



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

(Artificial Intelligence & Machine Learning)|

PREVIOUS YEAR QUESTION PAPERS

(In relevance with “Internet Programming” of IT & Comp Engg.)

1. With the help of suitable examples compare and contrast the use of <div> and .
2. Explain XML attributes and elements.
3. Differentiate between <table width = “400” height = “200”> and <table width = “100%” height = “50%”>
4. Differentiate between GET and POST method.
5. What is the need of stylesheets? Explain different cascading stylesheets with example.
6. What are the benefits of using JSON over XML data.
7. Explain REST API in detail.
8. Create a XML page storing name, country, runs scored, balls faced for three batsmen. Represent same data as JSON object
9. Explain with proper syntax and example how to use different types of CSS selectors?
10. What is the difference between class selector and ID selector?
11. Explain <audio>, <video>, and <canvas> element in HTML5.
12. Create an HTML page which will divide a page in two horizontal fragments using frameset tag, each frame should have different background color and different heading.
13. Differentiate between XML & HTML.
14. Explain the architecture of JSON mash-ups in detail with neat diagram.



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15. Explain XML & DTD with example.
16. Write short note on: i) DOM ii) JSX iii) URL iv) DNS
17. Write HTML5 code for embedding audio & video elements in web page.
18. Draw and illustrate 3- tier Web Architecture.
19. Explain XML Schema in detail with an example.
20. Write an external stylesheet and link it with HTML code. The stylesheet should include the following:
 - i. the web page will have the background image “img1.jpg”.
 - ii. The table headings will have red background color.
 - iii. Background color of alternate paragraphs are different.
 - iv. The hyperlinks on the web page will not have underline.
21. Design a web page to maintain a Library catalog using XML. It should maintain the name of the book, author, publisher, and year of publication. Format it in the tabular manner using XSLT.
22. Explain “Window” object of JavaScript DOM. Write a JavaScript code to change the background color of the webpage automatically after every 5 seconds.
23. Explain built-in objects in JavaScript?
24. Write code to process online Alumni information for your college. Create forms to get name, address, date of birth, and email id. Use check boxes for taking hobbies and radio buttons for selecting branch. Write JavaScript code to validate the following:
 - i. User has filled all the fields prior to form submission
 - ii. Valid email-id (with '@' and '.')
 - iii. Age validation using DOB (≥ 22 years)
25. Write an HTML code to create a form containing dropdown list. The dropdown list contains colors red, green, blue, grey. Write a JavaScript code to



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change the background color as soon as the user selects the color from the drop-down menu.

26. Write an HTML code to process placement registration from which accepts the student details like name, address, email-id, contact number, date of birth, percentage, branch (must be selected using radio button) and technology-preferred (using checkbox). Write the JavaScript code to validate the following:
 - i. Valid email-id (“@”, and “.”)
 - ii. All the fields must be filled before submission of the form
 - iii. Percentage validation is minimum first class ($\geq 60\%$)
27. Create a HTML form to accept the details like name (Text field), Address (Text area), Gender (Radio button) and company name (dropdown box) fields from user and use event handlers of JavaScript over it to display the success message.
28. Explain Promises in ES6.
29. What are events in JavaScript? Explain different types of events.
30. Differentiate between ES5 and ES6.
31. Explain Arrow function in ES6 with an example.
32. What is React JSX?
33. Explain React component life cycle with neat diagram and flow.
34. Explain folders and file structure of React.
35. Explain the importance of React “props” and “state” with an example to implement.
36. List and explain different features of React.



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37. What is the need of cookies? How can cookies be used to set up a counter, which shows number of times the user has visited the page.
38. Explain authentication techniques of Express JS?
39. What are buffers and Streams in NodeJs? Explain with an example?
40. Explain asynchronous programming in detail?
41. What is NodeJs? Explain features of NodeJs? State different types of NodeJs modules?
42. What are Refs? When to use Refs and when not to use Refs?
43. Explain routing in ExpressJs along with an example?
44. Write short note on: REPL, NPM, ExpressJS
45. Compare MVC and Flux?
46. Write short note on REST API in Express JS?
47. Explain Event loop in NodeJS?
48. Explain Hooks, usestate, useeffect?