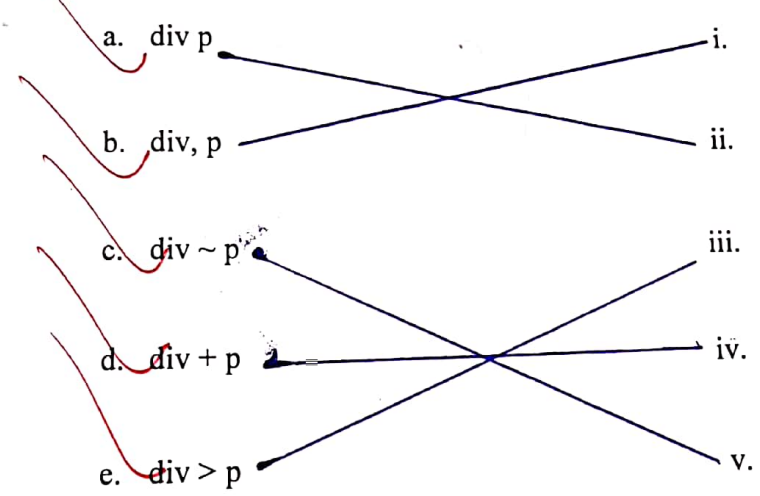
Question # 1: Short Questions **[8 Marks]**

1. Match the following CSS Selectors. (CLO: 1, PLO: GA1)



i. Selects all elements and all <p> elements

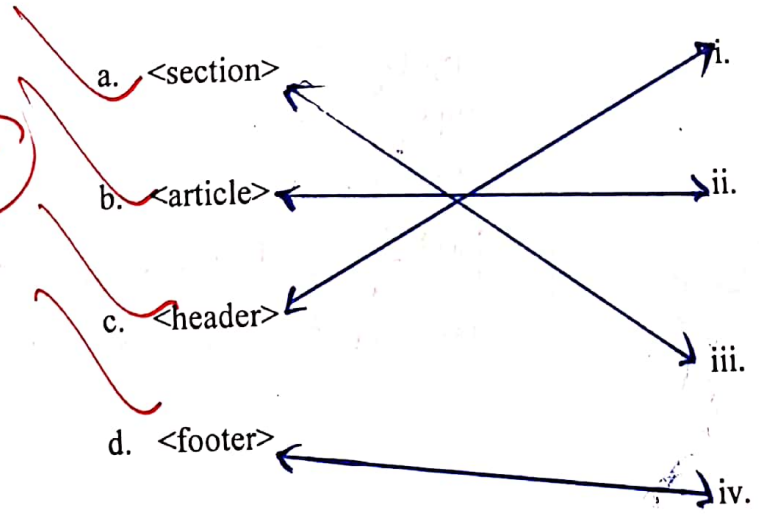
ii. Selects all <p> elements that are anywhere inside a element

iii. Selects all <p> elements where the immediate parent is a element

iv. Selects all <p> elements that are placed immediately after a element

v. Selects all <p> elements that are anywhere preceded by a element

2. Match the following Semantic elements. (CLO: 1, PLO: GA1)



i. Element is used to contain introductory and navigational information about a section of the page.

ii. Element is meant to house a self-contained composition that can logically be independently recreated outside of the page without losing its meaning.

iii. Element is a flexible container for holding content that shares a common informational theme or purpose.

iv. Element is used to hold information that should appear at the end of a section of content and contain additional information about the section.

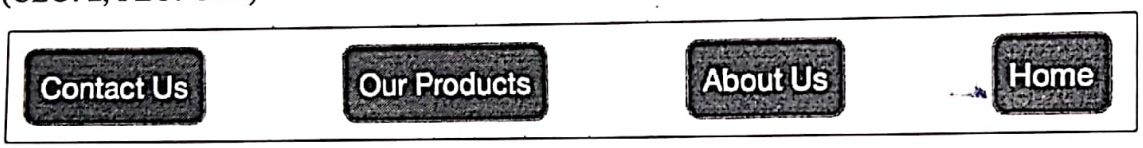
3. Given the following code is an example of Imperative Programming. How you will rewrite the given function with Declarative Programming using JavaScript method(s). (CLO: 4, PLO: GA2 & GA5)

```
const numbers = [1, 2, 3, 4, 5];

const sumNumbers = (n) => {

        let finalResult = 0;
        for (let i = 0; i < n.length; i++) {
                finalResult += n[i];
        }
        return finalResult;
}

sumNumbers(numbers) // Will give out 15
```

1

```
const sumNumbers =
numbers.((prev, next) =>
prev + next);
Console.log(sumNumbers);
```

4. Given the following output and the code. You need to develop a following layout using flexbox. (CLO: 2, PLO: GA3)



Complete the missing CSS code by picking appropriate styling code from the given CSS code pool.

HTML

```
<nav>
  <ul>
    <li><a href="/">Home</a></li>
    <li><a href="/about">About Us</a></li>
    <li><a href="/products">Products</a></li>
    <li><a href="/contact">Contact Us</a></li>
  </ul>
</nav>
```

0.25

CSS

```
nav ul {
display: flex;
display : d-flex;
flex-direction: row;
justify-content: space-between;
flex-direction : row-reverse;


}
```

CSS Pool:

```
display: flex;
display: d-flex;
flex-direction: column;
justify-content: space-between;
flex-direction: row-reverse;
flex-direction: row;
justify-content: space-around;
```

ou will rewrite the given
? GA2 & GA5)

5. What will be the output of the following HTML code on mobile and on desktop view? Draw a grid. (CLO: 4, PLO: GA2 & GA5)

```
<div class="row">
      <div class="col-xs-12 col-md-3">A</div>
      <div class="col-xs-12 col-md-3">B</div>
      <div class="col-xs-12 col-md-3">C</div>
      <div class="col-xs-12 col-md-3">D</div>
</div>
```

Mobile	Desktop
A B C D	A B C D

1

6. Write a CSS code to remove underline from the link. (CLO: 2, PLO: GA3)

0.5

Ans. text-decoration : none;

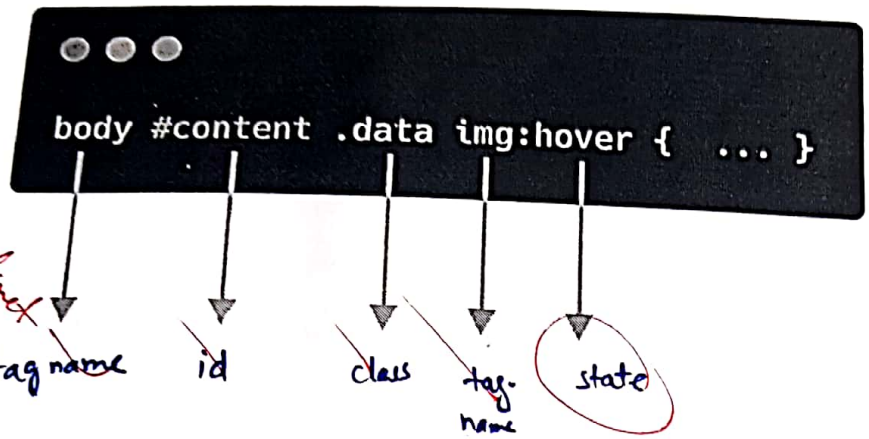
7. Consider the following HTML code and write a selector that select the meals for names that contain 'obb'. (CLO: 2, PLO: GA3)

```
<div class="table">
    <bento for="Robbie">
        <apple />
    </bento>
    <bento for="Timmy">
        <pickle />
    </bento>
    <bento for="Bobby">
        <orange />
    </bento>
</div>
```

Ans. bento [for * = "obb"]

0.5

8. Identify each part of the following given selector(s) and write name infront of each arrow. (CLO: 1, PLO: GA1)



9. Write an alternative of following code in CSS: (CLO: 1, PLO: GA1)

```
margin: 20px 30px 0px 0px;
```

Ans. margin-top: 20px; ~~margin-right: 30px~~ margin-right: 30px; margin-bottom: 0px; margin-left: 0px;

10. What will be the output of the following code? (CLO: 4, PLO: GA2 & GA5)

```
let arrayToSort = [1,2,3,4,5,6,7,8,9]
const midIndex = Math.floor(arrayToSort.length / 2); // Divide the array in half
const left = arrayToSort.slice(0, midIndex);
const right = arrayToSort.slice(midIndex);
console.log(left)
console.log(right)
```

1 2 3 4 5 6 7 8 9
left right

11. Add missing CSS code. (CLO: 1, PLO: GA1)

display: block;

one
three
Twelve

display: inline;

one three
Twelve Four

display: inline-block;

One Twel ve Three

of each arrow.

Question # 2: Differences (CLO: 1, PLO: GA1) **[3 Marks]**

Write down the differences between the following.

1. for...in vs for...of (write only sample code; no description is needed)

for...in	for...of

→ It runs on objects and as well on arrays but it returns index or key of the object and then by using key we print the values.
Code example:
`let obj = { name: 'Css', id: 2 }`
`for(let key in obj){`
`console.log(obj[key]);`
`}`
output is | css 2
	→ it runs for iterative objects like array and list etc.
	→ it returns value instead of index
	an example
	`let arr = [1,2,3,4]`
	`for(let itm of arr){`
	`console.log(itm);`
	`}`
	1, 2, 3, 4 as output

2. let & var

let	var
datatype	datatype
→ it has block level scop	→ it has function level scop.
→ it can't be redefine inside a block { inside }	→ it can be redefine as much as the developer wants.
{	{
`let a = 3;`	`var a = 3;`
`let a = 2;` ✗ variable has already defined.	`var a = 3;` 40k ✓
	}

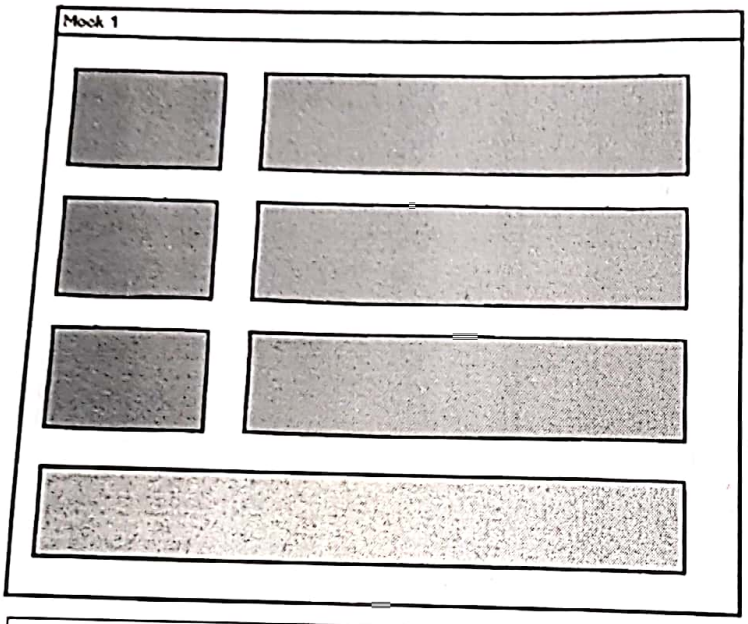
3. GET vs POST

Get	Post
it is unsecuired method	it is secured method
it is open	it is closed
it has limited storage	It has unlimited storage.
it sends data in url	it doesn't send the data in url.

Question # 3: Code Writing (CLO: 2, PLO: GA3) **[4 Marks]**

Note: Write only required code; no need to write supporting code like html page structure, linking css or js.

1. Write the necessary HTML and CSS to create the following layout. You can use floats, positioning or flexbox to solve this.



HTML

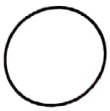
```
<div class="container">
  <div class="small1"></div>
  <div class="big1"></div>
  <div class="small1" id="two"></div>
  <div class="big1" id="b2"></div>
  <div class="small1" id="s3"></div>
  <div class="big1" id="b3"></div>
  <div class="big2" id="bb2"></div>
</div>
```

CSS

```
.container {
    hight: window-size;
    width: 100%;
}
.small1 {
    width: 20%;
    hight: 15%;
    margin: 20px;
    background-color: orange;
    clear: right;
}
.big1 {
    width: 60%; margin: 20px;
    hight: 15%;
    float: right;
    background-color: red;
}
.big3 {
    width: 85%;
    hight: 15%;
    background-color: green; margin: 20px;
}
```

Marks]

2. Write the necessary HTML & CSS to create following circle.



HTML	CSS
0.5	.circle { border : 1px solid black; width : 50px; hight : 50px; border-radiaus : 100%; }

3. Give a simple implementation of the <video> tag to embed a video stored at http://www.kd.com/wow_video.mp4. Give the video a width of 640 pixels by 360. Also provide the user with controls.

HTML
<video src = "http://www.kd.com/wow_video.mp4" alt = " The video could not play" controls = "controls" width = "640" hight = "360" >

Question # 4: (CLO: 1, PLO: GA1) **True/False** **[2 Marks]**

Write T/F next of each statement.

Statement	T/F
Values to the array can be prepended using unshift method of array.	T
Hyperlinks can be used in text and images both.	T
By default, properties in CSS are inherited from parent element to child element.	T
// This is a way to comment a line in CSS	F
"ul li" Selector selects all direct li elements in ul not all descendants.	F
While rem is relative to the font-size of its direct or nearest parent, em is only relative to the html (root) font-size.	F

Question # 5: Array Operations (CLO: 2, PLO: GA3) [3 Marks]

(3)

For each of the questions below, assume you are starting with the following people array.

```
let people = ["Hadi", "Maryam", "Dawood", "Jamal"];
```

a. Using a loop, iterate through this array and console.log all the people.

```
for(let item of people){
    console.log(item);
}
```

b. Write the command to remove "Hadi" from the array.

Ans. people.shift(); ~~or delete people[0];~~ delete people["Hadi"];

c. Write the command to remove "Jamal" from the array.

Ans. people.pop(); or delete people[people.length-1];

d. Write the command to add "Mariha" to the front of the array.

Ans. people.unshift("Mariha"); or people.splice(0,0,"Mariha");

e. Write the command to add your name to the end of the array.

Ans. people.push("Irfan ullah");

f. Write the command to make a copy of the array using slice. The copy should NOT include "Maryam" or "Mariha".

Ans. let copyArray = people.slice(2);

I assumed Maryam at 1 index and Mariha at 0 index.

WISH YOU ALL THE BEST