Model Questions

System Engineering and Web Design

(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 and conduct the Model examination during 27/01/2009 to 31/01/09)**

Part-I Choose the correct answer

1. Which of the following is an invalid variable name?
   a) $my_Var   b) $myVar   c) $my-Var   d)None of these

2. Which among the following PHP function is used to open files?
   a)fwrite()   b)fread()   c)fopen()   d)None of these

3. Which among the following is not a case sensitive language?
   a)JavaScript   b)HTML   c)C++   d)None of these

4. Which among the following is an attribute?
   a)<FONT>   b)<COLOR> c)<HR> d)None

5. Which among the following element has a closing tag?
    a)
  b)<HR> c)<HI> d)None

6. PHP statements are terminated by
   a) **.**   b) </php>   c) ;   d)None of these

7. What is the correct syntax to create a *pop up* "Hello World" in JavaScript?
   a) response. write("Hello World") ;
   b) document. write("Hello World");
   c) alert("Hello World");
   d) None of these

8. How can you make an e-mail link?

    a) <a href ="xxx@yyy">

    b) <a href =<"mailto:xxx@yyy">

    c) <mail>xxx@yyy</mail>

    d)All of these

9. Which among the following JavaScript code will give an output 10?

    a) X="5"+"5";

     Document. Write(X);

    b) X="5"+5;

     Document. Write(X);

    c) X=5+5;

Document. Write(X);

d) All of these.

10. With CSS where do you add the following:

<link rel="stylesheet" type="text/css" href="style.css" >

a) Head   b) body   c) both head and body   d)None of these

11. What is the correct HTML for inserting an image?

    a) <img>image.gif</img>

    b) <img src ="image.gif">

    c) <img href ="image.gif">

    d)None of these

12. What will be the output of the PHP code given below?

    <?php

    $x = "test";

    echo '$x';

    ?>

    a)test   b)'$x'   c)$x   d)none of these

13. What does PHP stand for?

    a)Personal Home Page

    b) PHP is Hypertext Preprocessor

    c)Personal Hypertext Processor

    d)None of these

14. 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

15. With CSS where do you add the following: <style type="text/css"> ?

    a)<head> section

    b)<body> section

    c)Text document

16. 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

17. 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

18.Which one of these variables name is invalid?

a)$my_Var

b)$myVar

c)$my-Var

d)None of these

19.How can you open a link in a new browser window?

a)<a href="url" target="_blank">

b)<a href="url" target="new">

c)<a href="url" new>

d)All of these

20. Which of the following HTML tag is used to create unordered list?
   a.   b)   c) <unordered>   d)None of these

21. What will be the output of the code given below?
    <?php
    echo strpos("Hello world!","world");
    ?>
   a)5   b)6   c)7   d)0

22. Which of the following is not a web browser?
       a) Internet Explorer b) Windows Explorer   c) Opera   d)Chrome

23. 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

24. <script type="text/javascript">
      var x=5;
      x="1"+x;
      document. write(x);
    </script>. What will be the value of x?

      a) 6   b) 15   c)5   d)1x

25. Which among the following is/are not a PHP file extension?
   a) .php   b) .php3   c) .phtml   d).pht

26. Which of the following is not used to transmit data from an HTML form to a server?
    a) get   b) post   c) send

27 .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)None of these

28. The process of translating a source document into a machine readable format
    is _____
    a)Data input   b) Data entry   c)   Batch input d)None of these

29. 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 of these

30 . Which among the following is an example of open system?
    a)Regulator of a fan   b)Personal Computer   c)Missile guidance system

31. 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

32. _____ 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

33._____ is the smallest unit of data stored in the memory
    a)Field   b)Record c)file d)None

34. Which among the following is the test performed on individual modules?
    a) Stress Testing   b) Unit Testing c) Stub Testing   d) Series Testing

Part-II Give the output of the codes given below

1.  ```php
    <?php
    for ($i = 1; $i < 2; $i++)
    {
     echo $i;
    }
     echo $i;
    ?>
    ```

2.  ```php
    <?php
    $x = 4;
    $rt = "Debug";
    $rt_4 = "Test";
    $rt_$x="Blue";
    echo ${rt_.$x};?>
    ```

3.  ```php
    <?php
     $txt1="Hello World";
     $txt2="1234";
    ```

```php
    echo $txt1 . " " . $txt2;
?>
```

4.
```php
<?php
$x = "x";
$y = "x";
$$x = "y";
echo "$x $y";?>
```

5.
```php
<?php
$a=array("PHP","Java","C++");
array_push($a,"VB","C#");
echo $a[3];
?>
```

6.
```php
<?php
$a=10;
$b='10';
if($a = = = $b)
{
echo "Equal";
}
else
{
echo "Not Equal";
}
?>
```

7.
```php
<?php
  $a=10;
  $b='10';
  if($a = = $b)
  {
      echo "Equal";
  }
  else
  {
      echo "Not Equal";
  }        ?>
```

8.
```php
<?php
$colorArray=array("Red","Blue","Green");
array_shift($colorArray,"Yellow");
echo $colorArray[0];
?>
```

9.
```php
<?php
  $j=10;
```

```php
        for($i=0;$i<5;$i++)
        {
        $j +=1;
        }
        echo $j;
        ?>
```

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

Part-lII Fill in the blanks

11. _____ tag is used for inserting images in HTML.
12. The function used to display year in JavaScript is _____.
13. The _____ tag creates a new row of a table.
14. In PHP function used to check whether a variable is set or not is _____.
15. An external style sheet can be added to a document using _____tag.
16. _____ attribute is used to set a border around the image
17. JavaScript is a _____ language.
18. CSS stands for _____
19. In JavaScript function used to print current webpage is _____
20. The HTML tag that provides paragraph break is _____.
21. In HTML tag used to divide the single browser window into two window panes is _____.
22. TIFF is _____.
23. The HTML tag that provides line break is _____.
24. All PHP variable names must be prefixed with a _____
25. In PHP the function used to convert the first letter of every word to uppercase is _____.
26. _____is a chance to improve the organization even in the absence of specific problems.
27. _____ relationship represents data elements that are repeated one or more times in a data structure.
28. PIECES is a framework for classifying problems, _____and directives
29. '[ ]' notation represents _____ relationship in data dictionary.
30. '+' notation represents _____ relationship in data dictionary
31. _____ relationship represents data elements that are repeated one or more times in a datastructure

32. _____ is used to refer to a point where the cost of candidate system and that of the existing system are equal.

33. _____ is used to refer to a point where the cost of candidate system and that of the existing system are equal.

Part-IV State whether True or False

1. A PHP scripting block always starts with <?php and ends with ?>.
2. The setcookie function must appear before the <HTML> tag.
3. <BASE> can be used to record document's location in the form of an URL.
4. The basic building block of conditional coding is the if statement.
5. In PHP, a variable must be declared before being set.
6. <Break> tag is used to break a line.
7. PHP is only executed in WINDOWS.
8. HTML is a case sensitive language.
9. Keystroke is a JavaScript event.
10. A CSS comment begins with "/*" and ends with "*/".
11. JavaScript variables are prefixed with '$' sign.
12. The purpose of JavaScript prompt is to gather information from the user.
13. H4 is the smallest HTML heading tag.
14. The purpose of Java script prompt is to gather information from the user.
15. An external JavaScript must contain the <script> tag.
16. Logical operators are also known as Boolean operators
17. In PHP '.' Operator is used to string concatenation.
18. JavaScript is a server side scripting language.
19. The two sub elements HEAD and BODY are required to form any HTML document.
20. The default color of VLINK is purple.
21. Web developers cannot set the link colors for their documents.
22. A background image must be either in the form of .gif or .jpg file.
23. A   is an invisible character that takes up one space.
24. In JavaScript semicolon is optional.
25. The horizontal bar chart is sometimes called a Gantt chart.
26. The development phase activity includes writing and testing the computer programs.
27. System Analysis deals with logical and system design with physical aspects of a system.
28. A missile guidance system is a deterministic system
29. The development phase activity includes writing and testing the computer programs.
30. In Water fall model the phases are organized in non linear model.

Part-V Answer the following   **(2 Marks each)**

1. Write the syntax of switch statement in PHP.
2. Write a JavaScript code to generate a pop up "I am learning Java".
3. What is the difference between PHP Session and Cookie?
4. How to set the background color in web document?
5. Write a PHP program to find the current working directory.
6. How do you sort an array using JavaScript? Explain with a program.
7. Write the HTML code to insert an image 'nehru.jpg', 160pixels wide and 190 pixels high.
8. What is the difference between GET method and POST method?
9. What do you mean by PHP session variables?
10. What do you mean by static and dynamic webpage?
11. What will be the result of the body element shown below?

    <BODY BGCOLOR ="WHITE" TEXT="RED" LINK="BLUE"
     VLINK="MAGENTA" ALINK="YELLOW">
12. The <BR> element does not have a closing tag. Give Reason
13. Write an HTML code to demonstrate nesting list.
14. What is Cell Spacing and Cell Padding?
15. Write a program to demonstrate *If else* statement in java script.
16. Mention some benefits of Javascript.
17. Write a java script code to find out the position of *S* in the string *JAVASCRIPT*.
18. Give an example to demonstrate how you will set the layout of a table using CSS.
19. Write an SQL query to select the details of the employees whose name starts with A.(Table Name: employeeDetails)
20. What do you mean by tangible cost and tangible cost? Give example.
21. Explain about the two types of decision table.
22. What is a data structure?
23. What do you mean by decision tree in structured analysis?
24. What do you mean by Scheduling?
25. Define the terms

    a)Linear Media b)Hyper Media
26. What is meant by System Engineering?
27. What is a form? What do you mean by Boxed Style Form?
28. Define

    a. Closed System   b. Open System
29. Name three ways of Changeover in System Engineering.
30. Define Critical Path and Float
31. What are the different ways in which a file is referenced and updated?
32. How we can assess technical feasibility?
33. What is a decision table? What are the four basic parts of decision table?

Part-VI Answer any *six* questions   **(5 Marks Each)**

1. Write a PHP program to display data stored in a table sorted by "age" column.

Table Name: employeeDetails

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

2. Write the HTML code for the table shown below and also set a background image for the table.

First Name	RUTRONIX
Telephone	6456089
	3058875
Place	Sasthamangalam

3. Explain any five character formatting elements in HTML
4. Explain

   a)Document-Relative Links

   b)Site-Root-Relative Links

5. Differentiate between Ordered list and Unordered list.
6. Explain about Special formatting elements in HTML.
7. 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)
8. 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						

9. Explain about five JavaScript loop statements
10. Give an example to demonstrate *for loop* in PHP. Briefly explain the code
11. Write the HTML code to create the frames given below

12. Write a JavaScript code to split the string 'I am learning Java Script' into words.
13. Explain about some of the table data and table header attributes.
14. 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).
15. What is MIS? How does it differ from Regular Information System?
16. Differentiate between structured and unstructured interview.
17. What is a Web Browser? Give two examples.
18. Briefly explain the Cost-Benefit evaluation methods.
19. What is meant by a System in System engineering? What are the different types of Systems?
20. What are the basic characteristics of a System?
21. Explain about the benefits of MIS.
22. What are the different phases in SDLC?
23. Why do we use system flow chart? What are the different types of symbols representing system flow chart?
24. Explain Data coding.
25. Explain about the design objectives in system design.
26. Explain about the basic parts of a Form.
27. What are the different types of decisions taken in a business system?
28. Explain about the design objectives in system design.

Part-VII Answer any two questions   **(10 Marks each)**

1. 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.

2. Briefly explain about conditional statements and looping statements in PHP with suitable examples.

3. Write a PHP program to read and insert the details from a webpage as shown below in a database.

4. What is System Testing? What are the different strategies for system testing?

5. Explain the various methods of Data collection.
6. Explain about the data documentation tools used by the system analyst.
7. Explain the system development lifecycle.
8. Explain about data collection/Fact finding techniques in system requirement specification.