different design issue at the time of designing an effective website.** (S25 - Q1c, 07 marks)
 2. **List and explain the website design issues.** (W23 - Q1b, 04 marks)
 3. **Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Website, Page Layout and linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation.** (Syllabus Reference)
 4. **Discuss the characteristics of effective navigation.** (W22 - Q1c, 07 marks)
 5. **Also write code of html page to open a link in a new browser window.** (W22 - Q1c, 07 marks)
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Unit 3: Basics of HTML and CSS

Repeated Questions:

1. **Explain ordered list and unordered list in HTML with example.**
(S25 - Q2b, 04 marks)
(W24 - Q1b, 04 marks)
(S23 - Q2b, 04 marks)
(S24 - Q4a, 03 marks)
(S22 - Q2a, 03 marks)
2. **Explain following html tags with proper example: 1. 2. <frameset>.**
(S25 - Q2b, 04 marks)
(S22 - Q2b, 04 marks)
3. **Explain frameset and frame tag with proper example.**
(W24 - Q2c, 07 marks)
(W23 - Q2c(i), 07 marks)
4. **What do you mean by "class" and "id" in CSS? Explain with Example.**
(S25 - Q2c, 07 marks)
(S24 - Q2c OR, 07 marks)
(W23 - Q3b OR, 04 marks)
(S22 - Q2c OR, 07 marks)
5. **Explain different ways to write the CSS with example.**
(S25 - Q2c, 07 marks)
(W22 - Q2c, 07 marks)
6. **What is Bootstrap? Why we use it.**
(W24 - Q2a, 03 marks)
(S23 - Q2a, 03 marks)
(S22 - Q3a OR, 03 marks)

Other Important Questions:

1. **Enlist and explain the usage of various formatting related tags available in HTML.** (S25 - Q1c, 07 marks)
2. **State different usages of <meta> tags.** (S25 - Q2a, 03 marks)
3. **Briefly discuss various tags available in HTML5.** (S25 - Q2b, 04 marks)
4. **Create an animation using CSS to rotate a rectangle by 360 degree around its center in 8 seconds.** (S25 - Q2c OR, 07 marks)
5. **Write any two meta tag syntax to implement different features in html.** (S23 - Q1c(i), 07 marks)
6. **Explain with example frames in HTML.** (S23 - Q1c(ii), 07 marks)
7. **What is bootstrap? What Bootstrap package contains?** (S23 - Q2a, 03 marks)
8. **Explain following with example: <pre> tag, <sup> tag, character encoding in HTML.** (S23 - Q2c(i), 07 marks)
9. **Explain HTML5 form validation attributes using example.** (S23 - Q2c(ii), 07 marks)
10. **Explain HTML form attributes with syntax. Make HTML form to collect details of a book in library.** (S23 - Q2c OR, 07 marks)
11. **What is Metadata? How we can include Metadata is included in a document? Write meta tag syntax to implement following features in html: (i) Set an expiration date (ii) Stop the browser from caching a page.** (W23 - Q2a, 03 marks)
12. **Write a code for the given output using list in HTML.** [Figure or Table given - refer Question paper of W23] (W23 - Q2b, 04 marks)
13. **Explain frame and frameset with example. Why we use bootstrap? Show a basic structure of bootstrap grid.** (W23 - Q2c, 07 marks)
14. **Explain HTML form attributes with syntax. Write a program to create sports registration page in HTML.** (W23 - Q2c OR, 07 marks)
15. **Explain "class" and "id" in CSS with suitable example.** (S24 - Q2c, 07 marks)
16. **Explain usefulness of rowspan and colspan attributes in HTML Table. Also, Write**

HTML code to print the following table. [Table given - refer Question paper of S24] (S24 - Q2c OR, 07 marks)

17. **Write an HTML snippet with CSS for following effects: 1. link: after visited red color and before visited green color 2. table with even rows black and odd rows green color. 3. Text color-green, Text case-uppercase.** (W22 - Q2c OR, 07 marks)
18. **Explain meta tag? How it is useful by search engine?** (W22 - Q3b, 04 marks)
19. **Write HTML code for creating following table also explain table element with its attributes.** [Table given - refer Question paper of W23] (W23 - Q1c, 07 marks)
20. **What is rowspan and colspan used in HTML? Give examples.** (S22 - Q2c, 07 marks)
21. **What is CSS? Explain the different types of CSS.** (S22 - Q3b OR, 04 marks)
22. **Explain following properties with respect to CSS.** (S23 - Q3b, 04 marks)
23. **What is positioning in CSS?** (S22 - Q3b, 04 marks)
24. **What is Pseudo-Elements in CSS? Explain through example.** (S23 - Q3b OR, 04 marks)
25. **What is the use wildcard selector in CSS? Discuss wildcard selectors with example.** (W23 - Q3b, 04 marks)
26. **Discuss following properties with respect to CSS.** (S23 - Q3b, 04 marks)

Unit 4: Client Side Scripting using JavaScript

Repeated Questions:

1. **Explain pop-up boxes in JavaScript with example.**
(S25 - Q3a OR, 03 marks)
(W24 - Q3a, 03 marks)
(S23 - Q3c(i), 07 marks)
(S24 - Q3a OR, 03 marks)
(W23 - Q3a OR, 03 marks)
2. **Write a JavaScript function/script to validate an email address using Regular Expression.**
(S25 - Q3c, 07 marks)
(S23 - Q3c(ii) OR, 07 marks)
(W23 - Q4c, 07 marks)
3. **Explain callbacks in JavaScript.**
(W24 - Q3a, 03 marks)
(S24 - Q3b, 04 marks)
(S22 - Q4a, 03 marks)
4. **Write a JavaScript to find whether entered number by user is Prime or Not.**
(W24 - Q3c, 07 marks)
(S24 - Q3c, 07 marks)
5. **Write a short note on DOM (Document Object Model) in JavaScript.**
(S25 - Q3b, 04 marks)
(S24 - Q3b OR, 04 marks)
(S22 - Q3c, 07 marks)
6. **Write an HTML and JavaScript program which accepts N as input and print N is odd or even number.**
(S25 - Q4b, 04 marks)
(S22 - Q4b, 04 marks)

Other Important Questions:

1. **Briefly discuss the types of JavaScript can be used in HTML pages.** (S25 - Q3a, 03 marks)
2. **Write a JavaScript function to validate an email address using Regular Expression.** (S25 - Q3c, 07 marks)
3. **Define a JavaScript function to check whether a number given by user is a Palindrome number or not.** (S25 - Q3b OR, 04 marks)
4. **How can you use function as an argument in JavaScript? Explain with suitable example.** (S25 - Q3c OR, 07 marks)
5. **Write JavaScript to validate Mobile Number. 1) Entered value must be numeric 2) 10 digit length.** (S25 - Q3b, 04 marks)
6. **What is JavaScript event handling? List the major events and show use of at least one event by writing JavaScript code.** (S25 - Q3c, 07 marks)
7. **Write a JavaScript that handles following mouse event. If the mouse is over heading, change font color to "green" and if the mouse goes out of the heading change it to "red".** (S23 - Q3c(i), 07 marks)
8. **Put three buttons "OPEN NEW WINDOW", "CLOSE CHILD WINDOW", "CLOSE MAIN WINDOW" in main HTML page. On click of first button, execute some JavaScript code that will open one child window. Clicking on second button, child window will close and clicking on third button, main html page will close.** (S23 - Q3c(ii), 07 marks)
9. **Create a webpage containing one button. Clicking on this button, change the size of the window & position.** (S23 - Q3a OR, 03 marks)
10. **Write HTML and JavaScript code to validate the email address using regular expression.** (S23 - Q3c(ii) OR, 07 marks)

11. **Write a short note on error handling in JavaScript.** (S24 - Q3a, 03 marks)
 12. **Design Student registration form including rollno, name, password and mobile number using HTML. Also write JavaScript to validate following: All Fields are compulsory. Password length should be 6 to 8 characters long. Mobile number must be of 10 digits only.** (S24 - Q3c, 07 marks)
 13. **Write a java script to find whether entered number by user is prime or not.** (S24 - Q3c OR, 07 marks)
 14. **Write a Java Script to read data from XML File and print it in tabular manner.** (W22 - Q4c, 07 marks)
 15. **What are the different ways to use JavaScript in html document?** (W23 - Q3a, 03 marks)
 16. **Explain the Document Object Model.** (W23 - Q3c(i), 07 marks)
 17. **Write an HTML and JavaScript program that accepts N as input and print all prime numbers. (e.g. input N=10 then answer is 3,5,7)** (W23 - Q3c(ii), 07 marks)
 18. **Write HTML and JavaScript code to validate the username and password. 1. Both fields should not be blank. 2. Username contains only number. 3. Minimum password length 8. 4. Password contains at least one capital letter, special character and number.** (W23 - Q3c OR, 07 marks)
 19. **Write a JavaScript program that accepts N as input and prints the first N odd numbers.** (W24 - Q3c, 07 marks)
 20. **Demonstrate functionality of following java script methods: substring, Slice, getDate, charAt.** (W24 - Q3b, 04 marks)
 21. **What is JavaScript? Discuss advantages of JavaScript.** (W24 - Q3a, 03 marks)
 22. **Explain error handling in JavaScript.** (W24 - Q3b, 04 marks)
 23. **List some advantages of JavaScript.** (W22 - Q4a OR, 03 marks)
 24. **Explain any two event handlers for text box & text area in Java Script with Example.** (S23 - Q4b, 04 marks)
 25. **Explain any two event handlers for button in Java Script with Example.** (S23 - Q4b OR, 04 marks)
 26. **Create an HTML and JavaScript program which accepts N as input and print first N odd numbers.** (W22 - Q5b OR, 04 marks)
 27. **What is JSON? Explain different methods used to convert JavaScript to JSON and vice versa through example.** (W23 - Q4b, 04 marks)
 28. **Enlist and explain valid data types in JSON with syntax.** (W23 - Q4b OR, 04 marks)
 29. **Briefly discuss JSON.** (S24 - Q5a OR, 03 marks)
 30. **Design a login form using HTML & JavaScript with following validations using Regular Expression on username and password fields. 1. Username and Password should not be both blank 2. Username should not start with digit, _, @ or # 3. Password length must be 8 to 16 characters.** (W22 - Q3c, 07 marks)
 31. **Write HTML and JavaScript code to validate the mobile number and email address using regular expression.** (W23 - Q4c, 07 marks)
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Unit 5: Server Side Programming with PHP

Repeated Questions:

1. **Explain Regular Expression in PHP.**
(W24 - Q4a, 03 marks)
(W22 - Q3a OR, 03 marks)
(S22 - Q5a, 03 marks)
2. **Explain Session in PHP with example.**
(S25 - Q4b OR, 04 marks)
(S23 - Q4a OR, 03 marks)
(S24 - Q4c OR, 07 marks)
3. **Differentiate Cookie and Session.**
(W24 - Q4b, 04 marks) (S25 - Q3a OR, 03 marks)

Other Important Questions:

1. **Explain types of arrays available in PHP with suitable example.** (S25 - Q4b, 04 marks)
2. **Create HTML form that will allow a candidate to enter his/her name and browse his/her photo and signature. Also write PHP code to upload Photo into "Candidate_Photos" and Signature into "Candidate_Signatures" folders on the server.** (S25 - Q4c, 07 marks)
3. **State and explain the syntax for variable declaration in PHP. Also enlist the rules to be followed for naming a variable in PHP.** (S25 - Q4a OR, 03 marks)
4. **Create HTML form that can accept Passenger details such as Name, Mobile, Email, Address, Gender, Photo etc. Also write PHP code to display the accepted details.** (S25 - Q4c OR, 07 marks)
5. **Write a PHP script to print following pattern: 1 1 0 1 0 1 0 1 0 1 1** (S25 - Q3b OR, 04 marks)
6. **What is PHP Form processing? Write an HTML and PHP program which accepts N as input and print N Fibonacci numbers as list.** (S25 - Q3c OR, 07 marks)
7. **What is use of "break" and "continue" statements in PHP scripts?** (S25 - Q4a, 03 marks)
8. **Write an HTML and JavaScript program which accepts N as input and print N is odd or even number.** (S25 - Q4b, 04 marks)
9. **What is document object model? Explain any two objects with example.** (S25 - Q4c, 07 marks)
10. **Write a PHP script to open, close, read and write into a file.** (S25 - Q4c OR, 07 marks)
11. **Explain the use of following arrays in PHP. 1) \$_REQUEST[] 2) \$_SERVER[]** (S25 - Q5b OR, 04 marks)
12. **Write PHP code to store Passenger Registration details such as Name, Email, Mobile, Gender, Address and Photo_URL into a MySQL table Passenger_info. Also implement necessary validations.** (S25 - Q5c, 07 marks)
13. **Write PHP code that demonstrates the usage of Prepared Statement.** (S25 - Q5c OR, 07 marks)
14. **Explain Session & Cookie in PHP.** (S25 - Q3a OR, 03 marks)
15. **What is PHP? How can you connect to database in PHP? Show the simple database operation using PHP with proper example.** (S25 - Q5c OR, 07 marks)
16. **Interpret PHP Function: Implode and Explode.** (W24 - Q4a, 03 marks)
17. **Differentiate between for and foreach statements in PHP.** (W24 - Q4b, 04 marks)
18. **Develop a PHP Code which read student enrollment number and display student information from mysql database when user submit page.** (W24 - Q4c, 07 marks)
19. **Write PHP program to store student registration data with mysql database.** (W24 - Q4c OR, 07 marks)
20. **Write a PHP script to sort the elements of an array.** (W24 - Q5c, 07 marks)
21. **Write a php code to upload file on server and display file details on the page.(Ex. File name, Extension, File Size)** (W24 - Q5c OR, 07 marks)
22. **What is the use of cookie in web programming? Write a code to set and display cookies in PHP.** (S23 - Q4a, 03 marks)

23. Write HTML and PHP program to read and store employee information such as e_id, e_name, e_dept, e_exp and e_salary from employee table. Make a search module to search a record from the database based on e_dept and display the result in tabular format. (S23 - Q4c, 07 marks)
24. Write a web application code using PHP, HTML and MySQL for Students that stores EnrollmentNo, Name, College, Branch, Year etc. in database. Make separate PHP file for each database operation like insert, update and delete operation. (S23 - Q4c OR, 07 marks)
25. Write a PHP Script to display content of .txt file and display total number of words. (S23 - Q5b, 04 marks)
26. Explain jQuery load(), get() and post() methods with its syntax. (S23 - Q5c OR(i), 07 marks)
27. What is web service? How we can create web service? (S23 - Q5c OR(ii), 07 marks)
28. Explain types of loops in PHP. (S24 - Q4b, 04 marks)
29. What are different types of arrays in PHP? Explain with example to process the arrays in PHP. (S24 - Q4c, 07 marks)
30. Write a PHP code to demonstrate a calculator using switch case. (S24 - Q4b OR, 04 marks)
31. Briefly discuss sessions and cookies in PHP using appropriate example. (S24 - Q4c OR, 07 marks)
32. Write a short note on file handling in PHP. (S24 - Q5a, 03 marks)
33. Design Employee form with Employee ID, Employee Name, Designation details with submit button using HTML. On clicking submit button, entered Employee details should be fetch and display on another webpage "EmpInfo.php". (S24 - Q5c, 07 marks)
34. Discuss steps to connect database using PHP. Also, discuss any two database operations using proper example. (S24 - Q5c OR, 07 marks)
35. Explain in brief about XSL and XSLT with example. (W22 - Q4b OR, 04 marks)
36. Develop a web application code using PHP, HTML and MySQL for Students that stores student's enrolment no., name, semester, gender, qualification, etc. in database. Create proper GUI including buttons that run separate .php file for each database operation like insert, update, delete etc. (W22 - Q4c OR, 07 marks)
37. Explain Following XSL i) Value-of ii) Sort. (W22 - Q5a, 03 marks)
38. Explain database connectivity in PHP with example. (W22 - Q5b, 04 marks)
39. Explain PHP? How can you connect to database in PHP? Show the simple database operation using PHP with proper example. (W22 - Q5c OR, 07 marks)
40. What are the different types of arrays in PHP? Explain with examples. (S22 - Q4c, 07 marks)
41. Explain file uploads in PHP. (S22 - Q4b OR, 04 marks)
42. What is PHP Form processing? Write an HTML and PHP program which accepts N as input and print N Fibonacci numbers as list. (S22 - Q4c OR, 07 marks)
43. How prepared Statement is executed in PHP? (S22 - Q5b, 04 marks)
44. What is Cookie? How can we handle cookies in PHP? (S22 - Q5c, 07 marks)
45. Write HTML and PHP program to read and store book information such as book id, title, author and price from database table. Output the data to a webpage in tabular format. (S22 - Q5c OR, 07 marks)
46. What is JQuery? What are the advantages of JQuery? (S22 - Q5a OR, 03 marks)
47. Explain index and associative arrays in PHP with example. (W23 - Q5b, 04 marks)
48. Write a PHP script to print number of words in a given statement. (W23 - Q5b OR, 04 marks)
49. Write a PHP script to insert user details (firstname, lastname, email) in MySQL using prepared statement. (W23 - Q4c OR, 07 marks)
50. What is the use cookie in web programming? Write a code to set and display cookies in PHP. (W23 - Q4a OR, 03 marks)
