


CMR Institute of Technology, Bangalore		
Department(s): Information Science & Engineering		
Semester: VII	Section(s): A & B	
Web Technology and its Applications	15CS71	Lectures/week: 04
Course Instructor(s): Sudhakar K.N		
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## **QUESTION BANK**

### **Module 1**

1. What is the difference between XHTML and HTML5?
2. What role do HTML validators play in web development?
3. What are the main syntax rules for XML?
4. What are HTML elements? What are HTML attributes?
5. What is the difference between standards mode and quirks mode? What role does the doctype play with these modes?
6. What is the difference between the <p> and the <div> element? In what contexts should one use the one over the other?
7. Describe the difference between a relative and an absolute reference. When should each be used?
8. What are the advantages of using the new HTML5 semantic elements?
9. What are the main benefits of using CSS?
10. What are the different parts of a CSS style rule?
11. What is an element selector and a grouped element selector? Provide an example of each.
12. What are class selectors? What are id selectors? Briefly discuss why you would use one over the other.
13. What are contextual selectors? Identify the four different contextual selectors.
14. What are pseudo-class selectors? What are they commonly used for?
15. What are the three cascade principles used by browsers when style rules conflict? Briefly describe each.
16. Illustrate the CSS box model. Be sure to label each of the components of the box.

## **Module 2**

1. What are the elements used to define the structure of an HTML table?
2. Describe the purpose of a table caption and the table heading elements.
3. How are the rowspan and colspan attributes used?
4. Create a table that correctly uses the caption, thead, tfoot, and tbody elements. Briefly discuss the role of each of these elements.
5. What are the drawbacks of using tables for layout?
6. What is the difference between HTTP GET and POST?
7. What is a query string?
8. What is URL encoding?
9. What are the two different ways of passing information via the URL?
10. What is the purpose of the action attribute?
11. What are some of the main additions to form construction in HTML5?
13. What is web accessibility?
14. What are microformats? What is their purpose?
15. Describe how block-level elements are different from inline elements. Be sure to describe the two different types of inline elements.
16. Briefly describe the two ways to construct multicolumn layouts in CSS.
17. Write the CSS and HTML to create a two-column layout using positioning and floating.
18. Briefly describe the differences between fixed, liquid, and hybrid layout strategies.
19. What is responsive design? Why is it important?
20. What are the advantages and disadvantages of using a CSS framework.
21. Explain the role of CSS preprocessors in the web development work flow.

## **Module- 3**

1. What is JavaScript?
2. Discuss the advantages and disadvantages of client-side scripting.
3. How is a browser plug-in different from a browser extension?
4. How do AJAX requests differ from normal requests in the HTTP requestresponse loop?
5. What kind of variable typing is used in JavaScript? What benefits and dangers arise from this?
6. What is fail-safe design, and why does it matter?

7. Compare graceful degradation with progressive enhancement.
8. What are some key DOM objects?
9. How does one access a particular HTML tag through JavaScript?
10. What is a listener?
11. Identify and briefly describe at least four different server-side development technologies.
12. Describe the difference between the multi-threaded and multi-process setup of PHP in Apache.
13. Describe the steps taken by the Zend Engine when it receives a PHP request.
14. What does it mean that PHP is dynamically typed?
15. What are server-side include files? Why are they important in PHP?
16. How do we define default function parameters in PHP?
17. How are parameters passed by reference different than those passed by value?

## **Module-4**

1. What are the superglobal arrays in PHP?
2. What function is used to determine if a value was sent via query string?
3. Describe the relationship between keys and indexes in arrays.
4. How does one iterate through all keys and values of an array?
5. What does urlencode() do? How is it “undone”?
6. What information is uploaded along with a file?
7. How do you read or write a file on the server from PHP?
8. List and briefly describe the ways you can limit the types and size of file uploaded.
9. What classes of information are available via the \$\_SERVER superglobal array?
10. Describe why hidden form fields can easily be forged/changed by an end user.
11. What is a static variable and how does it differ from a regular one?
12. What are the three access modifiers?
13. What are the principles of data encapsulation?
14. What is the advantage of polymorphism?
15. When is the determination made as to which version of a method to call? Compile time or run time.

## **Module-5**

1. Why is state a problem for web applications?

2. What are HTTP cookies? What is their purpose?
3. Describe exactly how cookies work.
4. What is the difference between session cookies and persistent cookies? How does the browser know which type of cookie to create?
5. What is web storage in HTML5? How does it differ from HTTP cookies?
6. What is session state?
7. Describe how session state works.
8. In PHP, how are sessions stored between requests?
9. How does object serialization relate to stored sessions in PHP?
10. What is a web farm? What issues do they create for session state management?
11. What is caching in the context of web applications? What benefit does it provide?
12. What is the difference between page output caching and application data caching?
13. Why are prototypes more efficient than other techniques for creating classes in JavaScript?
14. How can we add methods to existing classes, like String or array?
15. What does `$()` shorthand stand for in jQuery?
16. Write a jQuery selector to get all the `<p>` that contain the word "hello". How can we ensure jQuery loads, even if the CDN is down?
17. What is the difference between the `append()` and `appendTo()` methods?
18. What are the advantages of using asynchronous requests over traditional synchronous ones?
19. What are the two techniques for AJAX file upload?
20. What are the commonly used animations in jQuery?
21. What is the base method on which all jQuery animations rely?
22. What do MVC frameworks accomplish?