CIT 106: Web Technology - I Model Questions #1

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1   Introduction to Web

Question 1

Describe the development of Web from 1.0 to 3.0.

Question 2

Internet is unreliable. Describe in terms of state of network, threats of information communication, availability of resources with traffic and authenticity of information.

Question 3

What do you understand by internet protocols? Why are they necessary. Describe some of the internet protocols used to browse websites, send/receive emails, transfer files and authenticate internet services.

Question 4

Describe DNS. Discuss the different parts of "bit2022.anup.pro.np" separated by the dots(.).

2   HTML

Question 5

What do you understand by HTML5 and XHTML? Why is XHTML still used today?

Question 6

Design the home page of Gandaki University by using the learned CSS principles. Write the HTML and CSS.

Question 7

Design the marksheet of Gandaki University first terminal exam.

Question 8

How is spanning done in rows and columns in HTML table?

Question 9

Design a form in HTML and do some validations on form values (email, password, phone number, date).

Question 10

Describe GET, POST and PUT methods used by client to access a web resource in the remote server.

Question 11

List out some of the form control techniques. (for e.g. onsubmit, onreset). Write an example for each of the the control names.

3 CSS

Question 12

What do you understand by pseudo elements?

Question 13

What are CSS selectors? Describe with examples the use of CSS Combinators. What do these selector mean: ˜, +, >?

Question 14

Differentiate between inline, block and inline-block elements with examples.

4 JavaScript

> **Question 15**
>
> Describe the use of
>
> ```
> let
> const
> var
> ```

> **Question 16**
>
> How do you write a function in JavaScript? Demonstrate the use of recursive function for factorial.

> **Question 17**
>
> What do you understand by event handling? How can you handle different DOM events in JS?

> **Question 18**
>
> Tabulate different operators available in JS. What are their functions.

> **Question 19**
>
> How can you change the style of a DOM element using JavaScript? Demonstrate it with a button click event.

> **Question 20**
>
> What are the essential concepts required in handling a HTML form for user input values? Use the 'serialize' function on form element. What values can be processed by this method? Describe its superiority to form handling technique.
>
> ```
> serialize(document.getElementById("myForm"))
> ```

> **Question 21**
>
> How can we check for multiple values in JavaScript? for instance -
>
> ```
> checkbox
> multiple select
> ```

5 PHP

Question 22

Write a PHP script to iterate over a multi-dimensional array to generate a table of routine of different subjects taught in your classroom.

Question 23

What is post-processing in PHP? Demonstrate a technique to validate a form in server side.

Question 24

What are cookies and session used for? Demonstrate with an example.

Question 25

Write a function in PHP to calculate the area of a rectangle. Use values from form to POST data to the script and evaluate the area.

Question 26

Write a HTML form page with following elements

```
input element
radio select
checkbox
select element
multiple select element
```

and PHP script.

Question 27

How are expressions formed in PHP? Explain different expressions - arithmetic, logical, bitwise.

Question 28

How can you debug a PHP script? Describe in detail.

6 PHP and JavaScript

Question 29

What are the key differences in form processing in JS and PHP? Describe each difference with a related example.

Question 30

Compare and contrast different operators used in PHP and JS.

Question 31

Differentiate between client-side and server-side scripting.

Question 32

Compare and contrast string functions of JS and PHP.

Question 33

What are Objects created in JS? Compare the associative arrays used in PHP with the JS objects.

Question 34

Describe typecasting in PHP and JS.

Question 35

Describe different control methods (loops and conditionals) used in PHP and JS.

7 PHP and MYSQL

Question 36

Write a PHP script to connect to the MYSQL database with following credentials:

```
user: bit2022
pwd: mahendrapoolUniversity
database: dbCheck
```

1. Write a script to insert into a table "bitTable" with fields

```
id [integer primary key],
name [varchar],
semester[integer],
guid[varchar]
```

   with values

```
name = yourname
semester = yoursemNumber
guid = yourguid
```

2. Write a script to Update that record with your friend's record.

3. Write a script to Delete that record.

Question 37

What do you understand by CRUD operation? How can you do them using PHP and Database?