WT

Q: Difference b/w HTML and XHTML.

	HTML	XHTML
(1)	HTML stands for HyperText Markup lan^{n}.	XHTML stands for Extensible HyperText Markup lan^{n}.
(2)	It was developed in 1991.	It was released in 2000.
(3)	It is extended form of SGML.	It is extended form of XML and HTML.
(4)	It is not Case sensitive	It is Case sensitive.
(5)	Do not require a closing tag.	Require a closing tag.
(6)	Extension: .html or .htm	Extension: .xhtml or .xht or .xml

Q diff b/w inline and block element with example.

(10). What are empty elements in html briefly explain it with example.

ans ⇒ Those elements of HTML that cannot have closing tag and cannot have some content like text or child element inside them.

Example → <img>,
, <input>, <hr>, <meta>, <link>

 Hi I am raushan
 Kumar

Q. In how many ways can you integrate CSS on a web page? discuss with the help of programming examples.

(1) Inline CSS: We can apply CSS directly within HTML element using the 'style' attribute.

Example:

```
<p style="color: blue; font-size: 16px;">
This text is inline styled. </p>
```

(2) Internal (or Embedded): We can include style within the '<style>' tag in the head document '<head>' section.

```
<!DOCTYPE html>
<html>
<head>
<style>
p { color: pink;
    font-size: 16px;
}
</style>
</head>
<body>
<p> This is styled internally. </p>
</body>
</html>
```

(3) External CSS: We can create a separate CSS file and link it to your HTML document using the '<link>' element.

style.css:

```
p{ color: pink;
   font-size: 20px;
}
```

```
<!DOCTYPE html>
<html>
<head>
<link rel="stylesheet" href="style.css">
</head>
<body>
<p> This is externally styled </p>
</body>
</html>
```

Q. Briefly explain the ordered and unordered lists in HTML with suitable example. Also explain how can you change the type of list and control the list.

Ans⇒ In html ordered lists <ol> are used to create numbered lists, while unordered list ('<ul>') create bulleted lists

Example:

```
<ol> <li> First item </li>
     <li> Second item </li>
     <li> Third item </li>
</ol>
```

unordered list:

```
<ul>
  <li> Apple <li>
  <li> Banana </li>
  <li> Orange </li>
</ul>
```

To change the type of the list item marker in unordered list, we can use 'type' attribute within the '<ul>' tag

Ex → changing into square markers.

```
<ul type = "square">
  <li> Item 1 </li>
  <li> Item 2 </li>
  <li> Item 3 </li>
</ul>
```

To change the type of list item marker in an ordered list you can use the 'type' attribute within the ' tag

Ex → changing it to counting to uppercase Roman numerals.

```
<ol type = "I">
  <li> Item A </li>
  <li> Item B </li>
  <li> Item C </li>
</ol>
```

(8M) Create a feedback form in HTML and demonstrate the use of various form elements like text field, radio buttons, check boxes, text area. and submit button, Also apply form validation on any two fields using Javascript.

```
<!DOCTYPE html>
<html lang="en">
<head>
<title> Feedback form </title>
<style> label{ display: block;
}
</style>
</head>
<body>
<h1> Feedback Form </h1>
<form>
<label for="name"> Name: </label>
<input type="text" id="name" name="name">
<label for="email"> Email: </label>
<input type="email" id="email" name="email">
<label> Rating: </label>
<label for="excellent"> Excellent </label>
<input type="radio" id="excellent" name="rating" value="excellent">
<label for="good"> Good </label>
<input type="radio" id="good" name="rating" value="good">
<label for="average"> Average </label>
<input type="radio" id="average" name="rating" value="average">
<label for="bad"> Bad </label>
<input type="radio" id="bad" name="rating" value="bad">
```

```
<label for="comments">Comments</label>
<textarea id="comments" name="comments" rows="4"
cols="50"></textarea>
<label for="subscribe">subscribe to newsletter</label>
<input type="checkbox" id="subscribe" name="subscribe"
value="yes">
<input type="submit" value="Submit">
</form>
</body>
</html>
```

Q. Difference b/w GET and POST methods in html

GET	POST
(i) Sends data as part of the URL	Sends data in the request body
(ii) visible in the URL bar.	Not visible in the URL.
(iii) Suitable for less sensitive information	Suitable for large sensitive information.
(iv) use → retrieving data	use → submitting data
(v) not secure	secure
(vi) fast	slow

Q. How tables are created in HTML? What are the various tags used during table?

Ans → To create tables in HTML we can use a combination of the <table>, <tr>, <th>, <td> tags.

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>table</title>
</head>
<body>
<table border="block">
<tr>
<th>Name</th>
<th>URN</th>
<th>CRN</th>
</tr>
<tr>
<td>RAUSHAN</td>
<td>2203751</td>
<td>2221139</td>
</tr>
<tr>
<td>[redacted] JOY</td>
<td>2203752</td>
<td>2221139</td>
</tr>
</table>
</body>
</html>
```

- <table>: It represents the entire table.
- <tr>: It represents a row within table.
- <th>: It represents header cell of first row.
- <td>: It represents data cell within table.

Q diff b/w inline and block element with ex

Inline element	block element
(i) It occupies only necessary width.	It occupies full available width
(2) Example: , <a>, ,	, <p>, <h1>, to <h6>, ,
(3) Does not start on a new line	starts on a new line
(4) only as wide as content	full width of the parent container
(5) Syntax: This is inline ele	Syntax: This is a block ele

* Discription list

```
<dl>
  <dt> Term 1 </dt>
  <dd> Description 1 </dd>
  <dt> Term 2 </dt>
  <dd> Description 2 </dd>
</dl>
```

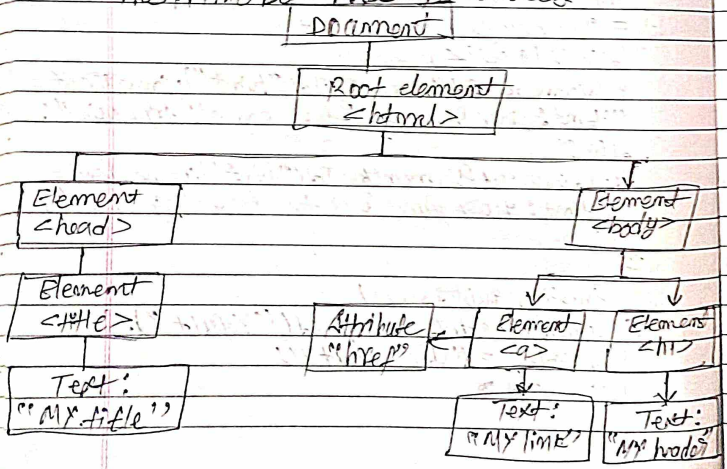
* Game using Java script

```
<script>
let num, random, guess;
function startgame()
{ num = document.getElementById("maximum").value;
random = Math.floor(Math.random()*num+1;
document.getElementById("hint").innerHTML=
innerText = "Guess a number b/w 1 and "+num
+"!";
}
function checkguess()
{ guess = document.getElementById("userGuess").
value; if(guess==random)
document.getElementById("result").innerText
= "congrats! your won" +
else if (guess<random)
{ document.getElementById("hint").innerText =
"Hint: your guess was too small try again";
else {
document.getElementById("hint").innerText =
"Hint: your guess was too large. Try again";
}
}
function quitGame()
{ document.getElementById("result").
innerText = "User Quit"}
</script>
```

MST-2

(Q2) What is HTML DOM? answer your question with a flow chart.

ans⇒ The HTML DOM is an object Model. For HTML it defines HTML element as object, properties for all HTML element Methods for all HTML elements, event for all HTML elements.
The HTML DOM is an API for Javascript. Javascript can add/change/remove HTML elements, HTML attributes, CSS styles, HTML events.
The HTML Dom Tree of objects



(Q3) Discuss various selectors in jquery with example.

ans⇒ jquery selectors allow you to select and manipulate HTML elements.

jQuery selectors are used to "find" HTML elements based on their name, id, class, type, attributes, values of attributes and much more. It based on the existing CSS selectors, and it has some own custom selectors. All selectors in jquery start with the dollar sign ($) and parenthesis $().

1. The element selector: The jquery element selector selects elements based on the element name.
   $("p")
   Example: $(document).ready(function(){
   $("button").click(function(){
   $("p").hide();
   });
   });
2. The #id Selector: The jquery #id selector uses the id attribute of an HTML to find the specific element based on id.
   $("#test")

Example: when you click on button the element with id="test" will be hidden.

```
$(document).ready(function(){
    $("button").click(function(){
        $("#test").hide();
    });
});
```

(3) The .class selector: The jquery .class selector finds elements with a specific class. To find elements with a specific class, write a period character, followed by the name of the class:

```
$(".test")
```

Ex: when a user clicks on a button, the element with class="test" will be hidden:

```
$(document).ready(function(){
    $("button").click(function(){
        $(".test").hide();
    });
});
```

(Q9) Discuss the concept of web storage in HTML 5.

Ans: with web storage, web applications can store data locally within the user's browser. Before HTML 5, application data had to be stored in cookies, included in every server request. Web storage is more secure and large amounts of data can be stored locally, without affecting website performance.

Cookies storage limit is at least 5MB and information is never transferred to the server. Web storage per domain and protocal. All pages from one origin can store and access the same data.

(Q8) Explain 3D transform in CSS

CSS also supports 3D transformations

CSS 3D Transforms Methods

with the CSS transform property you can use the following 3D transformation methods:

- rotateX()
- rotateY()
- rotateZ()

- The rotateX() Method: The rotateX() method rotates an element around its X axis at a given degree.

Example:
```
#myDiv {
    transform: rotateX(150deg);
```

- The rotateY() Method: The rotateY() method rotates an element around its Y-axis at a given degree. Ex:

```
#myDiv {transform: rotateY(150deg) }
```

- The rotateZ() Method: The rotateZ() method rotates an element around its Z-axis at a given degree.

Example:

```
#myDiv {
  transform: rotateZ(90deg);
}
```

(Q9) Explain the various event handling method in jquery.

Ans ⇒ Here are some event handling methods

Mouse Events	Keyboard Events	form event	Document/Window Events
click	keypress	submit	load
dbclick	keydown	change	resize
mouseenter	keyup	focus	scroll
mouseleave		blur	unload

- click(): click method Attach a function to the click event of selected elements.
- Ex ⇒
```
$("p").click(function(){
  $(this).hide();
});
```
- dbclick(): dbclick method attach a function to the double-click event of selected elements

Ex ⇒
```
$("p").dbclick(function(){
  $(this).hide();
});
```

- on(): on method attached a function to the on click event of selected elements,

Ex ⇒ `$("p").on("click",function(){$(this).hide();});`

- mouseenter(): mouseenter method attach a function to the mouse enter event of selected elements.

Ex ⇒
```
$("p").mouseenter(function(){
  $(this).hide();
});
```

- mouseleave(): mouseleave method attaches a function to the mouse leave event of selected elements.

Ex ⇒
```
$("p").mouseleave(function(){
  $(this).hide();
});
```

and so on just add any events example will be same.

(Q10) what are the different fade methods in jquery?

Ans ⇒ JQuery fading Methods

- fadeIn() — fadeIn → show
- fadeOut() — fadeIn ⇒ hide
- fadeToggle()
- fadeTo()

(1) fadeIn(): The JQuery fadeIn() methods is used to fade in a hidden element.

Syntax: `$(selector).fadeIn(speed,callback);`

Ex ⇒
```
$("button").click(function(){
  $("#div1").fadeIn();
  $("#div2").fadeIn("slow");
  $("#div3").fadeIn(3000);
});
```

(ii) fadeOut(): The jQuery fadeOut() method is used to fade out a visible element.

Ex→
```
$("button").click(function(){
    $("#div1").fadeOut();
    $("#div2").fadeOut("slow");
    $("#div3").fadeOut(3000);
});
```

(iii) fadeToggle(): The jQuery fadeToggle() method toggles between the fadeIn() and fadeOut() methods.

Ex→
```
$("button").click(function(){
    $("#div1").fadeToggle();
    $("#div2").fadeToggle("slow");
    $("#div3").fadeToggle(3000);
});
```

(iv) jQuery fadeTo(): The jQuery fadeTo() method allows fading to a given opacity (value b/w 0 and 1)

```
$("button").click(function(){
    $("#div1").fadeTo("slow", 0.15);
    $("#div2").fadeTo("slow", 0.4);
    $("#div3").fadeTo(3000, 0.7);
});
```

(Q9) Differentiate between localStorage and Session Storage.

	Local Storage	Session Storage
(i)	Local Storage is a built-in capability to store data locally on a user's computer. The data in local storage remains available even after the user closes the browser.	Session storage is similar to local storage. the diff is that while data in local storage doesn't expire, but data in session storage is cleared when the page session ends.
(ii)	The storage capacity of local storage is 5MB/10MB	The storage capacity of session storage is 5MB.
(iii)	The client can read local storage	The client cannot read session Storage.
(iv)	There is no transfer of data to the server	There is no transfer of data to the server
(v)	The data in local storage remains available even after the user closes the browser	The data in session storage is cleared when the page session ends.

(Q10) List the applications of AJAX

ans⇒ Here are the applications of AJAX

→ AJAX (Asynchronous javascript and XML) is a powerful technology used in web development to create interactive and dynamic webpage without reloading to entire web page.

Applications

1. Form submission: Submitting forms asynchronously providing real-time feedback to users without refreshing the page.
2. Data retrieval: Fetching data from a server and updating parts of a web page dynamically
3. Live Data updates: updating content in real time without the need of manual refreshes like chat applications.
4. Auto save: Automatically saving user input in forms of documents without interrupting their workflow.
5. User Authentication: checking user credentials asynchronously and providing feedback without page reloads.
6. Weather updates: Displaying weather forecasts that update dynamically without refreshing the page.
7. online Gaming: Creating real-time multi-player games where player actions are communicated to the server asynchronously.

(pyq) Elaborate CSS3 Borders multicolumn layout

ans ⇒ CSS Multi-column properties.

- column-count
- colum-gap
- column-rule-width
- column-rule-color
- column-rule-style
- column-rule
- column-span
- column-width

properties	Description	Example
column-count	specifies the no of column an ele should be divided into	div { column-count: 3; }
column-fill	specifies how to fill column	div { column-fill: auto; }
column-gap	specifies the gap between the columns	div { column-gap: 10px; }
column-rule	A shorthand property for setting all the column rules	div { column-rule: 1px solid pink; }
column-rule color	specifies the color of the rule b/w column	div { column-rule-color: Blue; }
column-rule style	specifies the style of the rule b/w column	div { column-rule-style: solid; }
column-span	specifies how many columns an element should span across	h2 { column-span: all; }
column-rule width	specifies the width of rule b/w column	div { column-rule-width: 1px; }
column width	specifies a suggested, optimal width for the column	div { column-width: 100px; }
columns	A shorthand property for setting column-width and count.	div { column: 200px 3; }

8 Marks

(Pg8) Create a multi column layout in html using CSS 3 (just like newspaper with same heading, text and image. also diagramatically represent the layout.

ans ⇒ index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>Newspaper layout</title>
</head>
<body>
<div class="container">
  <div class="column">
    <div class="headline">Breaking News</div>
    <div class="text">lorem ipsum dolor sit amet, consectetur adipiscing elit. Vivamus sagittis lacus vel augue laoreet, at sagittis nisi tristique.
    </div>
    <img src="image1" alt="Image" class="image">
  </div>
  <div class="column">
    <div class="headline">Sports</div>
    <div class="text">IPL 2024's winner will be csk team, MS dhoni is the captain of BBK team he won 5 ipl cup and 1 more in 2024
    </div>
    <img src="image2" alt="Image" class="image">
  </div>
</body>
</html>
```

style.css file

```
* {
  padding: 0;
  margine: 0;
}
.container {
  display: flex;
  flex-wrap: wrap;
  justify-content: space-between;
}
.column {
  width: calc(33.33% - 20px);
  margine-bottom: 20px;
  padding: 0 10px;
  box-sizing: border-box;
}
.headline {
  font-size: 20px;
  font-weigh: bold;
  margin-bottom: 10px;
}
.text { line-height: 1.6;
  margin-bottom: 10 px;
}
```

```
.image {
  width: 100%;
  height: auto
  margin-bottom: 10px;
}
```

Ex: <input type="text" id="myInput">
<script>
$("#myInput").val("Hello, world");
</script>

(A) attr(): It sets or returns attributes and values of selected elements.
Ex: click me
<script>
$("#mylink").attr("href", "https://raufkates39.netlify.app");
</script>

(Pg9) How to set content with the jquery text(), html(), val(), attr() methods explain with example.

ans => (i) text(): It sets or returns the text content of selected elements.
Ex:
<script>
$("#mydiv").text("Hello, world!");
</script>

(ii) html(): It sets or returns the content (innerHTML) of selected elements.
Ex:

<script>
$("#myDiv").html(" Hello world ");

(iii) val(): It sets or returns the value attribute of selected elements.

(Pg10) List the features of code igniter framework

ans =>
(i) Free to use: It is licensed under MIT license, so it is free to use.
(ii) Light weight: It requires very small library, other library may be added upon dynamic request based on your needs. That is why it is quite fast and light weighted.
(iii) Generate SEO friendly URLS: URLS generated by code igniter are search-engine friendly and clean.
(iv) Built-in libraries: It comes with full packed libraries that enable all the web needed like DB, form validation etc.

Codeigniter is a great choice for developers looking for a simple, lightweight and powerful PHP framework for building web application

(iv) follows MVC pattern: It uses Model-view-controller which basically separates logic and presentation parts.

(pgm) write code snippets to demonstrate asort, ksort, arsort and krsort php functions.

ans ⇒

(i) sort() ⇒ Sort array in ascending order.
(2) rsort() ⇒ sort array in descending order
(3) asort() ⇒ Sort associative arrays in ascending order according to the value.
(4) ksort() ⇒ sort associative arrays in acending order acc to the key.
(5) arsort() ⇒ Sort associative arrays in descending order acc to the value.
(6) krsort() ⇒ Sort associative arrays in descending order acc to the key.

Exemples

(i) sort() ⇒

```
<? php
  $ numbers = array (5, 3, 2, 4, 7);
  Sort ( $ numbers );
  echo " sorted in ascending order using
       sort() : \n ";
  foreach ( $numbers as $value ) {
      echo " value = ". $ value . "<br>";
  3
```

(ii)

```
rsort( $numbers );
echo " \n sorted in descending order using
rsort() : \n";
foreach ($numbers as $value ) {
 echo " value =". $value . "<br>";
}
?>
```

O/p → sorted in ascending order using sort() :
value = 1
" = 3
" = 5
" = 7
" = 9
Sorted in descending order using rsort() :
value = 9
= 7
= 5
= 3
= 1

(iii) asort() →

```
<? php
  $fruits = array ("apple" => 2,
                   "orange" => 5,
                   "banana" => 3,
                   "grape" => 1
                  );
asort ($fruits );
echo " Sorted by value (ascending) using asort():
```

```
foreach ($fruits as $key => $value) {
    echo "key=" . $key . ", value=" . $value;
}
```

(iv)
```
arsort($fruits);
echo "\n Sorted by value (descending) using arsort
:";
foreach ($fruites as $key => $value) {
echo "key=" . $key . "; value=" . $value . ";
}
```

(v)
```
ksort($fruites);
echo "\n Sorted by key (ascending) using ksort";
foreach ($fruits as $key => $value) {
echo "key=" . $key . "value=" . $value . ";
}
```

(vi)
```
krsort($fruites);
echo "\n Sorted by key (descending) using
krsort :";
foreach ($fruites as $key => $value) {
    echo "key=" . $key . "value=" . $value . ";
}
?>
```

o/p → Sorted by value (ascending) using asort:
key = grape, value = 1
key = apple, value = 2
key = banana, value = 3
key = orange, value = 5

Sorted by value (descending) using arsort:
key = orange, value = 5
key = banana, value = 3
key = apple, value = 2
key = grape, value = 1

Sorted by key (ascending) using ksort:
key = apple, value = 2
key = banana, value = 3
key = grape, value = 1
key = orange, value = 5

Sorted by key (descending) using krsort:
key = orange, value = 5
key = grape, value = 1
key = banana, value = 3
key = apple, value = 2

(Pg8) How to connect PHP with MYSQL database also write PHP script to update the Address and Dept. No of jack william to United States and 5 respectively in the following table.

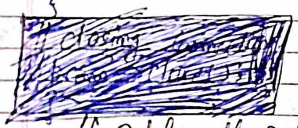
Ans →

Employee Details:

EmpId	EmpName	Address	Dept No
1	Mary Doe	Germany	2
2	Cindy Smith	Mexico	3
3	Jack William	England	4

```
<?php
$servername = "localhost";
$username = "root";
$password = "";
$dbname = "employee";
// create connection
$conn = new mysqli($servername, $username, $password, $dbname);
// check connection
if ($conn->connerror) {
die("Connection failed:" . $conn->connerror);
}
// create table
$sql = "CREATE TABLE employee_table (
EmpId INT NOT NULL,
EmpName VARCHAR(30) NOT NULL,
Address VARCHAR(30) NOT NULL,
DeptNo INT NOT NULL
)";
if ($conn->query($sql) === TRUE) {
echo "Table is created successfully";
} else {
echo "Error creating table:", $conn->error;
}
// insert data
$sql = "INSERT INTO employee_table (
EmpId, EmpName, Address, DeptNO)
VALUES
(1, 'Mary Doe', 'Germany', 2)";
if ($conn->query($sql) === TRUE) {
echo "New record created successfully";
} else {
echo "Error:" . $sql . "<br>" . $conn->error;
}
$sql = "INSERT INTO Employee_table (
EmpId, EmpName, Address, DeptNO)
VALUES (2, 'Cindy Smith', 'Mexico', 3)";
if ($conn->query($sql) === TRUE) {
echo "data inserted successfully";
} else {
echo "Error:" . $sql . "<br>" . $conn->error;
}
$sql = "INSERT INTO employee_table (
EmpId, EmpName, Address, DeptNO)
VALUES
(3, 'Jack william', 'England', 4)";
if ($conn->query($sql) === TRUE) {
echo "data inserted successfully"; }
```

```
else {
echo "Error:". $sql. "<br>". $conn->error;
}
// update
$sql = "UPDATE employee_table SET Address =
'United States', DeptNo = 5 WHERE EmpName =
'Jack William' ";
if ($conn->query($sql) === TRUE) {
echo "Data updated successfully";
} else {
echo "Error updating record:". $conn->
error;
}
// Delete
$sql = "DELETE FROM employee_table WHERE
EmpName = 'Mary Doe' ";
if ($conn->query($sql) === TRUE) {
echo "Data Deleted successfully";
} else {
echo "Error deleting record:", $conn->error;
}
```



```
// Delete all data inside a table
$sql = "DELETE FROM employee_table";
if ($conn->query($sql) === TRUE) {
echo "All data deleted from table";
} else {echo "Error in deleting all data";
}
```

```
// Add a column of type Date called Birthday
from employee_table and delete
that column (Birthday).

$sql = "ALTER TABLE employee_table ADD
Birthday DATE";

if ($conn->query($sql) === TRUE)
{
echo "column Birthday added successfully";
} else {
echo "Error in adding column:". $conn->error;

// Delete column
$sql = "ALTER TABLE employee_table DROP
column Birthday";

if ($conn->query($sql) === TRUE) {
echo "column Birthday deleted successfully"
}
else {
echo "column deleting error". $conn->error;

// closing connection
$conn->close();
?>
```

(Q) How can you import a file in PHP?

ans ⇒ To import a file in PHP, you can use the 'include' or 'require' statement

include : Includes and evaluates the specified file during the script execution. if the file is not found it will warning a issue.

require : similar to 'include' but if the specified file is not found it will result in fatal error.

```
<?php
include 'file.php';
require 'another_file.php';
?>
```

(Q) Difference b/w XML and HTML

HTML	XML
(i) Used to create structured documents for web browser	Designed to transport and store data.
(ii) It uses predefined tags like <p> , etc.	It uses custom tags defined by the user.
(iii) It doesn't require closing tags for all element	It requires opening and closing tags
(iv) It's extension is (.html)	It's extension is (.xml)
(v) No built in validation mechanism.	It have validation mech

(Q) diff b/w const and var

Feature	Const	var
Type of variable	Constant/not mutable	mutable
Scope	Block scope	function scope
Reassignment	Cannot be reassigned	can be reassigned
Use case	values that won't change	variable that may change
Initialization	Must be initialized	Can be declared without initialization

(Q) diff b/w const and define() in php.

Const	define()
(i) It is used to define constants at compile time	It is used to define constants at runtime.
(ii) Syntax: Const name = "Ram"	Syntax: define ("Name", "Ram");
(iii) scope: class and global scope	Global scope only.
(iv) function call: No	Yes, it is a function
(v) speed: Faster.	slightly slower.

Q) Explain the difference between Get and post methods in Php. In whom would you use each method, and what are the implication (प्रभाव, effect) of using one over others?

GET	POST
(i) It sends data as part of the URL.	It sends data in request body.
(ii) visible in URN.	No visible in URL.
(iii) Suitable for less sensitive data.	Suitable for large sensitive data
(iv) less secure	More secure
(v) It is used to retrieve information from server	It is used to send info to server.
(v) It is faster than POST	It is slower than GET.
(vi) form method Attribute <form method = "get">	<form method = "post">
(vii) URL length is limited about 2048 characters	No length limitation of URL.

When to use Each method

(i) GET:

(i) Retrieving Data: Use Get when you want to retrieve data from the server without causing any side effects.

(ii) Bookmarking: Use get when you want to share the link of Bookmark. Since the data is in URL user can easily bookmark and share the link.

(iii) Debugging: Get can be useful for debugging because the parameters are visible to the URL.

POST

(i) Submitting form data: Use post when you want to submit data.

(ii) Large data submissions: Use post when you need to send a large amount of data to the server as there is no limit to the amount of url length.

Implications of using one over the other

(i) Security: Use of POST over get leads to security because data not visible in the URL in post method.

(ii) Fast accessibility: Use Get over post leads to more faster because post is less fast than get.

Q Write short note on ajax it's application with the help of an example of using GET and POST Method.

AJAX: AJax stands for Asynchronous Javascript and XML. It is not a programming language, It is a combination of different technology. It is use to retrieve information from server to update a small part of a webpage dynamically without loading / refreshing the entire webpage. It also used to post / send info to a web server to changes the database Asynchronously without blocking other component.

~~How ajax works~~: Applications of Ajax
(i) Data fetching (ii) Data posting / sending
(iii) form validation (iv) Real-time data update
(v) Interactive user interface.

Example: Code Retrieving posting Data.

index.html → file

```
<body>
<button id="getBtn">Geting data</button>
<button id="postBtn">Post Data</button>
<Div id="result"></div>
</body>
```

here is a text file → abcd.txt

abcd.txt

Hi, I am Raushan Kumar

Now. Java script code (script.js)

```
const getdata = document.getElementById("getBtn");
const postdata = document.getElementById("POSTBtn");
const ref = document.getElementById("result");
    // get
getdata.addEventListener("click", function(){
  const obj = New XMLHttpRequest();
  obj.open("GET", 'abcd.txt', true);
  obj.onreadystatechange = function(){
   if(obj.readyState == 4 && obj.status == 200){
     ref.innerHTML = obj.response.Text;
   }};
     obj.send();
});
    // post
postdata.addEventListener("click", function(){
const obj = New XMLHttpRequest();
obj.open("POST", 'abcd.txt', true);
obj.setRequestHeader("Content-Type", 'application/x-www
    -form-urlencoded');
obj.onreadystatechange = function(){
if(obj.readyState == 4 && obj.status == 200){
{ ref.innerHTML = "Data posted successfully!";
}};
```

chi.send("This is the data to be Posted");
});
});

* Write sort Note on Jquery and its applications.

ans ⇒

Jquery is a fast, small and feature-rich JavaScript library "Write less, do More". Jquery takes a lot of common tasks that requires many lines of javascript code to be accomplish. Jquery done this tasks in a single line of code.

Basic applications

(i) DOM Manipulation: changing the content and style of HTML elements.

(ii) CSS manipulation: changing the ~~content~~ style of HTML elements.

(iii) Event Handling: Adding event listeners for user interactions.

(iv) Animation: Create rich animations and effects.

Ex ⇒ Animation:

```
<div id="box"></div>
<button id="Btn">Animated Box</button>
<script>
$(document).ready(function(){
$("#Btn").click(function(){
$("#box").animate({width:"200px",
height:"200px",
backgroundColor:"Blue"},
1000);
});
});
</script>
```

(PYQ) which two HTML elements tags are used to insert audio and video into an HTML 5 document? Give ex.

<video src="movie.mp4" controls hight="400px" width="400px"></video>

<audio src="movie.mp3" controls></audio>

(Q10) How can you perform text wrap using CSS? Name the property used to apply multiple background in CSS?

Ans ⇒ Text wrapping can be controlled using white-space and (word-wrap) properties in CSS

Example:

(i) & (ii)

```
div {  white-space: normal;
       word-wrap: break-word;
    }
```

(2) Applying multiple background in CSS

```
div {
background: url('image1.png'),
            url('image2.png'),
            url('image3.png');
background-repeat: no-repeat, no-repeat, no-repeat;
background-position: left top, right top, left bottom;
}
```

(Q9) Discuss New markup elements in HTML5

(1) <header>: The <header> element represents introductory content or a group of navigational links. It's typically use in used in contain headings, logos, nav menu and other introductory content. This element helps improve accessibility and search engine optimization.

(2) <footer>: The <footer> element defines a footer for a document or section. it typically contains information about the author, copyrights, contact information or social media links. This element helps improve accessibility and search engine optimization.

(3) <Section>: The <section> element represents group of contents typically with heading, paragraphs, anchor tags, images etc. It helps to organize content into distinct sections, making the structure of the document clearer. Sections can be nested within each other to create hierarchical structures.

Exp 9 Compare and contrast empty(), remove() and detach() in jquery.

(i) empty(): $('#container').empty(); This will remove all child elements and text from the element with id container but leave the container itself.

(ii) remove(): $('#container').remove(); This will completely remove the element with id container and all the content from the DOM.

(iii) detach(): This will remove the element with id container but keep its data and events handlers.

Exp 8 what is the role of Apache web server explain concept of accessing functions using objects in php with example.

(i) HTTP request handling: Apache listens for incoming HTTP requests from clients and forwards them to the handlers.

(ii) Static content serving: It serve static content HTML, CSS, JS, images.

(iii) Dynamic content Generation: It also handle dynamic contents generated by php, python.

(iv) Security.

```
<?php
class Calculator {
    public function add($a, $b)
    { return $a + $b;
    }
    public function sub($a, $b)
    { return $a - $b;
    }
}

$obj = new Calculator();
$res1 = $obj -> add(5,5);
$res2 = $obj -> sub(10,5);
echo "Add:". $res1 : "<br>";
echo "Sub:". $res2;
?>
```

Exp 10 Difference betw relative & absolute links.

relative link	absolute link
(i) Specifies a path relative to the current document location	specifies the full URL including the domain name
(ii) Example: href = "/about.html";	Example: href="https://www.example.com/about.html"
(iii) Dependent on the current URL path	Independent of the current URL path.
(iv) More flexible.	less flexible.
(v) Easy to maintain.	Difficult to maintain.

<?php ?>

(Q4) Diff b/w ~~prog~~ java and javascript

	Java	Javascript
(1)	OOPs	scripting language
(2)	Run on JVM	Run on Browsers.
(3)	Compiled to bytecode	interpreted
(4)	Use for Applications server side App	web development client side programming
(5)	faster in exe.	slower in exe.

(Q4) List the CMS used in companies.
ans → (1) WordPress (2) ~~Magmato~~ Magento (3) Shopify (4) Joomla (5) Drupal

(Q4) Detect whether the user has pressed Enter key using jquery.

```
<script>
$(document).ready(function(){
  $(document).keypress(function(e){
    if(e.which == 13){
      alert('Enter key pressed!');
    }
  });
});
</script>
```

(Q5) Discuss the PHP basic syntax, variable declaration and exp

Elaborate the implementation of inheritance and advantages of PHP framework.

```
<?php
// parent class
class Animal{
  public $name;
  public function __construct($name)
  { $this->name = $name;
  }
public function speak(){
  echo "Animal speaks";
}
} //child class
class cat extends Animal{
public function speak(){
  echo "cat speaks";
}
} // create an obj of cat
$obj = new cat("max");
echo $cat->name; // max
$cat->speak(); // cat speaks
```

Advant → server side programming
scalability, code reusability,

PYQ write HTML code to create a nested page

```
<!DOCTYPE html>
<html>
<head></head>
<body>
<h1>
Creating a Nested webpage using 'iframe' Tag
</h1>
<iframe src="https://rayfinder99.netlify.app"
height="500px" width="1000px">
</iframe>
</body>
</html>
```

PYQ Is flexbox better than a CSS grid?

Both flexbox and CSS grid have their own advantages and use cases. whether one is better than the other depends on the specific layout requirement of your project.

flexbox: (i) One Dimensional layout: flexbox is designed for one-dimensional layouts, either as a row or a column helps to align the items along 'x' or 'y' axis.

Simplicity: For simpler layouts flexbox is generally easier.

CSS grid:

Two Dimensional layout: CSS grid is designed for two dimensional layouts, allowing for both rows and columns. This makes it more powerful for creating complex grid-based layouts.

PYQ Elaborate built in string functions of PHP with examples of each.

(i) strlen(): return length of a string
(ii) strtolower(): converts string to lowercase
(iii) strtoupper(): converts a string to uppercase
(iv) substr(): returns a part of a string

Ex=>

(i)
```
$str="Hello";
echo strlen($str); //13
```

(ii)
```
$str="HEllo";
echo strtolower($str); // hello
```

(iii)
```
$str="hello";
echo strtoupper($str); // HELLO
```

(iv)
```
$str="Hello, world";
echo substr($str, 0, 5); // Hello
```

Pr8. Define frameset, frame Tag. write a HTML code that divide the web page into four equal parts each individual eafily in detail.

ans ⇒

Frameset: A frameset is an HTML element that allows to divide a web page into multiple frames, each containing a separate HTML document independent from each-other.

Frame tag: The <frame> tag is used within a <frameset> element to define individual frames within the frameset. Each <frame> tag specifies a seprate HTML document to be displayed within the frame.

Frameset doesnot writtem in body just after head element.

```
<!DOCTYPE html>
<html>
<head>
<title> Frameset Exemple </title>
</head>
<frameset rows="50%,50%">
<frameset cols="50%,50%">
<frame src="page1.html" name="f1" />
<frame src="page2.html" name="f2" />
</frameset>
<frameset cols="50%,50%">
<frame src="page3.html" name="f3" />
<frame src="page4.html" name="f4" />
</frameset>
</frameset>
</html>
```