— HTML —

1 Ans:- No, <!Doctype html> is not a HTML tag, It a HTML5 declaration to the browser for knowing what kind of document it will be going to present in the browser.

2 Ans:- Sementic tags in HTML are those tags where tags are described for what they can belongs to the browser and the developer making it easier for styling the content.
For example: some of the commonly used semantic tags that are used in HTML5 are

- **<header>**: It represents the introduction to the heading of the content or group of introductory content in the document of the webpage
- **<nav>:** It represents the navigation to the webpage or it can contain nevigation links.
- **<aside>:** It represents some content related to the sorrounding content.
- **<article>:** It represents box content where it should reference its own independent from the rest of the site
- **<section>:** It represents
- **<footer>:** it representes

We use it for styling and align item in systemetic order or structre

3 Ans:- Difference between HTML Tags and Elements are :

- **Tags** are called the starting and ending parts of element, whereas **Elements** are the content that are enclosed in between the tags.
  For example:
- **Tags** have < starting symbol and > ending symbol, whereas **Element** consist of some expression or some kind of structure.

4 Ans:- Resume link
5 Ans: Link is not working
6 Ans:- Here are some of the advantages of HTML5 over it's previous version

- It has a new multimedia tags which can support both video and audio by <video> and <audio> respectively.
- Tags are now more specifically defined like <header>, <section>, <article>, <footer>
- It can locate the geographical map of the client.
- Now it's easy declaration for document type ie, <!doctype html>
- It can detect incorrect syntax

7 Ans:- Music player link

8 Ans:- Difference between <figure> and <img> is that <figure> element is used to insert a photo in a document and inside there we can add more like <figcaption> for writing figure caption, whereas in <img> we can insert only image by the attributes **src** for specifying the path for the image and **alt** for alternative text if the image that provided cannot be displayed for some reason.

9 Ans:- Difference between html **Tag** and **Attribute** are that

Tags represents to an element that is used to define the structure or Element of the content of webpage. Tags are enclosed in <> brackets And contains a opening and a closing tag. They give instructions to the Browser and behaves as it is instructed.

for example -

```
    <h1>This tag is automatically indicates that it is
top-main-heading</h1>
```

And they define different type of element such <heading>,<article>,<section>,<paragraph>,<footer> etc.

Attributes defines an additional information for HTML elements. Usually all elements can have attributes and can have value which are always specified in the start tag.

For example:

```
<img src="image-one.jpg">
```

Global Attributes are those attributes that can be used in all elements. Like for example:

- **Id:** It specifies an unique id for all the elements
- **Title:** It defines some more information about an element .
- **Class:** It specifies more than one classnames for an element

— Css —

1 Ans:- Box Model is a essential box model where it is wraped around every box or you can say every html element. The very important thing we should know about box model is that it contains of 4 layer like - Margin, Border, Padding, and the Main content.

Here comes the desgine

2 Ans:- There are five type of CSS selector

1. **Id Selector:** It selects the element with a unique id attribute. It has an advantage to select one unique element and make changes within element with the (#)character.
2. **Class Selector:** It selects the element with a specific class attribute. It has the ability to select multiple attributes with specific class with the (.)character.
3. **Element Selector:** It selects all the HTML element with same style definition. It has the advantage to make changes to the HTML by selecting just the tag name
4. **Star Selector:** It can also called the star selector which selects all the HTML element with (*)character.
5. **Pseudo Element Selector:** It is used to style a targeted parts of an element. It has an advantage that like, It can style the first letter, or first line etc.

3 Ans: VH/VW stands for viewport height and viewport width respectively and they are units of measurement that represent a percentage of viewport.

They are dynamic and they adjust their size by the height and the width of the viewport. But in **PX** the they represent a fixed number of pixel, does not matter what the size of the viewport is.

4 Ans:- The difference between Inline, Inline Block and Block are

INLINE

- It applies within the content and do not take the whole width of the container.

INLINE BLOCK

- It has its own height and width of the element. And it respect the top and bottom margin/padding but with inline it is not. And it does not add line break after the element , by that the element it placed next to each other

BLOCK

- It's uses its own line and it starts on new line and the browser automatically add some space before and after the element
- It always stretches out to left and right .

5 Ans:- Content box has the default box sizing padding margin. For example if one element height is set to 50px then if i add 10px border to the element then the box border will be added to the container and the final box size will be of 60px. But

Border box it tell the browser that if any element value is set to 50px and the border is 10px then if the main content is set to 50px then it will shrink the element size to 40px and the border will be set 10px. It makes easier to size element.

6 Ans:- The **z-index** property specifies the stack order or arrange the element. An element which has greater stack will always be in the front of any element which have lower stack order.

For example link

7 Ans:-

8 Ans:-

— JAVASCRIPT —

1 Ans:- hoisting is a javascript term or you can say a mechanism where variable, classes function are declared before they executed. And they are moved to top of their scope.

2 Ans:- HOF(higher order function) are function that can take function as parameter and returns another function is called HOF. These are map(), foreach(), reduce() etc.

The difference between .map() and .forEach() is that map() create a new array from the element, whereas forEach() doesnot return new array but it loop through every single element of the array.

3 Ans:- Simply, binds creates a new function where 'this' has been bound to whatever was passed in, and apply calls the function immediately whereas call waits until later. Bind returns a copy of the original function whereas both apply and call modify the current function directly.

For example

```
function people (name){
   console.log(`Hello there, My name is ${name} and i am ${this.age}
year old `)
}
const age = {
   age: 23
}
// this is .call() It Invokes a function by specifying the context
(this value) and passing arguments individually.
people.call(age, 'sameer')
// this is .apply() it Invokes a function with a specified context and
passes arguments as an array.
people.apply(age, ['pradip'])
// this is .bind() it creates a new function with a fixed context and
any specified arguments, without immediate invocation.
let peopleBio = people.bind(age);
peopleBio('jhon')
```

4 Ans:- Event Bubbling is a fundamental or a type of propagation where the event first trigger from the inner element to the ancestors of the element in nesting till it reaches the outermost DOM element.
Event Capturing like almost reverse of event bubbling that where the event is now first triggered by the outermost element and then triggers one the descendants of the target element in the nesting hierarchy till it reaches the innermost DOM element.
7 Ans:- A promise is an objest that may produce a single value some time in the future with either a resolved value or a reason that it's not resolved. It will be in one of the 3 possible states: fulfilled, rejected, or pending.
Fulfilled - The state of a promise when it has successfully resolve.
Rejected - The state of promise when it fails to resolve for some error occurred during the promised operation
Pending - The very initial state when a promise is created and it is still in progress and has not been resolved or rejected.
8 Ans:- 'This' keyboard refers to the current execution context or the object on which a method is called.

```
Const data = {
Name: 'ujjal'
Height: 6,
Bio : functionn(){
console.log(`Hey, my name is ${this.name} my height is ${this.height} ft tall.`}
};
data.bio();
```

9 Ans:- Closure is combination of a function and lexical enviironment within which where the function was declared. I.e, it is an inner function that has access to the outer or enclosing function's varibles.