CIT 208: Web Technology - II Model Questions #1

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Question 1

Describe the development of Web from 1.0 to 3.0.

Question 2

Describe the HTTP Request and Response with appropriate diagrams. Discuss its implications on different status codes with their meanings.

Question 3

Define XHTML. How is it different from HTML5? How will you choose the choice of HTML5 and XHTML for web projects?

Question 4

How can you form complex selectors in CSS? Can you style a document element without the use of ID, CLASS, NAME?

Question 5

Differentiate between dynamic and static page? Highlight their importance with respect to modern web development.

Question 6

Describe different page layout techniques. Which method do you prefer the most and why? Suppose you are asked to design an HTML for ekantipur newspaper(the print version). Which layout tools would be useful?

Question 7

Design a website that shows different designs with print media, mobile media and desktop media.

Question 8

What is BootStrap? How is it convenient to use with HTML design? Discuss.

Question 9

Write an ajax script to post a data

```
{"name":"Shiva", "roll": "23"}
```

and api at 'test.anup.pro.np/hello' responds with

```
{"description": "Shiva is a nice guy"}
```

Use this description to update the innerText of p element inside <div data="shiva element>

```
<body>
    <div data="shiva">
        <p class="desc"></p>
    </div>
    <div data="ram">
        <p class="desc"></p>
    </div>
</body>
```

Question 10

IMPORTANT!!!

1. Discuss XML DOM Tree using suitable example.

2. How do XSD and DTD differ? Highlight significant advantages of XSD in respect to DTD. Discuss suitable examples with both.

Question 11

IMPORTANT!!!

1. What is XSLT? Use it with suitable examples to render a HTML page.

2. Discuss the use of XPATH and XQUERY.

Question 12

What is JSON? Discuss on libraries like jQuery which are used for JS operations.

Question 13

IMPORTANT

1. What are the differences between let, const and var keywords in JS.

2. How is scope of a variable determined in relation to functions, class methods? Discuss the implications if it declared outside the scope or inside the scope in relation to functions and class methods.

Question 14

Write an example on JS use of for-of, for-await-of, for-in and for-each loops for iterating JS arrays.

Question 15

IMPORTANT

1. What do you understand by Object class of JS? Illustrate the use of inheritance of default values between two classes: Animal and Dog.

2. Discuss the use of constructor methods for object creation in JS.

3. Implement a callback function in JS.

Question 16

IMPORTANT

1. What do you use the Promise for in JS? Discuss the use of .then and .catch in its implementation.

2. Demonstrate the use of arrow functions. How is it different from normal functions in JS?

3. Discuss the use of async and await?

Question 17

How is SSL security confirmed while browsing the web?

Question 18

What is Cryptography? Discuss the use of Single Key Encryption and Public-Private Key Encryption.

Question 19

1. Your senior developer says that your php script is vulnerable to SQL injection. How do you solve your code to protect from it?

2. Your senior developer says that your php script is vulnerable to XSS. How do you solve your code to protect from it?

Question 20

Suppose you are given a task to make a website live. Discuss on different techniques to deploy your

1. static website

2. dynamic website in php and mysql

Question 21

Discuss different techniques to securing a library management system website hosted in your university.

Question 22

What do you understand by CMS? How do different web systems interact with these CMS systems? Discuss on any 3 CMS systems. Differentiate between on-site CMS(for example wordpress) and off-site CMS (for example datocms)

Question 23

1. What is MVC architecture? Describe their role in web app development.

2. What is unit-testing? Why is it useful in web development?

3. Discuss on any 3 MVC systems (ASP.NET MVC, Laravel, CodeIgniter, Spring MVC).

4. What do you understand by framework? Discuss on any PHP framework that you know. Why are frameworks popular in web app development?