

Unit 1

- 1) What do you mean by CSS? What are the different ways to create CSS?
- 2) What is JSON? Why to use JSON over XML?
- 3) Write at least any five Differences between HTML and HTML5.
- 4) What are the different design issues in web development?
- 5) What is purpose of HTTP?
- 6) How does a Web Browser work?
- 7) Describe the steps involved when a web browser requests for and obtains a web page from a web server.
- 8) Define the terms i. Website, ii. Web Page, iii. Web Server, iv. URL and v. Home Page.
- 9) Why is HTTP called a stateless protocol? Why is it so?
- 10) Discuss any three HTTP commands.
- 11) Discuss the idea of HTML tags with an example.
- 12) Describe any five HTML tags.
- 13) Investigate how you can set up your own website. What are the requirements for the same?
- 14) Create a web page that displays your own details in about 100 words, and includes your photographs.
- 15) Find out major differences between the two web browser- Internet Explorer and Mozilla Firefox.
- 16) Explain the need for XML in detail.
- 17) What are the strength of XML technology?
- 18) What are DTDs? How do they work?
- 19) Explain the differences between external and internal DTDs.
- 20) What are XML schemas? How are they better than DTDs?
- 21) Explain the XSLT technology with an example.
- 22) What is HTML? *Do all HTML tags have end tag?*
- 23) What is the difference between HTML elements and tags?
- 24) What is a style sheet? How to you create a multi colour text on a web page using CSS?
- 25) What is the difference between progress and meter tag?
- 26) What are the new <input> types for form validation in HTML
- 27) Create a web page for Admission form with using all Tag in HTML.
- 28) What is use of static & dynamic web page? Enlist applications of static & dynamic web page.

Unit 2

1. Can javascript be in a separate file? Discuss in details.
2. What are key usage of JavaScript?
3. How are HTML form and JavaScript related.
4. Write an HTML Page and also provide a JavaScript for accepting a user ID and password from the user to ensure the input is not empty.
5. Write an HTML Page and stop the user if the user attempts to tab out of the user ID or password fields without entering anything.
6. How to create objects in Java Script? Explain with Suitable examples.
7. How to create array and read elements in java script.
- 8 What are the variable conventions available in Java Script?
9. Explain with example how to access values of textbox of form using JavaScript.
10. Explain how to call JavaScript from an HTML page.
11. List and brief the any five functions in JavaScript.
12. How to set a default parameter value for a JavaScript function?
13. How to open URL in new tab in javascript?
- 14 How do I declare a namespace in JavaScript?
- 15 What is JavaScript? How to validate any sample login form using JavaScript.
16. Design a form to accept workshop registration details from participants and validate any five fields using javascript (Assume suitable structure).
- 17 Explain Document Object Model (DOM) with suitable example.
- 18 Write differences between JavaScript and jQuery.
- 19 Why there are two different version of jQuery library?
- 20 What are the different Data Types available in JavaScript?
- 24 [Write a program of your choice to demonstrate the use of DOM?](#)
- 25 [What are the errors made while processing the DOM?](#)
- 26 What is the purpose of DOM Node Tree? Draw/Create DOM node tree for simple HTML page.
- 27 How does the relationship exist between the node, child and siblings in node-tree?
- 28 [What are the properties of DOM involved in the system?](#)
- 29 [Write a program of your choice that uses Methods and properties of DOM?](#)
- 30 What are the different properties of Nodes?

Unit 3 :JSP Servlets

1. What is Servlet? Explain how a servlet is processed.
2. What are the various element of JSP page?
3. Write a servlet which will accept user name and password in a form, which will compare both in the database to display success or failure.
4. Why session management is required in JSP?
5. Why session management is required in Servlet?
6. Write a JSP scriptlet for displaying even numbers between 1 to 50 and also its JSTL version.
7. Discuss MVC architecture in details.
 8. Write a Java Servlet which will display “welcome to Servlet” message.
 9. Write advantages of JSP over Servlets? Also explain life cycle of a JSP.
 10. List and elaborate any five JSP implicit objects with examples.
 11. Write JSP code to accept product details and store in database table. If the product is already inserted, display the appropriate message to insert another product. (Assume suitable table structures).
 12. List and elaborate any five JSP actions with example.
 13. Explain HTTP request and response messages used in JSP.
 14. Create a servlet in java to get user ID and password parameters which are entered in the form of Login.html file.
 - 15 Create a JSP page to search a student details from database by studentId. (Assume suitable table structure).
 - 16 What are JSP actions? Explain error handling in JSP using JSP actions with example.
 - 17 What is thread safety in Servlets? Write a Servlet which will display the count of number of times a client has accessed it.
 - 18 What is use of isThreadSafe in JSP? Also Explain Single Thread Model in JSP.
 - 19 Explain different session management mechanism in JSP.
 - 20 Explain Session and Cookies in Servlets.
 - 21 Write a jsp code which adds the student education details in a database through Java bean.
 - 22 Explain HttpServletRequest and HttpServletResponse with suitable examples.
 - 23 What are the usage of JSP Directives and JSP Actions.
 - 24 Write the different usage of JSP action tags and directives.
 - 25 Create simple JSP pages which will explain use implicit session object of JSP.
 - 26 Write JSP code for accepting product-id from user. Verify if product already exists the display details. If not insert details into product table. (Assume suitable table structure)
 - 27 What is difference between include action and include directive in JSP?
 - 28 How do you define application wide error page in JSP?
 - 29 Explain the following JDBC API components:
 - DriverManager
 2. SQLException
 - 3.Connection
 - 4.Statement
 - 5.ResultSet

Questions on UNIT IV

- a) What these tags specify in PHP : <?php and ?>
- b) Can we run PHP from HTML file? If yes, how?
- c) Why PHP is known as scripting language?
- d) Write a program in PHP to calculate Square Root of a number?
- e) How can we create links in PHP pages?
- f) What is the function of “foreach” construct in PHP?
- g) What is the purpose of “nl2br” string function?
- h) Write the name of PHP functions that can be used to build a function that accepts any number of arguments?
- i) What is the difference between include and require?
- j) Differences between GET and POST methods?
- k) What do you mean by Server Side Scripting?
- l) Explain all possible types of scope of variable?
- m) Explain with example the use of substring function?
- n) Write a program in HTML (Web-Page) having a form with firstname, lastname and a submit button. On clicking the button form validation should work (Use Javascript for that) and data entry should be saved in a database (PHP code needed, for insertion of data from “form” to database). Form should be styled using CSS. (Use any mode-inline, internal or external)?
- o) What do you understand about Numeric array, Associative array and Multidimensional array?
- p) What is the use of strlen() and strpos() functions?
- q) Why we use \$_REQUEST variable? Write a note on various library functions available in PHP?
- r) What is the function name in PHP, used to delete an element from an array?
- s) Write the PHP code for fetching the data from a database to a webpage?

t) What is the purpose of \$_PHP_SELF?u) Explain the use of preg_match(), preg_replace(), preg_split(), ereg() , eregi() ,ereg_replace(), ereg_match() ,eregi_replace()functions in regular expression?v) What do you meant by WAMP, LAMP and XAMP?

AngularJS

1. Write a node How am angularJS application can be developed using MVC architecture?
2. **What are Directives in AngularJS?**
3. **How AngularJS expressions are different from the JavaScript expressions?**
4. **What are Expressions in AngularJS?**
5. **What are Filters in AngularJS?**
6. **What is Angular Prefixes \$ and \$\$?**
7. **What is Global API?**
8. **When dependent modules of a module are loaded?**
9. **How angular modules load the dependencies?**
10. **What is core module in AngularJS?**
11. **What components can be defined within AngularJS modules?**
12. **What is the size of angular.js file?**
13. **What browsers AngularJS support?**
14. **Is AngularJS a library, framework, plugin or a browser extension?**
15. **How to use jQuery with AngularJS?**
16. **Does AngularJS has dependency on jQuery?**
17. **How AngularJS is different from other JavaScript Framework?**
18. **What are the advantages of AngularJS?**
19. **Why to use AngularJS?**
20. **What are different ways to invoke a directive?**

NodeJs

1. Differentiate between JavaScript and Node.js.
2. What Is Node.js?
3. List down the major benefits of using Node.js?
4. What is the difference between Angular and Node.js?
5. Why Node.js is single threaded? Having a single thread reduces the overhead of thread communication, which works faster because all tasks using the same shared memory and no need for communication. That's the reason why node js able to process tasks faster.
6. How do Node.js works?
7. Where Node.js can be used?
8. How many types of API functions are there in Node.js?
9. What is the difference between Asynchronous and Non-blocking?
10. What is package.json?
11. What do you understand by Event-driven programming?
12. What is an *Event loop* in Node.js and how does it work?
- 13 Explain REPL in the context of Node.js.
14. List down the tasks which should be done asynchronously using the event loop?
15. List down the steps using which “Control Flow” controls the function calls in Node.js?

Asp.Net

ASP stands for active server pages and it is a server-side script engine for building web pages. ASP is basically a server page that contains embedded programs in it. The programs in it are processed on the Microsoft server.

1) What is ASP?

2) What is ASP.NET?

ASP.NET is a server-side web-application framework designed for web development to produce dynamic web pages. It was developed by Microsoft to allow programmers to build dynamic web sites, applications and services. The name stands for Active Server Pages Network Enabled Technologies.

3) What is the difference between the ASP and ASP.NET?

4) What is IIS?

Internet Information Services, also known as IIS, is a Microsoft web server that runs on Windows operating system and is used to exchange static and dynamic web content with internet users. IIS can be used to host, deploy, and manage web applications using technologies such as ASP.NET and PHP.

5) What is the usage of IIS?

6) What is a multilingual website?

7) What is caching? Explain.

8) what are the main requirements for caching?

9) What are the advantages of ASP.NET?

10) What is the concept of Postback in ASP.NET?

PostBack is the name given to the process of submitting an ASP.NET page to the server for processing. PostBack is done if certain credentials of the page are to be checked against some sources (such as verification of username and password using a database).

11) What is the used of "isPostBack" property?

12) How do you identify that the page is PostBack?

13) What is the parent class of all web server control?

14) What is the difference between ASP.NET Webforms and ASP.NET MVC?

ASP.NET Web Forms – A framework for building modular pages out of components, with UI events being processed server-side. This framework is not included in the ASP.NET Core versions; it only works in the "classic" ASP.NET, on Windows.
ASP.NET MVC – allows building web pages using the model–view–controller design pattern.

Ruby and Rails

- 1) What is Ruby on Rails?
- 2) Explain DRY in Rails?
- 3) What is the current version of Ruby on rails?
- 4) Explain CoC in Rails
- 5) Who developed Rails?
- 6) What are the three methods to install Ruby on Rails?
- 8) What is Rails script? Name some of them?
- 9) Are there any disadvantages of Ruby on Rails? If yes, mention them.
- 10) What is the use of the super function in Ruby on Rails?
- 11) What is Active Record in Rails?
- 12) Who designed Active Record in Rails?
- 13) Explain model in Rails?
- 14) Which command is used to create a migration?
- 18) What are the hashes?
- 19) How are blocks created?