

U18ITI6203 Web Technology

QUESTION BANK

UNIT I

1. **Write** a JavaScript program to demonstrate the onclick event

```
<button onclick="myFunction()">Click me</button>
```

2. **Design** a webpage with a form consisting of two text boxes and a button. The first text box is used to enter an integer. Find the sum of the digits of the given number in the first text box and display the results in the second text box if the button is pressed.

3. **Discuss** the various attributes of HTML form element.

- **Accept-charset**
- **Action**
- **Autocomplete**
- **Enctype** ☐ **Method**
- **Name**
- **Novalidate**
- **Rel**
- **Target**

4. **What** is URL? What are the various parts of URL?

URL is an acronym for Uniform Resource Locator and is a reference (an address) to a resource on the Internet. A URL has two main components: Protocol identifier: For the URL `http://example.com`, the protocol identifier is `http`. Resource name: For the URL `http://example.com`, the resource name is `example.com`.

VARIOUS PARTS: protocol (or scheme), subdomain, domain name, top level domain, port, path, query, parameters, and fragment.

5. **State** the advantages of scripting languages

- Easy Learning
- Fast Editing

- Interactivity
- Functionality

6. **What** are scripting languages? List out the features of JavaScript.

- Scripting language which is used to enhance the functionality and appearance of web pages.
- Used to create dynamic and Interactive web pages.

Features:

- Light Weight Scripting language
- Dynamic Typing
- Object-oriented programming support
- Functional Style
- Platform Independent
- Prototype-based
- Interpreted Language

7. **Write** the HTML code to create a clickable image.

```
 <map
name="workmap">   <area shape="rect" coords="34,44,270,350" alt="Computer"
href="computer.htm">   <area shape="rect" coords="290,172,333,250"
alt="Phone" href="phone.htm">   <area shape="circle" coords="337,300,44"
alt="Coffee" href="coffee.htm">
</map>
```

8. **Summarize the features of JSON.**

- JSON is Scalable. Because of language-independent, it works with most of the modern programming language.
- JSON is lightweight.
- JSON is easy to read and write.
- JSON is a text-based, human-readable data exchange format.

9. **Compare between Java and JavaScript.**

Java	JavaScript
Java is an object oriented programming language .	JavaScript is an object based programming language .
Java creates application that can run in a virtual machine or browser	JavaScript code run on browser only .
Java code is compiled .	JavaScript is interpreted .
High level and strongly typed language	Text based and loosely typed language

10. Design a web page to display the bio-data of a candidate with all the necessary fields and validate the fields using script code.

11. What is the use of HTML forms? Create a HTML form for Airline registration

- An HTML form is a section of a document which contains controls such as text fields, password fields, checkboxes, radio buttons, submit button, menus etc.
- An HTML form facilitates the user to enter data that is to be sent to the server for processing such as name, email address, password, phone number, etc.

12. Develop a JavaScript program to arrange set of number in descending order.

```
function sortDescending(num) {
    return Number(num.toString().split("").sort((a, b) => b - a).join(""));
}
```

```
console.log(sortDescending(123));
```

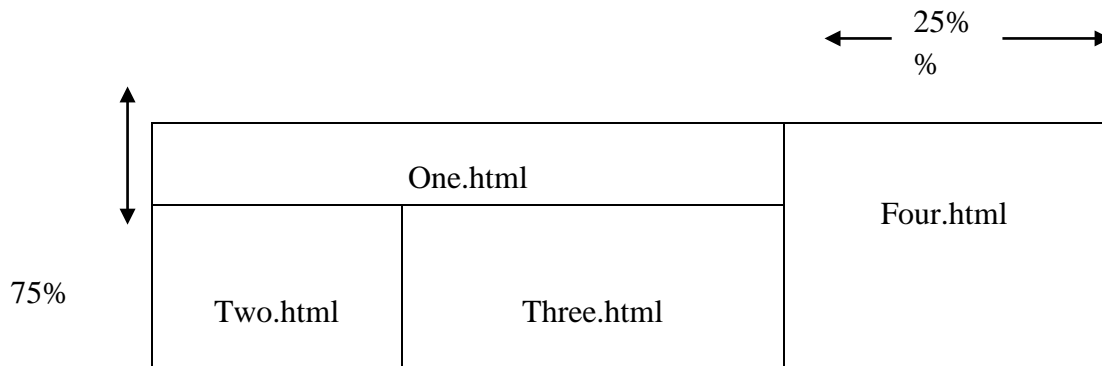
13. What is DOM? Explain its usage with an example (10m)

14. Design a webpage with two text boxes and a button. The first text box is used to enter a three digit number. Find the sum of the digits and store it in the second text box if the button is pressed.

15. Explain any four event handlers in JavaScript.(10m)

16. Create a HTML form (airline /railway reservation system) and validate the form using Javascript code.

13. Build HTML code to create a framed web page in the following format:



14. **How will** you add an image and a hyperlink to a webpage? Demonstrate with an example.

15. **Create a web page about yourself and apply the three types of style sheets.**

16. Explain how to transform JSON text to a JavaScript object?

[https://www.geeksforgeeks.org/converting-json-text-to-javascript-object/#:~:text=JSON%20text%2Fobject%20can%20be,parse\(\).&text=If%20we%20pas s%20a%20invalid,using%20in%20tag%20of%20HTML\).](https://www.geeksforgeeks.org/converting-json-text-to-javascript-object/#:~:text=JSON%20text%2Fobject%20can%20be,parse().&text=If%20we%20pas s%20a%20invalid,using%20in%20tag%20of%20HTML).)

17. Why must one use JSON over XML?

- JSON is lightweight in comparison with XML.
- JSON parses data faster than XML by using standard JavaScript function.
- XML is much more difficult to parse than JSON by using XML parser. □ JSON has a better ratio of data to markup.

18. List out the uses of JSON?

- JSON format is used for serializing and transmitting structured data over network connection.
- It is primarily used to transmit data between a server and web applications.
- Web services and APIs use JSON format to provide public data.
- It can be used with modern programming languages.

19. With suitable code explain how to convert JSON object to Javascript code.

```
var jsonPerson = '{"first_name":"billy", "age":23}';
var personObject = JSON.parse(jsonPerson);
```

20. **Develop a html page** consisting of three text boxes and two buttons. The user is allowed to enter an integer in the first text box. Write appropriate Javascript code to reverse the digits and sum the digits in the integer. Display the results in appropriate textboxes when the corresponding button gets pressed.

21Design a webpage with a textbox and a button. The user can enter a five digit number in the text box. Write JavaScript code to verify the entered number is a palindrome number or not.

UNIT II

1.What is XML?How is it different from HTML?

- **XML is a standard language which can define other computer languages, but HTML is a predefined language with its own implications.**
- **The key difference between HTML and XML is that** HTML displays data and describes the structure of a webpage, whereas XML stores and transfers data

2. List out the advantages of XML.

- XML uses human, not computer, language. XML is readable and understandable, even by novices, and no more difficult to code than HTML.
- XML is extendable.
- Any application that can process XML can use your information, regardless of platform.

3. Justify the need for namespaces in XML.

XML Namespaces provide a method to avoid element name conflicts.

4.List out the features of XML.

- 1) XML separates data from HTML. ...
- 2) XML simplifies data sharing. ...
- 3) XML simplifies data transport. ...
- 5) XML increases data availability. ...
- 6) XML can be used to create new internet languages.

5. **Create a XML** document consisting of details about set of students. Validate the document using XML DTD. Apply XSLT to display the student details in a tabular form.
6. **Create a XML document consisting of details of employees in an organization. Validate the document using XML Schema..**

7. Create the DTD specification for the following schema:

Customer (Name, Address, PurchaseInfo, CusType)

Address (StreetName, Place, City, Phone)

PurchaseInfo (Orderno, ItemList, Amount)

ItemList (ItemNo, ItemName, Quantity)

CusType(Regular customer/visitor)

The customer may be regular or visitor .A customer can place order any number of times. At least one order must be associated with a customer. Prepare a valid XML document (customer.xml) for the XML DTD (customer.dtd)

8. What are the advantages of XML Schema over DTD?

- XSD keeps much better control over types of data than the DTD.
- DTD does not allow creating customized data types while the XSD provides full support to create □ customized data types.
- XSD allows you to specify restrictions on data.

9. Describe the working of AJAX-DOM based XML. (10m)

10. Create a XML document consisting of details of various books in the library. Validate the document using XML DTD. Apply XSLT to display the book details in a tabular form.

11. What is AngularJS? Summarize its features.

- **AngularJS is a** JavaScript framework. **It can be added to an HTML page with a <script> tag.**
- AngularJS extends HTML attributes with **Directives**, and binds data to HTML with **Expressions**.

FEATURES:

- Data Binding.
- Architecture.
- Directives.
- Not Browser Specific.
- Codeless.
- Speed and Performance.

UNIT III

1. **Create a vehicle** registration form and validate the same using PHP.
2. Write a PHP program to generate the Fibonacci series (0,1,1,2,3,5,...)

```
<?php
$num = 0;
$n1 = 0; $n2 = 1; echo "<h3>Fibonacci series for first
12 numbers: </h3>"; echo "\n"; echo $n1.' '.$n2.' ';
while ($num < 10 )
{
    $n3 = $n2 + $n1;
    echo $n3.' ';    $n1
    = $n2;
    $n2 = $n3;
    $num = $num + 1;
?>
```

3. Write PHP code to find the **smaller of two numbers**. <?php function smallest(\$x, \$y) {
 \$min = \$x; if
 (\$x <= \$y)
 { \$min = \$x; }
 else { \$min =
 \$y; }

```
    echo "Smallest number among $x, $y is: $min\n";  
}
```

```
smallest(100, 50);
```

```
?>
```

4. Write PHP code to find the length of a given string.

```
<?php $str =  
'WebTechnology'; echo  
"Your String is:". $str;  
echo "<br>"; echo  
strlen($str);  
?>
```

5. Explain the syntax of 'for-each' in PHP.

```
foreach ($array as $value) {  
    code to be executed;  
}
```