

System Engineering and Web Designing

Note:

- These questions are given only to indicate the nature of questions for the Final Examination.
- The Final examination questions will not be confined to the ones in this question bank.
- The ATCs may prepare the Question Paper for the Model examination with the questions from this Question Bank.

Part - I Choose the correct answer

(1 mark each)

- Which among the following PHP function is used to open files?
a) fopen() b) flopen() c) filopen() d) fileopen()
- Which among the following is not a case sensitive language?
a) JavaScript b) HTML c) C++ d) None of these
- Which of the following is an invalid variable name in PHP?
a) \$my_Var b) \$myVar c) \$my-Var d) None of these
- PHP statements are terminated by
a) . b) </php> c) ; d) ,
- Which among the following function is used to create a cookie?
a) setcookie() b) Setcookie() c) setCookie() d) All of these
- Which among the following is the function used to merge two or more arrays into a single array in PHP?
a) merge_array() b) merge() c) mergeArray() d) array_merge()
- What will be the output of the code given below?

```
<?php  
echo strpos("Hello world!", "world");  
?>
```


a) 5 b) 6 c) 7 d) 0
- What will be the output of code given below?

```
<?php  
$num=6;  
echo "The circle is the ${num}th shape";  
?>
```


a) The circle is the {6}th shape
b) The circle is the shape
c) The circle is the 6th shape
d) None of these
- Which among the following is/are not a PHP file extension?
a) .php b) .php3 c) .phtml d) .pht
- Java Script is a _____
a) Programming language b) Scripting language c) Tag d) None of these

- Which is the correct place to insert a JavaScript?
 - a) Both the <head> section and the <body>
 - b) The <body> section
 - c) The <head> section
 - d) None of these
- What is the correct JavaScript syntax to write "Hello World"?
 - a) response.write("Hello World")
 - b) document.write("Hello World")
 - c) "Hello World"
 - d) None of these
- Which among the following operator is used to add strings together in JavaScript?
 - a) & b) . c) + d) \$
- In JavaScript, which among the following is illegal to print "Hello World! "?
 - a) document.write("Hello \ World!");
 - b) document.write \ ("Hello World!");
 - c) document.write("Hello World!");
 - d) None of these
- Which among the following JavaScript codes will give an output 10?

<ul style="list-style-type: none"> a) X='5'+ '5'; document.write(X); c) X=5+5; document.write(X); 	<ul style="list-style-type: none"> b) X='5+5'; document.write(X); d) b & c
---	--
- Which among the following element has a closing tag?
 - a)
 b) <HR> c) <H1> d) None of these
- Choose the correct HTML tag for the largest heading
 - a) <h6> b) <h1> c) <head> d) <heading>
- Choose the correct HTML tag to make a text bold
 - a) <bb> b) <bld> c) <bold> d)
- Which of the following HTML tag is used to create unordered list?
 - a) b) c) <Unordered> d) <ulist>
- Which of the following is not used to transmit data from an HTML form to a server?
 - a) get b) post c) send d) All of these
- Which of the following is an attribute of body tag?
 - a) <hr> b) <bold> c) <bgcolor> d) <table>

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- c)Text document
- d)All of these
- What is the correct way to connect to a MySQL database?
 - a)mysql_Connect("localhost");
 - b) mysql_connect ("localhost");
 - c)mysql_opendb("localhost");
 - d)None of these
- Cost that are known to exist but whose financial value cannot be measured accurately are called _____.
 - a) Intangible cost b) Tangible cost c) Cost of operation d) None
- Which among the following is a system in which the occurrence of events cannot be perfectly predicted?
 - a) Open System b) Deterministic System c) Probabilistic System d) None
- _____ is the smallest unit of data stored in the memory.
 - a) Field b) Record c) Row d) Word
- Which among the following is the test performed on individual modules?
 - a) Stress Testing b) Unit Testing c) Stub Testing d) Series Testing
- PIECES is a framework for classifying problems, _____ and directives.
 - a) opportunities b) information c) efficiency d) solutions
- _____ is used to refer to a point where the cost of candidate system and that of the existing system are equal.
 - a) Break even point b) Pay back point c) Net benefit point d) Present value point
- Top level management takes _____ decisions
 - a) structured b) unstructured c) partly structured d) none of these
- Which of the following is not a browser?
 - a)Internet Explorer b) Opera c) Windows Explorer d) Firefox
- Which of the following testing certifies that the system is free of errors and is ready to be placed into operation?
 - a) Alpha testing b)Audit testing c) Stress testing d)Performance Testing
- The process of translating a source document into a machine readable format is
 - b) Data input b) Data entry c)Batch input d)None of these
- Which among the following is an example of open system?
 - a)Canon Ball b)Personal Computer c)Missile guidance system d)None of these
- _____ is the actual entry of data in a machine readable format into the computer.
 - a) Data Entry b)Data input c)Batch input d)Online input

Part - II Fill in the blanks

(1 mark each)

- CSS stands for _____
- In JavaScript, function is used to print current webpage.

- The function used to display year in JavaScript is _____.
- JavaScript in the _____ section will be executed when called.
- The external JavaScript file is saved with _____ file extension.
- In JavaScript, _____ method of string object is used to display the text in lowercase letters.
- The _____ command is a standard JavaScript command for writing output to a page.
- In JavaScript, _____ is a variable that can store many values.
- In JavaScript, _____ function creates a new browser window.
- In HTML, _____ tag is used for inserting images.
- An external style sheet can be added to a document using _____ tag.
- _____ attribute is used to set a border around the image
- Hyperlinks are created with a _____ tag.
- _____ hyperlink points to a particular part of a page.
- In HTML, _____ element creates divisions in the browser window in a single direction.
- <TR>, <TD>, <TH> are the available in _____ tag
- <a> tag is used for _____
- <input> tag is used with in _____
- The _____ tag creates a new row of a table.
- TIFF stands for _____
- In PHP, arrays are created using _____ function.
- _____ function is used to check whether a variable is set or not.
- In PHP, constants are created using _____ function.
- In PHP, _____ function is used to sort the array elements in random order.
- Directories are deleted in PHP using the _____ function.
- PHP Sessions are created using the _____ function.
- All PHP variable names must be prefixed with _____ symbol.
- In PHP, the _____ function can be used to convert the first letter of every word to uppercase.
- _____ is a chance to improve the organization even in the absence of specific problems.
- _____ relationship represents data elements that are repeated one or more times in a data structure.
- '+' notation represents _____ relationship in data dictionary
- Review of files and data are done in the _____ stage of system development.
- '[' notation represents _____ relationship in data dictionary.
- Clerical decision is an example for _____ decision.
- Any cost whose money value can be easily measured is called _____.
- _____ files are generally used for security purposes.

Part - III State whether true or false

(1 mark each)

- The setcookie function must appear before the <HTML> tag
- Web developers cannot set the link colors for their documents

- A is an invisible character that takes up one space
- In PHP, a variable must be declared before being set
- In PHP '&' Operator is used for string concatenation
- PHP is only executed in LINUX.
- A PHP scripting block always starts with <?php and ends with ?>.
- The basic building block of conditional coding is the **if** statement.
- PHP scripts are executed on the server.
- Information sent from a form with the **POST** method is visible in the address bar.
- In PHP, printf formatting specifiers begin with '&' .
- In PHP, trim() function is used to remove white spaces to the end of the string.
- In PHP, the first character of the variable name must be either a letter or an underscore.
- When a variable is declared outside of a PHP function it is said to have global scope.
- In JavaScript, semicolon at the end of a code line is optional.
- In JavaScript Variable names are case sensitive.
- Keystroke is a JavaScript event.
- JavaScript variables are prefixed with '\$' sign.
- The purpose of Java script prompt is to gather information from the user.
- An external JavaScript must contain the <script> tag.
- Java and JavaScript are similar.
- JavaScripts in the body section will be executed while the page loads.
- JavaScripts in the head section will be executed when called.
- The JavaScript confirm function is very similar to the JavaScript alert function
- Logical operators are also known as Boolean operators
- All text for a Web page should be typed between the body tags.
- H6 is the smallest HTML heading tag.
- The two sub elements HEAD and BODY are required to form any HTML document.
- The default color of VLINK is purple.
- A background image must be either in the form of .gif or .jpg file.
- HTML is not a programming language, it is a markup language
- <HR> tag is an empty tag
- <input type="checkbox"> is used for displaying checkbox in html.
- <BASE> can be used to record document's location in the form of an URL.
- A CSS comment begins with "/*" and ends with "*/".
- The horizontal bar chart is also called a Gantt chart.
- A missile guidance system is a deterministic system
- In Water fall model, the phases are organized in non linear model.
- Supporting a system to tackle the changing technology is achieved through reactionary maintenance at post implementation stage.
- Linking is used for displaying text effects

- System analysis deals with logical and system design with physical aspects of a system
- In system engineering, the development phase activity includes writing and testing the computer programs.
- The system analyst does not gather information regarding functional aspects.
- Interlaced GIFs have slightly smaller file size than non-interlaced GIFs.
- A decision tree represents the condition sequentially.

Part - IV Give the output of the codes given below

- ```
<?php
$a=10;
$b='10';
if($a == $b)
{
 echo "Equal";
}
else
{
 echo "Not Equal";
}
?>
```
- ```
<?php
$a=array("PHP","Java","C++");
    array_push($a,"VB");
    echo $a[2];
?>
```
- ```
<?php
 $x = "test";
 echo '$x';
?>
```
- ```
<script type="text/javascript">
    var x=5;
    x="1"+x;
    document.write(x);
</script>
```
- ```
<?php
for ($i = 1; $i < 3; $i++)
{
 echo $i;
}
```

```
echo $i;
?>
```

- ```
<script type="text/javascript">  
var x=5;  
x="2"+x;  
document.write(x);  
</script>
```
- ```
<script type="text/javascript">
var arr=new Array();
arr[0]="PGDCA";
arr[1]="DCA";
arr[2]=" CTTC ";
arr.sort();
document.write(arr[2]);
</script>
```
- ```
<?php  
  
$a=10;  
$b='10';  
if($a == $b)  
{  
    echo "Equal";  
}  
else  
{  
    echo "Not Equal";  
}  
?>
```
- ```
<?php

$x = "y";
$y = "x";
$z = "a";
$$x = "z";
$$$x = "b";
echo "$x $y $z";
?>
```
- ```
<?php  
    $j=10;
```



```

for($i=0;$i<5;$i++)
{
    $j +=2;
}
echo $j;  ?>

```

- <?php


```

      $i=1;
      while($i<=5)
      {
          echo "The number is " . $i . "<br />";
          $i++;
      }?>
      
```
- <?php


```

      $i=1;
      do
      {
          $i++;
          echo "The number is " . $i . "<br />";
      }
      while ($i<=5);
      ?>
      
```
- <?php


```

      $x=array("one","two","three");
      foreach ($x as $value)
      {
          echo $value . "<br />";
      }
      ?>
      
```
- <?php


```

      $customerArray=array('custName'=>'John','custAddress'=>'Street
      No:1','accNum'=>'12345678')
      foreach($customerArray as $key=>$value)
      {
          echo "key=$key <br>";
          echo "Value=$value <br>";
      }
      ?>
      
```

Part - V Fill in the blanks.

- A portion of the form shown below is given .Fill in the blanks with appropriate

Name

Password

☐ Passed ☒ Not Passed

☐ Knows Hindi

Hindu

Muslim

Christian

answer.

a) Fill up the blanks (1.5 Marks)

<-----method=----------="register.php">

b) Fill up the blanks (1.5 Marks)

<p>Name < _____ size="30"></p>

c) Fill up the blanks (1.5 Marks)

<p>Password <div style="border: 1px solid black; width: 100px; height: 20px; display: inline-block;"> size="20"></p>

c) Fill up the blanks (2 Marks)

<p><-----"R1">Passed

<----- name ----->Not Passed</p>

d) Fill up the blanks (1.5 Marks)

<p><-----> > Knows Hindi</p>

e) Fill up the blanks (3 Marks)

<p><----- size ----- name="religion">

<----->Hindu<----->

<----->Muslim<----->

<----->Christian<----->

<----->Other<----->

</select>

</p>

<p><----- name="submit"></p>

Part - VI Write the SQL queries

- To set the **mark** of the student in a table **student_List** with **register number** 43657 to 65.
- To list the details of students in **student_List** table whose **mark** is more than or equal to 40.
- To set the result of students as Distinction who have secured a total mark of 480 out of 600 in an examination .(Assume the Name of table as markDetails).
- To select the details of the employees whose name starts with **A**.(Table Name: employeeDetails).

Part - VII Answer the following

- What is Linear Media and Hyper Media?
- Write the syntax of switch statement in PHP
- What is the difference between GET method and POST method?
- Write a PHP program to find the current working directory.
- Write a PHP program to print the number of fields in a data table. (Assume that name of the table is Studdetails and database is Student).
- Write a program to calculate total fees of the students who are applying for an examination in which there are three theory subjects and one practical in total. The students may register for subjects of their choice. (Fees: - 75 Rs. For one theory and 100 Rs for one practical)

- Write a PHP program to display data stored in a table sorted by “age” column. Table Name is employeeDetails and its structure is as shown below.

Column	Type
name	Varchar(20)
age	int(5)
salary	int(10)
DOJ	Date

- What is the difference between PHP Session and Cookie?
- Briefly explain about the different conditional statements and looping statements in PHP with suitable examples.
- Give an example to demonstrate **for loop** in PHP. Briefly explain the code
- Explain the different types of arrays used in PHP with example.
- Write the syntax for **foreach** Loop
- Find out the mistake in the PHP codes given below and correct it.

```
a)<?php
    $customerArray=array('custName'=>'John','custAddress'=>'Street
    No:1','accNum'=>'12345678')
    echo $customerArray[0];
?>
```

```
b)<?php
    if($n=100)
        echo Good
    else
        echo Not Good
?>
```

- What are the two ways in which an associative array can be sorted in PHP? Mention about the functions used for it.
- What is meant by sub classing in PHP?
- Write a PHP program to read and insert the details from a webpage as shown below in a database.

Name
 Address
 Graduate ☐
 Gender ☐ Male ☐ Female
 District

- What is meant by static and dynamic webpage?
- Write a java script code to find out the position of S in the string JAVASCRIPT.
- Write a program to demonstrate If else statement in java script.
- Mention some benefits of Javascript.
- Explain about five JavaScript loop statements
- Why we are adding an HTML comment tag <!-- before the first JavaScript statement, and a --> after the last JavaScript statement?
- Give the output of the following JavaScript codes given below
 - a) `x=5+5;`
`document.write(x);`
 - b) `x="5"+"5";`
`document.write(x);`
 - c) `x=5+"5";`
`document.write(x);`
 - d) `x="5"+5;`
`document.write(x);`
- Explain about the three kinds of pop up boxes in Javascript with examples.
- Correct the JavaScript code given below to give the output: ***-We are the so-called "Vikings" from the north.***

```

<script type="text/javascript">
    var txt="We are the so-called "Vikings" from the north.";
    document.write(txt);
</script>

```
- Write the Javascript code lines to display a clock on your webpage.
- Write a JavaScript code to split the string 'I am learning Java Script' into individual words.
- What can a JavaScript do? Explain its features.
- Write a JavaScript code to generate a pop up "I am learning Java".
- How do you sort an array using JavaScript? Explain with a program.
- Give an example to demonstrate how you will set the layout of a table using CSS.
- The
 element does not have a closing tag. Give Reason
- Write an HTML code to demonstrate nesting list.
- What is Cell Spacing and Cell Padding?
- Explain Document-Relative Links and Site-Root-Relative Links
- Rewrite the following HTML tags in the **proper** sequence.


```

</body>

```

```

<body>
</form>
<form>
</head>
<head>
</html>
<html>
</table>
<table>
</td>
</td>
<td> Name
<td> Mark
</title>
<title>
</tr>
<tr>

```

- Explain any five character formatting elements in HTML
- Write the correct HTML tags for the following
 - a)Horizontal Line b)Line Break
 - c)Ordered list d)Unordered list
 - e)Hyper link f)Bold text
 - g)Large Heading h)Table Row
- Identify the error in the following tag and rewrite it


```

<html>
<Head>
<Title> My page <Title>
<Body>
<H1> This web page shows <Br>
Different programming languages
<html>

```
- Write the HTML code for the table shown below and also sets a background image (bgnd.jpg) for the table.

First Name	RUTRONIX
Telephone	6456089
	3058875
Place	Sasthamangalam

- Write the HTML code to create the table given below.

Name	Marks	
	First term	Second term
Arun Gosh	320	410
Sunil	400	310
Darsana	200	140

- Write the HTML code for the following web form elements
password fields, text area fields, radio buttons, checkboxes, buttons
- Explain the concept of linking in web pages with suitable examples
- Write the HTML code to create an Events Calendar as shown below.

Coming Events

Click any of the days highlighted in the calendar to read about the event scheduled for that day.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

- What will be the output of the following html tag

```
<html>
<body>
<p>The hr tag defines a horizontal rule:</p>

<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
<hr>
<p>This is a paragraph</p>
</body>
</html>
```
- What is the use the html code given below? List its attributes.

```
<a href="mailto:someone@microsoft.com?">
```
- Identify the following html code and list its features?

```
<html>
<frameset cols="25%,50%,25%">
<frame src="frame_a.htm">
<frame src="frame_b.htm">
<frame src="frame_c.htm">
</frameset>
```

</html>

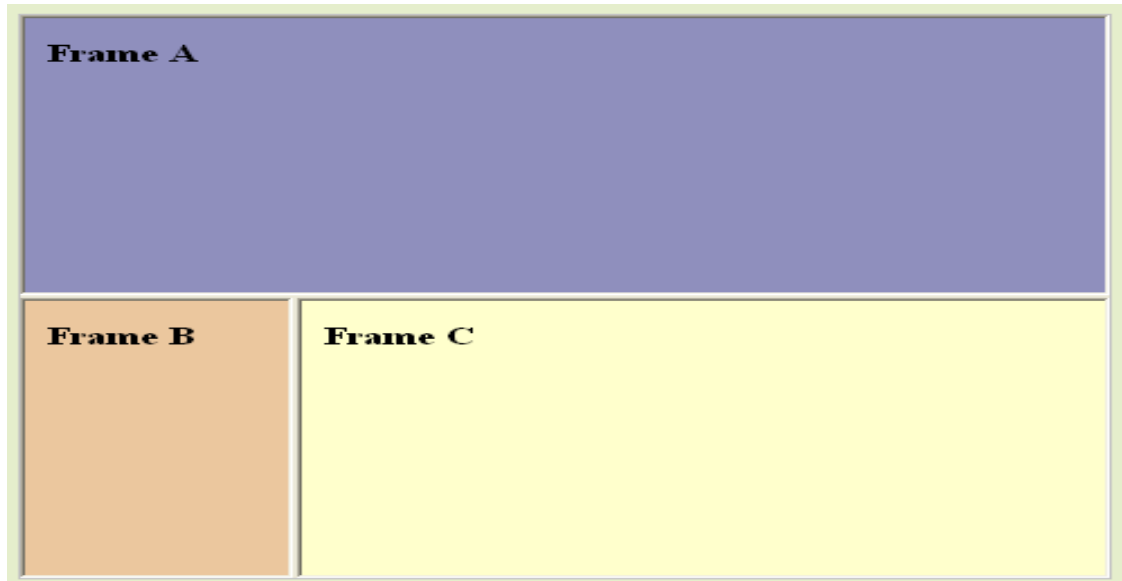
- How do you create an ordered list?
 - How to set the background color in web document?
 - Differentiate between Ordered list and Unordered list.
 - Explain about Special formatting elements in HTML.
-
- Write a program to create an HTML page to display in a tabular form, the details of students who have registered for an examination. The data is stored in a table named regDetails and details of 20 students are displayed at a time. The starting idNum is obtained from another HTML page through POST method.

Table Name: regDetails	
Column	Type
idNum	Int(5)
name	varchar(25)
course	char(10)
subjects	char(25)
fees	Int(10)

- Write the HTML code to create the frames given below

- Explain about some of the table data and table header attributes.

- Write the HTML code to display the contents of a webpage as shown below.



- Write the HTML code to insert an image 'nehru.jpg', 160pixels wide and 190 pixels high.
- Write the HTML code to display the contents of a webpage as shown below.

This is some text. This is some text. This is some text. This is some text. This is some text.

Another text. Another text. Another text.
Another text. Another text. Another text.
Another text.

- Write CSS code to repeat a background
- What are the three parts of CSS syntax .What is the difference between external style sheet and internal style sheet? Create a web page to demonstrate CSS; the web page should have its heading in blue color and the font should be of size 3 and italics and it should have a background image which should repeat in the vertical direction only.
- What do you mean by tangible cost and intangible cost? Give example.
- What is a decision table? What are the four basic parts of decision table?
- What is a data structure?
- What do you mean by decision tree in structured analysis?
- What do you mean by Scheduling?
- What is meant by System Engineering?

- What is a form? What do you mean by Boxed Style Form?
- Define
 - a. Closed System b. Open System
- What are the different ways in which a file is referenced and updated?
- How we can assess technical feasibility?
- Why do we use system flow chart? What are the different types of symbols used in system flow chart?
- Explain Data coding.
- Explain about the design objectives in System design.
- Give a graphical representation of SDLC.
- Differentiate between tangible and intangible costs.
- Write on any four methods to test a system.
- Name three ways of Changeover in System Engineering.
- Define Critical Path and Float
- What is MIS? How does it differ from Regular Information System?
- Differentiate between structured and unstructured interview.
- What is a Web Browser? Give two examples.
- Briefly explain the Cost-Benefit evaluation methods.
- What is System Testing? What are the different strategies for system testing?
- Explain the various methods of Data collection.
- Explain the System development life-cycle.
- Explain about data collection/Fact finding techniques in system requirement specification.
- What is meant by a System in System engineering? What are the different types of Systems?
- What are the basic characteristics of a System?
- What are the different types of decisions taken in a business system?
- What is meant by system analysis?
- What is meant by data modeling?
- What is meant by data capture?
- What are the various factors considered for hardware selection?
- What is a record?
- What is a module?
- What are the two stages of a pilot operation?
- Explain about various categories of decisions taken in a business system.
- Explain about structure chart.
- Explain briefly about classification of files.

