

(Section-A)Answer-1

Hypertext is the text displayed on a computer display or other electronic devices with references to other text that the reader can immediately access.

Hyperlink is a reference to data that the user can follow by clicking. A hyperlink can point to either a whole document or to a specific element within a page.

Answer-2

is an instruction

A doctype or document type declaration, which tells the browser about the ~~marking~~ markup language in which the current page is written.

The document type of an HTML page is  
`<!DOCTYPE HTML>`

Answer-3

style attribute is used to alter the CSS properties of an element. style attribute can be used with any html tag and is used for implementation of inline-CSS. It accepts CSS property:value pairs in double quotes, each separated by semi-colon (;).

Rupam

#### Answer-4

To use an image as a hyperlink, we use an `<img>` tag inside an `<a>` tag with the "href" attribute.

for eg:- `<a href = "www.google.com"><img src = "a.jpg">  
</a>`

This image 'a.jpg' will act as a hyperlink to `www.google.com`.

#### Answer-5

Three files will be stored on the web server to produce a single page with two image.

The files are,

- the html file
- two images (image file)

#### Answer-6

A web-browser is a software application for accessing information on the world wide web. When a user requests a web page for a particular website, the web browser retrieves the necessary content from the web server & displays it on the screen.

#### Answer-7

`<html>`

`<head>`

`<script>`

`let a = [1, 2, 3, 4, 5];`

Defm



```
for (let i = 0; i < a.length; i++)  
{  
    document.write(a[i] + "<br>");  
}  
</script>  
</head>  
</html>
```

### Answer - 8

There are three types of functions in javascript

- Named functions
- Anonymous functions
- Immediately invoked functions

Yes an anonymous function is always assigned to a variable.

### Answer - 9

Cpanel is a web-based control panel that helps in quick & easy management of Dot easy website & account. It gives complete control over a number of functions like

- setting up email accounts
- managing website files
- installing scripts & applications

### Answer - 10

A domain name is an identification string that defines a realm of authority or control within the internet. In general a domain name identifies a network domain, or it represents an Internet protocol (IP) resource such as a personal computer, a server computer or the website itself.

Dubz

## (Section - B)

### Answer - 11

An HTML form is a section of a document containing normal content, markup, special elements called controls (checkboxes, radiobuttons, menus etc), and labels on those controls. Users generally "complete" a form by modifying its controls (entering text, selecting menu items, etc) before submission the form to an agent for processing.

```
<!DOCTYPE html>
<body>
  <form name = "f1">
    <p>Name: <input type = "text" name = "name"></p>
    <p>Email: <input type = "email" name = "email"></p>
    <p>Phone number: <input type = "number" name = "phone">
      </p>
  </form>
</body>
</html>
```

### Answer - 14

An array is a single variable that is used to store different values. It is often used when we want to store list of elements & access them by a single variable. In javascript an array can store values of multiple datatypes for eg:-

```
let a = [1, "a", "xyz", 2];
```

*Def*



The 5-main array functions are

- Concat (2 arrays) :- This is used to concatenate two arrays & return the array thus formed.
- Joined (delimiter) :- joins all the elements of array into a single string separated by specified delimiter.
- Reverse () :- this method reverses the order of elements in the array.
- toString () :- converts array into string with elements separated by commas (,)
- ~~sort()~~ :- ~~converts array into string with elements separated by commas.~~
- sort () :- sorts the array elements in ascending order.

### Answer-15

CSS selectors are used to find or select the HTML element we want to style.

CSS selectors can be divided into 5 categories

- Simple selectors :- They are used to select and style elements on the basis of their name class or id.

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eg:- `*{....}` (by tag name)

`.C1{....}` (by class)

`#i1{....}` (by ID)

- Combinator selectors:- They are used to select an element based on a specific relationship.

eg:- `div p{...}` will change style of all `<p>` descendants of `<div>`

`p>span{...}` will change style of `<span>` which are children of `<p>`

- pseudo-class selector - They are used to select an element on the basis of a certain state

eg:- `button: hover{...}` will change style of all `<button>` on hover i.e. when mouse is over the button.

- pseudo-element selector:- They are used to select and style a particular part of an element.

eg:- `p::before{...}`

`p::after{...}`

- Attribute selectors:- They are used to select elements on the basis of an attribute or an attribute value.

eg:- `a[target = "-blank"]{...}` will change the style of all anchor tags with `target = "-blank"`.

*Harsh*



(Section - C)Answer - 16 (b)

```
<DOCTYPE html>
<body>
<form>
  <p> Num 1 : <input type="number" id="num1">
  </p>
  <p> Num 2 : <input type="number" id="num2">
  </p>
  <p> Output : <input type="number" id="result"
               disabled> </p>
  <input type="button" onclick="mul()" value =
    "Multiply" >
  <input type="button" onclick="div()" value =
    "Divide" >
</form>
<script>
  function mul()
  {
    const a = document.getElementById('num1').
                                   value;
    const b = document.getElementById('num2').
                                   value;
    document.getElementById('result').value = a * b;
  }

  function div()
  {
    const a = document.getElementById('num1').value;
    const b = document.getElementById('num2').value;
    document.getElementById('result').value =
    a / b;
  }
```

```
</script>  
</body>  
</html>
```

### Answer-17(a)

```
<DOCTYPE html>  
<head>  
<script>  
  function sum(array1, array2)  
  {  
    var result = [];  
    var ctr = 0;  
    var x = 0;  
    if (array1.length == 0)  
    {  
      return 'Array 1 empty';  
    }  
    if (array2.length == 0)  
    {  
      return 'Array 2 empty';  
    }  
    while (ctr < array1.length && ctr < array2.length)  
    {  
      result.push(array1[ctr] + array2[ctr]);  
      ctr++;  
    }  
    if (ctr === array1.length)  
    {  
      for (x = ctr; x < array2.length; x++)  
      {  
        result.push(array2[x]);  
      }  
    }  
    else {  
      for (x = ctr; x < array1.length; x++)  
      {  
        result.push(array1[x]);  
      }  
    }  
  }  
</script>
```

Dr. Pm



```
        return result;
    }
    document.write( sum([1,0,2,3,4],[3,5,6,7,8,3]) );
</script>
</head>
</html>
```

### Answer - 19(a)

Web hosting is a service that allows organizations and individuals to post a website or web page onto the internet. A web host or web hosting service provider, is a business that provides the technologies & services needed for the website and webpage to be viewed on the internet. Websites are hosted on special computers called servers.

There are various types of web hosting services available to host your website.

- Shared hosting → Shared hosting is perfect for entry-level web hosting. This is where your website will be stored on the same server as multiple other websites with a shared hosting plan all domains share the same server resources such as RAM & CPU. However, because all resources are shared, the cost of shared hosting plans are relatively low.

- Virtual Private Server Hosting :- A VPS hosting plan is the ultimate middle ground.

*By*



between a shared server & a dedicated server. It is ideal for website owner that need more control, but don't need a dedicated server.

- Dedicated Server Hosting:- Dedicated hosting gives website owners the most control over the server that their website is stored on. That's because the server is exclusively rented by you, and your website is the only one stored on it. This means that you have full root & admin access so you can control everything from security to operating system you run. All that control, however is expensive.
- Cloud hosting:- Cloud hosting is the current buzzword of the technology industry. In regard to web hosting it means many computers working together running applications using combined computing resources. It's a hosting solution that works via a network & enables companies to use the computing resource like a utility.
- Managed Hosting:- Most hosting packages online are managed. Hosting companies provide technical services such as hardware & software setup & configuration, maintenance, hardware replacement, technical support, patching, updating & monitoring. With managed hosting the provider looks after the day-to-day management of the hardware, OS & standardised applications.

Byjus



• Colocation :- Instead of keeping servers in house or at a private data center, you may choose to "co-locate" your equipment by renting space in a colocation center. The center will provide the power, bandwidth, IP address & cooling systems that your server requires. Space is rented out in racks & cabinets.

Answer - 18(a)

On-page SEO :-

On page SEO is the practice of optimising individual web pages in order to rank higher & earn more relevant traffic in search engines. On-page refers to both the content and HTML source code of a page that can be optimised, as opposed to off-page SEO which refers to links & others external signal.

On-page SEO refers to the optimization of website structure & content.

12 important on-page SEO factors are.

- crawlable website
- site architecture
- quality outbound links
- website speed
- mobile friendliness
- use of HTTPS
- User-friendly URLs
- well-targeted content

*By*

- Keyword optimisation
- image optimisation
- readability & UX
- click-through rate (CTR)

### Off page SEO :-

Off page SEO refers to the techniques you can use to improve the position of a website in the search engine results page (SERPs). Many people associate off-page SEO with link building but it is not only that ~~in~~<sup>in</sup> general ~~method~~, off-page SEO has to do with promotions methods - beyond website design - for the purpose of ranking a website higher in the search results.

factors of off -page SEO are:-

- Back links
- Domain authority
- Social promotion.

Bhpm



### Answer - 20(b)

Web planning is the process of choosing among competing opportunities for communication so that you can set overall goals for a web. You will need to define your web intended audience, formulate a statement of your web's purpose and objective and gather and maintain domain information to support your web.

Things that should be considered while planning a website are:-

- Usability:- One of the most important aspects of web designing is actually making the site usable to the average user, things must be simplified a little bit.
- Speed:- Despite the insane technology involved with connecting people to various pages all around the world, if the page doesn't load within three to five seconds, user will go mad.
- Content:- Users are very picky, Even if your webpage is easily accessible, functions well, work quickly and looks great they still won't be pleased unless you have compelling and engaging content on your site.
- Contact info:- Nothing makes customer angrier than not being able to contact a business when they want to. Make sure that from

*[Signature]*



every page on your site, your users are able to easily find your company's contact information.

- Website Maintenance:- Every page on your site should work 100% of the time. In the event of an issue, however you have to have some sort of 24-hour support system implemented to ensure that someone can immediately address the problem.

- Mobile friendly:- Wholly 48% of all users admit that if they visit a company's website that doesn't work on their mobile device, they take it as an indication that the business simply doesn't care, just <sup>like</sup> your company should ~~be~~ be online, your webpage should also function on mobile screens/devices.

- Aesthetics:-

The look and feel of your page is just as important as the functionality. You only have 10 seconds to make an impression on a visitor and to let them know what they will get out of visiting your page.

Dip