# VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD 

B.E. (CBCS) VI-Semester Main Examinations, May-2019

## Introduction to Web Design

(Open Elective-VI)
Time: $\mathbf{2}$ hours
Note: Answer ALL questions in Part-A and any FIVE from Part-B

| Q.No. | Stem of the question | M | L | CO | PO |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Part-A (5 $\times 2=10$ Marks) |  |  |  |  |
|  | Define internet and mention the uses of IP Address and ports. | 2 | 1 | 1 | 1 |
|  | Distinguish two-tier and three-tier architectures with diagram. | 2 | 2 | 1 | 1 |
| 3. | List the various dialogue boxes present in java script. | 2 | 1 | 2 | 1 |
| 4. | Define DOM and its usage. | 2 | 2 | 2 | 1 |
| 5.6.a) | What is the use of MIME and list the predefined MIME content types. | 2 | 1 | 1 | 1 |
|  | Part-B (5 $\times 8=40$ Marks) |  |  |  |  |
|  | Create the following table (using only HTML) | 6 | 3 | 1 | 2 |
|  | Price Due Date |  |  |  |  |
|  | Phone $\$ 50$ March 1st |  |  |  |  |
|  | Car insurance $\quad \$ 100$ March 5th |  |  |  |  |
|  | Internet $\quad \$ 70$ March 10th |  |  |  |  |
|  | Consider the following HTML table definition: | 2 | 2 | 1 | 2 |
|  | $\begin{aligned} & \text { <table border = 1> } \\ & \text { <tr> } \end{aligned}$ |  |  |  |  |
|  | <td colspan=2> Text $A</ t d\rangle$ |  |  |  |  |
|  | </tr> |  |  |  |  |
|  | <tr> |  |  |  |  |
|  | $\begin{aligned} & <d d>\operatorname{Text} B</ t d\rangle \\ & <t d>\operatorname{Text} C</ t d\rangle \end{aligned}$ |  |  |  |  |
|  | </tr> |  |  |  |  |
|  | <tr> |  |  |  |  |
|  | <td rowspan $=2>$ Text $\mathrm{D}</ \mathrm{td}>$ |  |  |  |  |
|  | $\langle\mathrm{ld}>$ Text $\mathrm{E}</ \mathrm{td}\rangle$ |  |  |  |  |
|  | </tr> |  |  |  |  |
|  | <tr> |  |  |  |  |
|  | <td> Text F </td> |  |  |  |  |
|  | </tr> |  |  |  |  |
|  | </table> |  |  |  |  |
|  | What the above HTML code rendered on the screen? |  |  |  |  |

7.a) What is CSS stands for? What are the different ways of using style sheets? Explain with an example each.
b) Write a HTML code for displaying the following output on the screen.

8.a) Create a web page having frames as follows:


The frame which includes Objective, Personal Information ect. are the hyperlinks.
Display the relevant information in the next frame on selecting the link.
The colour scheme of hyper links should be as follows:
default - green
active - red
visited - blue
b) Prints 10 names with a line break between each name. The list should be alphabetized, and to do this place a subscripted number next to each name based on where it will go in the alphabetized list. (Example: Alan1). Print first, the unalphabetized list with a subscript number next to each name, then the alphabetized list. Both lists should have an <h1> level heading.
9.a) Know your country. Given an array country types having description about countries.
Write a JavaScript code that takes country name as input and displays the type of
country based on a calculation. Generate random values between $1-9$ (using the asci value of the alphabet) for each alphabet that defines a country name .Add the generated random value and if it is not a single digit, add the digits of the resultant number, till you arrive at a single digit. Check the value against the index of country_types and display the value at that index.
var country types $=$ ['super power','developed','developing','under developed',
'nuclear power','safe','unsafe','republic','monarchy']
$\begin{array}{llll}5 & 1 & 1 & 1\end{array}$
$\begin{array}{llll}3 & 4 & 1 & 2\end{array}$
$\begin{array}{llll}6 & 3 & 1 & 1\end{array}$

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$\begin{array}{llll}5 & 3 & 2\end{array}$
b) In the following code snippet can you predict the output. If you get an error and explain the error?

```
<!DOCTYPE html>
<html>
<body>
<h2> <strong> Sample: Software Testing Help</strong> </h2>
<p style='text-decoration:underline'>Find the output </p\rangle
<p id="display_first"></p>
<p id="display_second"></p>
<script>
if(true){
var first_num =1000;
let second_num=500;
}
document.getElementById("display_first").innerHTML = "First Number:" +
first_num;
document.getElementById("display_second").innerHTML = "Second
Number:" + second_num;
</script>
</body>
</html>
```

10. Emirp is the word "prime" spelled backwards, and it refers to a prime number
a) that becomes a new prime number when you reverse its digits. Emirps do not include palindromic primes (like 151 or 787 ) nor 1 -digit primes like 7.107 , 113, 149, and 157. Write a Java Script program to validate Emirp Example:
Input: 17
Output: 71
17 is a Emirp number
b) Predict the output of following snippet of java script code
<html>
<body>
<script>
var $a=2154$; //First number
var $b=458$; //Second number
var ged;
while ( $\mathrm{a}!=\mathrm{b}$ )
\{
if ( $\mathrm{a}>\mathrm{b}$ )
\{

$$
\mathrm{a}=\mathrm{a}-\mathrm{b} ;
$$

\}
else
\{ $\mathrm{b}=\mathrm{b}-\mathrm{a} ;$
\}
\}
</scripl>
</body>
</html>
11.a) Write a JavaScript program to add items in an blank array and display the $\begin{array}{llllll}5 & 3 & 2 & 2\end{array}$ items.

Sample Screen:
$\square \square \square$ Arda] Disaday
Element $0=23$
Element $1=12$
Element $2=25$
b) Write a Java Script program which will create three button 'red','green','blue'. Clicking every button should change the background color to the respective color mentioned on the button. 10
12.a) Create a web page which will have one table and 2 paragraphs. Create different styles for the table cells and paragraph. Maintain a separate style sheet file for table whereas the styles for paragraph should be maintained in the same file.
b) Distinguish XML and HTML and Describe the building blocks of XML document

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

| S. No. | Criteria for questions | Percentage |
| :---: | :--- | :---: |
| 1 | Fundamental knowledge (Level-1 \& 2) | $50 \%$ |
| 2 | Knowledge on application and analysis (Level-3 \& 4) | $50 \%$ |
| 3 | *Critical thinking and ability to design (Level-5 \& 6) <br> (*wherever applicable) | - |

