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| **Sl.** | **Set 1** | **Marks** |
|  | **Explain IP address and DNS conversion with example and neat diagram.** | 3+3 |
|  | **IP Addresses:**  The Internet nodes (computers) identified by their unique numeric addresses. The Internet Protocol (IP) address of a machine connected to the Internet is a 32-bit number. They usually written as four **8-bit** numbers, separated by periods“.”. These formats use **ipv4** version form 12.0.0.0 to 12.255.255.255 or 191.57.65.0 to 191.57.65.255. The internet-routing computers to decide the destination separately identify each four parts.  However, people type the domain names into their browsers like [www.google.com](http://www.google.com) referenced through its IP addressing only.    **Domain Name System:** The Domain Name System (DNS) is a hierarchical naming system for computers, services, or any resource connected to the Internet or a private network. It associates various information with domain names assigned to each of the participants.  Most importantly, it translates domain names meaningful to humans into the numerical (binary) identifiers associated with networking equipment for the purpose of locating and addressing these devices worldwide.  Domain Name System is that it serves as the "phone no." for the Internet by translating human-friendly computer host names into IP addresses. For example, [www.example.com](http://www.example.com) translates to 192.32.0.10  fig01_01 |  |
|  | **What is MIME? Explain in brief.** | 4 |
|  | **MIME**: Multipurpose Internet Mail Extensions   * Originally developed for email * Used to specify to the browser the form of a file returned by the server (attached by the server to the beginning of the document) * Type specifications   + Form: type/subtype * Examples: text/plain, text/html, image/gif, image/jpeg * Server gets type from the requested file name’s suffix (**.html** implies **text/html or text/plain**) * Browser gets the type explicitly from the server   **Experimental types**   * + **video/x-msvideo** * Experimental types require the server to send a helper application or plug-ins so the browser can deal with the file |  |
|  | **Explain the following with examples:**   1. **Frames**   Frames are rectangular sections of the display window, each of which can display a different document. The <frameset> tag specifies the number of frames and their layout in the window. <frameset> takes the place of <body>  **e.g. <frameset rows = “200, 300, 400">**   1. **Absolute and Relative file addressing**   A **path**, the general form of the name of a file or directory.  An **absolute** (complete) or **full** path points to the same location in a file system, regardless of the current working directory. To do that, it must include the root directory.  **E.g. : /home/user/docs/Letter.txt** or **C:\user\docs\Letter.txt**  A **relative** path starts from some given working directory, avoiding the need to provide the full absolute path. A filename can be considered as a relative path based at the current working directory.  E.g. images/PICTURE.JPG or PICTURE.JPG  If target document is in some other directory called absolute addressing.  <a href=” C:\pictures\Image01.jpg> Picture </a>  Whereas in relative addressing the file is available in the subdirectory or same directory of the source file.  <a href=” \pictures\Image01.jpg> Picture </a>  Relative addressing of targets is easier to maintain and more portable than absolute addressing | 2.5\*2 |
|  | **Write html program to display a passport application to accept user input. Use appropriate tag for this.**  Use form elements and attributes (HTML4 +HTML5) | 5 |
| 5. | **Explain response phase in HTTP protocol.** | 5 |
|  | The protocol used by All Web communications   * + Current Version : HTTP 1.1 * HTTP has two phases   + Request Phase   + Response Phase   Each http communication between browser and Web Server consist two part   * + a header (Contains information about communication)   + a body (Contains data of communication)   **Response Phase**   * **Form**:   + Status line   + Response header fields   + blank line   + Response body * **Status line format**:   + HTTP version status code textual -explanation   + Example: **HTTP/1.1 200 OK** * Common **status code**:   + 404: Not found   + 200: request handled without error   + 500: Server encountered a problem and was not able to fulfill the request * Status code is a three-digit number; first digit specifies the general status   + 1 => Informational   + 2 => Success   + 3 => Redirection   + 4 => Client error   + 5 => Server error * The header field, **Content-type**, is required |  |
| 6. | **Explain in detail about usage Web Server.** | 5 |
|  | **Web Server:** A **Web server** is a computer program that delivers (serves) content, such as Web pages, using the Hypertext Transfer Protocol (HTTP), over the World Wide Web. The term Web server can also refer to the computer or virtual machine running the program. In large commercial deployments, a server computer running a Web server can be rock mounted in a server rack or cabinet with other servers to operate a Web farm.  The most commonly used Web servers are Apache, which implemented for a variety of computer platforms, and Microsoft’s internet information Server (IIS), which runs under Windows operating systems.  Optional   * Apache (open source, fast, reliable)   + *Directives (operation control):*     - ServerName     - ServerRoot     - ServerAdmin,     - DocumentRoot     - Alias     - Redirect     - DirectoryIndex     - UserDir |  |
| 7. | **Explain about rowspan and colspan attribute.** | 4 |
|  | A table can have two levels of column labels  If so, the colspan attribute must be set in the <th> tag to specify that the label must span some number of columns  <table border = "border">  <tr>  <td rowspan = "2"> </td>  <th colspan = "3"> Fruit Juice Drinks</th> </tr>  <tr>  <th> Apple </th>  <th> Orange </th>  <th> Screwdriver </th>  </tr>  …/</table> |  |
| 8. | **Write html program to display index page of your favourite book. Use necessary tags to display the document.** | 6 |
|  | Definition list need to be used  Image result for index page sample of book Image result for index page sample of book |  |
| 9. | **Give information about available Web Browsers with explanation.** | 4 |
|  | **Web Browser**: A browser is **a client** on the Web because it is a software application for retrieving, presenting, and traversing information resources on the World Wide Web.  An information resource is identified by a Uniform Resource Locator **(URI)** and may be a web page, image, video, or other piece of content. Hyperlinks present in resources enable users to easily navigate their browsers to related resources.  Though the Web supports a variety of protocols, the most common one is the Hypertext Transfer Protocol **(HTTP).** HTTP provides a standard form of communications between browsers and web servers.  The most commonly used browsers are Microsoft Internet Explorer (IE), which runs only on PCs that use one of Microsoft Windows operating systems, and Firefox, which is capable of computing on different platforms, including Windows, Mac OS, and Linux.  The other browsers are Mozilla Suite and Netscape Navigator also the Opera and Apple’s safari. |  |
| 10. | **Write html program to display groceries items in tabular format. Use necessary tags and attributes to display the document.** | 6 |
|  | Use cellpadding, cellspacing, border, margin, rowspan and colspan to display the document. |  |
| 11. | **What is www? Purpose of using internet.** | 1+4 |
|  | 1989 – WWW (**World Wide Web)** concept introduced by Tim Berners-Lee (European Organization for Nuclear Research).  A possible solution to the rapid increase of different protocols being used on the Internet  **Purpose:** to allow scientists to have access to many databases of scientific work through their own computers  **Document form:** hypertext (text with embedded link)   * + - It consist of Pages, Documents, Resources     - We’ll call them documents   Hypermedia – more than just text – images |  |
| 12. | **Explain the concern about security issues while browsing with example for each.** | 5 |
|  | ***Refer book for proper explanation***   * **Privacy:** Credit card number and other details must not be stolen from server * **Integrity:** credit card details must not be modified in on its way to company’s server * **Authentication:** purchaser and seller must know their identity * **Non repudiation** (Rejecting) – legally prove that message was actually sent and received * Public /Private **Key encryption-** 1976 |  |
| 13. | **Explain about iframe with example.** | 4 |
|  | An inline frame is marked up as follows:  **<iframe src="http://google.co.in"></iframe>**  An inline frame is used to embed another document within the current HTML document. The **height and width** attributes are used to specify the height and width of the iframe. The **frameborder** attribute specifies whether or not to display a border around the iframe. |  |
| 14. | **Write html program to display visiting places nearby. Divide the page into two parts. One part contains list of places and other part display description and image gallery for the selected place. Use appropriate html tags.** | 6 |
|  | Use Frameset columns concept |  |
| 15. | **Describe virus, malware, spam with an example for each. Differentiate each one with effect in system.** | 6 |
|  | **Computer viruses** generally trick hosts or other types of computers into **reproducing** copies of the invading organism. They spread from computer to computer through electronic bulletin boards, telecommunication systems and shared usb disks.  **Malware** is a broad term that refers to a variety of malicious programs. This post will define several of the most common types of **malware**; adware, bots, bugs, rootkits, spyware, Trojan horses, viruses, and worms.  **Spam**, viruses and junk email. ... They create large quantities of messages containing viruses and other types of unwanted email, for **example** 'harmless' messages with the virus blocked by some antivirus solution, or numerous auto replies informing a user about a virus in the correspondence sent from his **computer**. |  |
| 16. | **Explain URL format with syntax and example** | 4 |
|  | Uniform Resource Locators. Used to identify different resources  General form:   * + scheme: object-address   The scheme is often a communications protocol, such as http, gopher, file, mailto, news, telnet or ftp  For the http protocol, the object-address is:  // fully qualified domain name/doc path  Host name may include a port number, as in  http://localhost:80 (80 is the default) |  |
| 17. | **List out all character entities.** | 5 |
|  | A collection of special characters that are sometimes needed in a document but cannot be typed as themselves. The available character entities and its syntax is as shown below:  ***Char. Entity Meaning***  & &amp; Ampersand  < &lt; Less than  > &gt; Greater than  " &quot; Double quote  ' &apos; Single quote  ¼ &frac14; One quarter  ½ &frac12; One half  ¾ &frac34; Three quarters  ° &deg; Degree  space &nbsp; Non-breaking space |  |
| 17. | **Write html program to display an unordered nested list for diet chart for healthy lifestyle.** | 5 |
|  | Nested <ul> list |  |
| 18. | Explain the following with example:   1. **Headings**   Six sizes, 1 - 6, specified with <h1> to <h6>  1, 2, and 3 use font sizes that are larger than the default font size   1. uses the default size 2. and 6 use smaller font sizes   **Example**  <body>  <h1> Aidan’s Airplanes (h1) </h1>  <h2> The best in used airplanes (h2) </h2>  <h3> "We’ve got them by the hangarful" (h3)  </h3>  <h4> We’re the guys to see for a good used  airplane (h4) </h4>  <h5> We offer great prices on great planes  (h5) </h5>  <h6> No returns, no guarantees, no refunds,  all sales are final (h6) </h6>  </body>  b)**Paragraph**  The <p> tag breaks the current line and inserts a blank line - the new line gets the beginning of the content of the paragraph. The browser puts as many words of the paragraph’s content as will fit in each line    <body>  <p>  Greetings from your Webmaster!  </p>   1. **Preserving whitespaces**   It is sometimes necessary that a whitespace must be preserved in text which means to prevent the browser from eliminating multiple spaces and ignoring embedded line breaks.  Eg:  <body>  <p> Pre tag output  <pre>  Welcome  To  The  Real world  </pre>  </P>  </body>  </html> | 2.5\*2 |
| 19 | **Write a program to display two inline and block tag and mention the difference.** | 4 |
|  | <http://dustwell.com/div-span-inline-block.html> |  |
| 20 | Explain the following with example:   1. **Blockquotes**   Content of <[blockquote](../Practice/XHTML%20Practice/href,%20Image&Blockquote/blockquote.html)>  To set a block of text off from the normal flow and appearance of text  Browsers often indent on left or right side or both, and sometimes italicize  **Example**  <p>  <blockquote>Fourscore and seven years ago our fathers brought forth on  this continent, a new nation, conceived in Liberty, and  dedicated to the proposition that all men are created equal.  </blockquote>  Now we are engaged in a great civil war, testing whether  that nation or any nation so conceived and so dedicated,  can long endure."  </p> | 2.5\*2 |
| 21 | **Write html program to display a driving license application to accept user input. Use appropriate tag for this.** | 6 |
|  | Html4 +5 form elements and attributes |  |
| 22 | HTTP request header format with example. | 6 |
|  | **The Request Phase:**  The general form of an HTTP request is as follows:  1. HTTP method Domain part of the URL HTTP version  2. Header fields  3. Blank line  4. Message body  The HTTP Request Methods  METHOD DESCRIPTION  GET returns the contents of the specified document  HEAD returns the header infon for the specified document  POST Executes the specified docmnt, using the enclosed data  PUT Replaces the specified document with the enclosed data  DELETE Deletes the specified document  There are four categories of header fields:   1. General: for general information, such as the date 2. Request: Included in request headers 3. Response: For response headers 4. Entity: Used in both request and response headers   Request line, such as GET /images/logo.gif HTTP/1.1, which requests a resource called /images/logo.gif from server. Headers, such as Accept-Language: en |  |
| 23 | **Explain Ordered list with example,** | 4 |
|  | Nested list with css |  |
| 24. | **Create html program to display menu with links and images appropriately.** | 5 |
|  | Use href and img |  |