Core Module 3- Web Designing QB
**HTML**

A webpage displays a picture. What tag was used to display that picture?
A. picture  
B. image  
C. img  
D. src  
ANSWER: C

<\texttt{b}> tag makes the enclosed text bold. What is other tag to make text bold?
A. <\texttt{strong}>  
B. <\texttt{dar}>  
C. <\texttt{black}>  
D. <\texttt{emp}>  
ANSWER: A

Tags and text that are not directly displayed on the page are written in _____ section.
A. <\texttt{html}>  
B. <\texttt{head}>  
C. <\texttt{title}>  
D. <\texttt{body}>  
ANSWER: B

Which tag inserts a line horizontally on your web page?
A. <\texttt{hr}>  
B. <\texttt{line}>  
C. <\texttt{line direction="horizontal">}  
D. <\texttt{tr}>  
ANSWER: A

What should be the first tag in any HTML document?
A. <\texttt{head}>  
B. <\texttt{title}>
C. <html>
D. <document>
ANSWER: C

Which tag allows you to add a row in a table?
A. <td> and </td>
B. <cr> and </cr>
C. <th> and </th>
D. <tr> and </tr>
ANSWER: D

How can you make a bulleted list?
A. <list>
B. <nl>
C. <ul>
D. <ol>
ANSWER: C

How can you make a numbered list?
A. <dl>
B. <ol>
C. <list>
D. <ul>
ANSWER: B

How can you make an e-mail link?
A. <a href="xxx@yyy ">
B. <mail href="xxx@yyy ">
C. <mail>xxx@yyy </mail>
D. <a href="mailto:xxx@yyy ">
ANSWER: D

What is the correct HTML for making a hyperlink?
A. <a href="http://data.com">Question</a>
B. <a name="https://data.com">Question</a>
C. <https://data.com></a>
D. url="https://data.com">Question
Choose the correct HTML tag to make a text italic
A. <ii>
B. <italics>
C. <italic>
D. <i>
ANSWER: D

Choose the correct HTML tag to make a text bold
A. <b>
B. <bold>
C. <bb>
D. <bld>
ANSWER: A

What is the correct HTML for adding a background color?
A. <body color=“yellow”>
B. <body bgcolor=“yellow”>
C. <background>yellow</background>
D. <body background=“yellow”>
ANSWER: B

Choose the correct HTML tag for the smallest size heading?
A. <heading>
B. <h6>
C. <h1>
D. <head>
ANSWER: B

What is the correct HTML tag for inserting a line break?
A. <br>
B. <lb>
C. <break>
D. <newline>
ANSWER: A
What does vlink attribute mean?
A. visited link  
B. virtual link  
C. very good link  
D. active link  
ANSWER: A

Which attribute is used to name an element uniquely?
A. class  
B. id  
C. dot  
D. all of the mentioned  
ANSWER: B

Which tag creates a check box for a form in HTML?
A. <checkbox>  
B. <input type="checkbox">  
C. <input=checkbox>  
D. <input checkbox>  
ANSWER: B

To create a combo box (drop down box) which tag will you use?
A. <select>  
B. <list>  
C. <input type="dropdown">  
D. all of above  
ANSWER: A

Which of the following is not a pair tag?
A. <p>  
B. <u>  
C. <i>  
D. <img>  
ANSWER: D

To create HTML document you require a
A. web page editing software  
B. High powered computer  
C. Just a notepad can be used  
D. None of above  
ANSWER: C

The special formatting codes in HTML document used to present content are  
A. tags  
B. attributes  
C. values  
D. None of above  
ANSWER: A

HTML documents are saved in  
A. Special binary format  
B. Machine language codes  
C. ASCII text  
D. None of above  
ANSWER: C

Some tags enclose the text. Those tags are known as  
A. Couple tags  
B. Single tags  
C. Double tags  
D. Pair tags  
ANSWER: D

The _____ character tells browsers to stop tagging the text  
A. ?  
B. /  
C. >  
D. %  
ANSWER: B

In HTML document the tags  
A. Should be written in upper case
B. should be written in lower case  
C. should be written in proper case  
D. can be written in both uppercase or lowercase  
ANSWER: D

Marquee is a tag in HTML to  
A. mark the list of items to maintain in queue  
B. Mark the text so that it is hidden in browser  
C. Display text with scrolling effect  
D. None of the options  
ANSWER: C

There are ____ different of heading tags in HTML  
A. 4  
B. 5  
C. 6  
D. 7  
ANSWER: C

To create a blank line in your web page  
A. press Enter two times  
B. press Shift + Enter  
C. insert <BR> tag  
D. insert <BLINE>  
ANSWER: C

Which of the following is not a style tag?  
A. <b>  
B. <tt>  
C. <i>  
D. All of the mentioned are style tags  
ANSWER: D

CSS  

What does CSS stand for?  
A. Creative Style Sheets  
B. Colorful Style Sheets  

C. Cascading Style Sheets
D. Computer Style Sheets

**ANSWER:** C

**What is the correct HTML for referring to an external style sheet?**

A. `<stylesheet>mystyle.css</stylesheet>`
B. `<style src="mystyle.css" />`
C. `<link rel="stylesheet" type="text/css" href="mystyle.css">`

**ANSWER:** C

**Where in an HTML document is the correct place to refer to an external style sheet?**

A. At the end of the document
B. In the `<head>` section
C. At the top of the document
D. In the `<body>` section

**ANSWER:** B

**Which HTML tag is used to define an internal style sheet?**

A. `<style>`
B. `<css>`
C. `<script>`

**ANSWER:** A

**Which HTML attribute is used to define inline styles?**

A. `font`
B. `class`
C. `styles`
D. `style`

**ANSWER:** D

**Which is the correct CSS syntax?**

A. `body {color: black}`
B. `{body;color:black}`
C. `{body:color=black(body}`
D. `body:color=black`

**ANSWER:** A

**How do you insert a comment in a CSS file?**

A. `// this is a comment //`
B. `/* this is a comment */`
C. `' this is a comment`
D. `// this is a comment`

**ANSWER:** B
Which property is used to change the background color?
A. bgcolor:
B. background-color:
C. color:
ANSWER: B

How do you add a background color for all <h1> elements?
A. all.h1 {background-color:#FFFFFF}
B. h1.all {background-color:#FFFFFF}
C. h1 {background-color:#FFFFFF}
ANSWER: C

How do you change the text color of an element?
A. text-color=
B. fgcolor:
C. color:
D. text-color:
ANSWER: C

Which CSS property controls the text size?
A. font-size
B. font-style
C. text-style
D. text-size
ANSWER: A

What is the correct CSS syntax for making all the <p> elements bold?
A. <p style="text-size:bold">
B. p {font-weight:bold}
C. p {text-size:bold}
D. <p style="font-size:bold">
ANSWER: B

How do you display hyperlinks without an underline?
A. a {text-decoration:no underline}
B. a {decoration:no underline}
C. a {text-decoration:none}
D. a {underline:none}
ANSWER: C

How do you make each word in a text start with a capital letter?
A. text-transform:capitalize
B. You can't do that with CSS
C. text-transform:uppercase
ANSWER: A

How do you change the font of an element?
A. font-family:
B. font=
C. f:
ANSWER: A

How do you make the text bold?
A. font:b
B. font-weight:bold
C. style:bold
ANSWER: B

How do you display a border like this:
The top border = 10 pixels
The bottom border = 5 pixels
The left border = 20 pixels
The right border = 1pixel?
A. border-width:10px 20px 5px 1px
B. border-width:10px 1px 5px 20px
C. border-width:5px 20px 10px 1px
D. border-width:10px 5px 20px 1px
ANSWER: B

How do you change the left margin of an element?
A. margin:
B. indent:
C. margin-left:
D. text-indent:
ANSWER: C

To define the space between the element's border and content, you use the padding property, but are you allowed to use negative values?
A. Yes
B. No
ANSWER: B

How do you make a list that lists its items with squares?
A. list-type: square
B. type: square
C. type: 2
D. list-style-type: square
ANSWER: D

PHP

What PHP stands for?
A. Hypertext Preprocessor
B. Pre Hypertext Processor
C. Pre Hyper Processor
D. Pre Hypertext Process
ANSWER: D

Which of the following tags is not a valid way to begin and end a PHP code block?
A) <%% %>
B) <? ?>
C) <?= ?>
D) <! !>
E) <?php ?>
ANSWER: B

How does the identity operator === compare two values?
A. It converts them to a common compatible data type and then compares the resulting values
B. It returns True only if they are both of the same type and value
C. If the two values are strings, it performs a lexical comparison
D. It bases its comparison on the C strcmp function exclusively
E. It converts both values to strings and compares them
ANSWER: A

Under what circumstance is it impossible to assign a default value to a parameter while declaring a function?
A. When the parameter is Boolean
B. When the function is being declared as a member of a class
C. When the parameter is being declared as passed by reference
D. When the function contains only one parameter
E. Never
Variables always start with a .......... in PHP
A. Pond-sign
B. Yen-sign
C. Dollar-sign
D. Euro-sign
ANSWER: C

What is the value displayed when the following is executed? Assume that the code was executed using the following URL:
testscript.php?c=25
<?php
function process($c, $d = 25)
{
    global $e;
    $retval = $c + $d - $_GET['c'] - $e;
    return $retval;
}
$e = 10;
echo process(5);
?>
A. 25
B. -5
C. 10
D. 5
E. 0
ANSWER: B

PHP is an open source software
A. True
B. False
ANSWER: A

Which of the following is not valid PHP code?
A. $_10
B. ${“MyVar”}
C. &$something
D. $10_somethings
E. $aVaR
ANSWER: D

Doubt

What is the difference between print() and echo()?
A. print() can be used as part of an expression, while echo() can’t
B. echo() can be used as part of an expression, while print() can’t
C. echo() can be used in the CLI version of PHP, while print() can’t
D. print() can be used in the CLI version of PHP, while echo() can’t
E. There’s no difference: both functions print out some text!
ANSWER: A, B

PHP runs on different platforms (Windows, Linux, Unix, etc.)
A. True
B. False
ANSWER: A

Which of the following will not combine strings $s1 and $s2 into a single string?
A. $s1 + $s2
B. "{$s1}{$s2}"
C. $s1.$s2
D. implode(' ', array($s1,$s2))
E. All the mentioned options combine the strings
ANSWER: A

Given a variable $email containing the string user@example.com, which of the following statements would extract the string example.com?
A. substr($email, strpos($email, "@"));
B. strstr($email, "@");
C. strchr($email, "@");
D. substr($email, strpos($email, "@")+1);
E. strrpos($email, "@");
Given a comma-separated list of values in a string, which function from the given list can create an array of each individual value with a single call?
A. strstr()
B. Cannot be done with a single function
C. extract()
D. explode()
E. strtok()
ANSWER: D

What is the best all-purpose way of comparing two strings?
A. Using the strpos function
B. Using the == operator
C. Using strcasecmp()
D. Using strcmp()
ANSWER: D

Which of the following PCRE regular expressions best matches the string php|architect?
A. .* 
B. ...|........ 
C. \d{3}\d{8} 
D. [az]{3}\[az]{9} 
E. [a-z][a-z][a-z]\w{9} 
ANSWER: E

Which of the following functions can be used to determine the integrity of a string?
A. md5() 
B. sha1() 
C. str_rot13() 
D. crypt() 
E. crc32() 

Doubt
ANSWER: A,B,E

What happens if you add a string to an integer using the + operator?
A. The interpreter outputs a type mismatch error
B. The string is converted to a number and added to the integer
C. The string is discarded and the integer is preserved
D. The integer and string are concatenated together in a new string
E. The integer is discarded and the string is preserved
ANSWER: B

The ___________ function can be used to compare two strings using a case-insensitive binary algorithm
A. strcmp()
B. stricmp()
C. strcasecmp()
D. stristr()
E. None of the above
ANSWER: C

Doubt
Which of the following functions can be used to convert the binary data stored in a string into its hexadecimal representation?
A. encode_hex()
B. pack()
C. hex2bin()
D. bin2hex()
E. printf()
ANSWER: B,D

Doubt
^[A-Za-z].* matches
A. play it again
B. I
C. 123
D. ?
ANSWER: A,B
^[0-9]{5}\-(\-[0-9]{4})?$ matches
A. 90001 and 90002-4323
B. 9001 and 12-4321
ANSWER: A

Array values are keyed by ______ values (called indexed arrays) or using ______ values (called associative arrays). Of course, these key methods can be combined as well.
A. Float, string
B. Positive number, negative number
C. Even number, string
D. String, Boolean
E. Integer, string
ANSWER: E

What will the following script output?
```php
$array = array (1, 2, 3, 5, 8, 13, 21, 34, 55);
$sum = 0;
for ($i = 0; $i < 5; $i++) {
    $sum += $array[$array[$i]];
}
echo $sum;
?>
```
A. 78
B. 19
C. NULL
D. 5
E. 0
ANSWER: A

What elements will the following script output?
```php
$array = array (true => 'a', 1 => 'b');
var_dump ($array);
?>
```
A. 1 => 'b'
B. True => 'a', 1 => 'b'
C. 0 => 'a', 1 => 'b'
D. None
E. It will output NULL
ANSWER: E

Which array function checks if the specified key exists in the array
A. array_key_exist()
B. array_key_exists()
C. array_keys_exists()
D. arrays_key_exists()
ANSWER: B

There are three different kind of arrays:
A. Numeric array, String array, Multidimensional array
B. Numeric array, Associative array, Dimensional array
C. Numeric array, Associative array, Multidimensional array
D. Const array, Associative array, Multidimensional array
ANSWER: C

Abscent any actual need for choosing one method over the other, does passing arrays by value to a read-only function reduce performance compared to passing them by reference?
A. Yes, because the interpreter must always create a copy of the array before passing it to the function.
B. Yes, but only if the function modifies the contents of the array.
C. Yes, but only if the array is large.
D. Yes, because PHP must monitor the execution of the function to determine if changes are made to the array.
E. No.
ANSWER: E

Assume you would like to sort an array in ascending order by value while preserving key associations. Which of the following PHP sorting functions would you use?
A. ksort()
B. asort()
C. krsort()
D. sort()
E. usort()
ANSWER: B

What function computes the difference of arrays?
A. array_diff
B. diff_array
C. arrays_diff
D. diff_arrays
ANSWER: A

Doubt
What functions count elements in an array?
A. count
B. Sizeof
C. Array_Count
D. Count_array
ANSWER: A,B

What array will you get if you convert an object to an array?
A. An array with properties of that object as the array's elements.
B. An array with properties of that array as the object's elements.
C. An array with properties of that object as the Key elements.
D. An array with keys of that object as the array's elements.
ANSWER: A

Doubt
Which of the following functions do not return a timestamp?
A. time()
B. date()
C. strtotime()
D. localtime()
E. gmmktime()
ANSWER: B, D
The getdate() function returns
A. An integer
B. A floating-point number
C. An array
D. A string
E. A Boolean
ANSWER: C

............ Returns the time of sunrise for a given day / location
A. datesunrise()
B. date_sunrise()
C. date-sunrise()
D. date.sunrise()
ANSWER: B

What will the following script output?
```php
<?php
$time = strtotime ('2004/01/01');
echo date ('H:i:s', $time);
?>
```
A. 00:00:00
B. 12:00:00
C. 00:i:00
D. 12:i:00
E. -1
ANSWER: C

.................Checks a date for numeric validity.
A. check_date
B. verifydate
C. Verify_date
D. checkdate
ANSWER: D

What is the difference, in seconds, between the current timestamp in the GMT time zone and the current timestamp in your local time zone?
A. It depends on the number of hours between the local time zone and GMT
B. There is no difference
C. The two will only match if the local time zone is GMT
D. The two will never match
E. None of the above
ANSWER: B

You must make a call to ................. to specify what time zone you want calculations to take place in before calling any date functions.
A. date_default_timezone_set()
B. datedefault_timezone_set()
C. date_defaulttimezone_set()
D. date_default_timezoneset()
ANSWER: A

What would happen if the following script were run on a Windows server set to Moscow, Russia’s time zone?
```php
<?php
echo gmdate(0, 0, 0, 1, 1, 1970);
?>
```
A. It would output the number 0
B. It would output the number -1
C. It would output the number 1
D. It would raise an error
E. It would output nothing
ANSWER: B

The ........ function parses an English textual date or time into a Unix timestamp
A. strtodate()
B. stroftime()
C. strtotime()
D. str_to_time()
ANSWER: C
Formats a local time or date according to locale settings.
A. strftime
B. strptime
C. strhtime
D. stritime
ANSWER: A

In PHP, the difference between double quote and single quote is that variables . . . . in single quoted strings whereas they . . . . in double quoted strings.
A. are not parsed, are parsed
B. are parsed, are not parsed
ANSWER: A

PHP strings are binary-safe (i.e. they can contain null bytes). Their size is limited only by the amount of memory that is available to PHP.
A. True
B. False
ANSWER: A

Print substr ('watch out for that tree',20,5);
What is the output of above statement?
A. tree
B. tree'
C. ree
D. none of above
ANSWER: C

$var = 'HELLO WORLD!';
$var = ucfirst($var);
What is the value of var?
A. Hello World!
B. hello world!
C. Hello world!
D. HELLO WORLD!
ANSWER: D
The functions strtolower() and strtoupper() work on individual characters and not on entire strings.
A. True  
B. False  
ANSWER: B

For trim, ltrim or rtrim, whitespace is defined as  
A. newline  
B. space  
C. vertical tab  
D. null  
E. both a and B  
F. all the mentioned options  
ANSWER: F

Heredoc's are a great alternative to quoted strings because of increased readability and maintainability.  
A. True  
B. False  
ANSWER: A

Which of the below is most useful for debugging:  
A. print()  
B. printf()  
C. print_r()  
D. echo  
ANSWER: C

$name = “John”;
$message = ‘Hello, $name’;
What is the value of message?  
A. Hello, John  
B. it will print an error message  
C. ‘Hello, $name’  
D. none of above
ANSWER: C

$str = "Hello fri3nd, you're feeling happy today?";
echo str_word_count($str);
A. 7  
B. 6  
C. 5  
D. 4  
ANSWER: A

PYTHON

What is answer of this expression, 22 % 3 is?
A. 7  
B. 1  
C. 0  
D. 5  
ANSWER: B

What is the output of this expression, 3*1**3?
A. 27  
B. 9  
C. 3  
D. 1  
ANSWER: C

Which of the following will run without errors ?
A. round(45.8)  
B. round(6352.898,2,5)  
C. round()  
D. round(7463.123,2,1)  
ANSWER: A

What datatype is the object below?
L = [1, 23, ‘hello’, 1].
A. list  
B. dictionary
C. array  
D. tuple  
ANSWER: A

What does -------- 5 evaluate to?  
A. +5  
B. -11  
C. +11  
D. -5  
ANSWER: A

What is the result of round(0.5) – round(-0.5)?  
A. 1.0  
B. 2.0  
C. 0.0  
D. None of the mentioned  
ANSWER: B

What is the maximum possible length of an identifier?  
A. 31 characters  
B. 63 characters  
C. 79 characters  
D. none of the mentioned  
ANSWER: D

All keywords in Python are in  
A. lower case  
B. UPPER CASE  
C. Capitalized  
D. None of the mentioned  
ANSWER: D

Which of the following is an invalid statement?  
A. abc = 1,000,000  
B. a b c = 1000 2000 3000  
C. a,b,c = 1000, 2000, 3000  

D. \texttt{a\_b\_c} = 1,000,000
\textbf{ANSWER: B}

Which of these is not a core datatype?
A. Lists
B. Dictionary
C. Tuples
D. Class
\textbf{ANSWER: D}

What is the output when following code is executed?
\begin{verbatim}
print r"\nhello"
\end{verbatim}
The output is
A. a new line and hello
B. \nhello
C. the letter r and then hello
D. Error
\textbf{ANSWER: B}

What is the output of the following code?
\begin{verbatim}
example = "snow world"
example[3] = 's'
print example
\end{verbatim}
A. snow
B. snow world
C. Error
D. snos world
\textbf{ANSWER: C}

What is the output of "hello"+1+2+3?
A. hello123
B. hello
C. Error
D. hello6
\textbf{ANSWER: C}

Suppose \texttt{i} is 5 and \texttt{j} is 4, \texttt{i + j} is same as
A. \texttt{i.__add(j)}
B. \texttt{i.__add__}(j)
C. \texttt{i.__Add(j)}
D. \texttt{i.__ADD(j)}

\textbf{ANSWER: B}

What is the output of the following?
\texttt{print(*, "abcdef".center(7), ")
A. * abcdef *
B. * abcdef *
C. *abcdef *
D. * abcdef*

\textbf{ANSWER: B}

What is the output of the following?
\texttt{print("xyyzxyzxxyy".count('xyy', 2, 11))}
A. 2
B. 0
C. 1
D. Error

\textbf{ANSWER: B}

What is the output of the following?
\texttt{print("Hello \{1\} and \{0\}.format('bin', 'foo'))}
A. Hello foo and bin
B. Hello bin and foo
C. Error
D. None of the mentioned

\textbf{ANSWER: A}

What is the output of the following?
\texttt{print('The sum of \{0\} and \{1\} is \{2\}'.format(2, 10, 12))}
A. The sum of 2 and 10 is 12
B. Error
C. The sum of 0 and 1 is 2
D. None of the mentioned

\textbf{ANSWER: A}
What is the output of the following?
print('ab'.isalpha())
A. True
B. False
C. None
D. Error
ANSWER: A

What is the output of the following?
print('1.1'.isnumeric())
A. True
B. False
C. None
D. Error
ANSWER: B

What is the output of the following?
print('a'.maketrans('ABC', '123'))
A. {97: 49, 98: 50, 99: 51}
B. {65: 49, 66: 50, 67: 51}
C. {97: 49}
D. 1
ANSWER: A

What is the output of the following?
print('xyyxyxyxyxyxy'.replace('xy', '12', 100))
A. xyyxyxyxyxy
B. 12y12y1212x12
C. none of the mentioned
D. error
ANSWER: B

What is the output of the following?
print('abcd'.translate({'a': '1', 'b': '2', 'c': '3', 'd': '4'}))
A. abcd
Cloud Computing

When you add a software stack, such as an operating system and applications to the service, the model shifts to ______ model.
A. SaaS
B. PaaS
C. IaaS
D. All of the mentioned
ANSWER: A

Which of the following is most refined and restrictive service model?
A. IaaS
B. CaaS
C. PaaS
D. All of the mentioned
ANSWER: C

All cloud computing applications suffer from the inherent _______ that is intrinsic in their WAN connectivity.
A. propagation
B. latency
C. noise
D. All of the mentioned
ANSWER: B

Cloud computing is a _______ system and it is necessarily unidirectional in nature.
A. stateless
B. stateful
C. reliable
D. 4
ANSWER: A

Which of the following is best known service model?
A. SaaS  
B. IaaS  
C. PaaS  
D. All of the mentioned  
ANSWER: D

The __________ model originally did not require a cloud to use virtualization to pool resources.  
A. NEFT  
B. NIST  
C. NIT  
D. All of the mentioned  
ANSWER: B

Which of the following is related to service provided by Cloud?  
A. Sourcing  
B. Ownership  
C. Reliability  
D. AaaS  
ANSWER: A

_________ dimension corresponds to two different states in the eight possible cloud forms.  
A. Physical location of data  
B. Ownership  
C. Security boundary  
D. None of the mentioned  
ANSWER: D

_________ is a complete operating environment with applications, management, and the user interface.  
A. IaaS  
B. SaaS  
C. PaaS  
D. All of the mentioned  
ANSWER: B

Which of the following cloud concept is related to pooling and sharing of resources?
A. Polymorphism
B. Abstraction
C. Virtualization
D. None of the mentioned
ANSWER: C

**DBMS**

The candidate key is that you choose to identify each row uniquely is called ..............
A. Alternate Key
B. Primary Key
C. Foreign Key
D. None of the above
ANSWER: B

............... is used to determine whether a table contains duplicate rows.
A. Unique predicate
B. Like Predicate
C. Null predicate
D. In predicate
ANSWER: A

To eliminate duplicate rows .............. is used
A. NODUPLICATE
B. ELIMINATE
C. DISTINCT
D. None of these
ANSWER: C

State true or false
i. A candidate key is a minimal super key.
ii. A candidate key can also refer to a surrogate key.
A. i-true, ii-false
B. i-false, ii-true
C. i-true, ii-true
D. i-false, ii-false
ANSWER: C
DCL stands for
A. Data Control Language
B. Data Console Language
C. Data Console Level
D. Data Control Level
ANSWER: A

........................ is the process of organizing data into related tables.
A. Normalization
B. Generalization
C. Specialization
D. None of the above
ANSWER: A

A .................. Does not have a distinguishing attribute if its own and most are dependent entities, which are part of some another entity.
A. Weak entity
B. Strong entity
C. Non-attributes entity
D. Dependent entity
ANSWER: A

............... is the complex search criteria in the where clause.
A. Substring
B. Drop Table
C. Predict
D. Predicate
ANSWER: D

............... is the preferred method for enforcing data integrity
A. Constraints
B. Stored Procedure
C. Triggers
D. Cursors
ANSWER: A
The number of tuples in a relation is called its ............ While the number of attributes in a relation is called it’s ..............
A. Degree, Cardinality
B. Cardinality, Degree
C. Rows, Columns
D. Columns, Rows
ANSWER: B

The language that requires a user to specify the data to be retrieved without specifying exactly how to get it is
A. Procedural DML
B. Non-Procedural DML
C. Procedural DDL
D. Non-Procedural DDL
ANSWER: B

Which two files are used during the operation of the DBMS?
A. Query languages and utilities
B. DML and query language
C. Data dictionary and transaction log
D. Data dictionary and query language
ANSWER: C

The database schema is written in
A. HLL
B. DML
C. DDL
D. DCL
ANSWER: C

The way a particular application views the data from the database that the application uses is a
A. module
B. relational model
C. schema
D. subschema
ANSWER: D
The relational model feature is that there
A. is no need for primary key data
B. is much more data independence than some other database models
C. are explicit relationships among records.
D. are tables with many dimensions
ANSWER: B

Which one of the following statements is false?
A. The data dictionary is normally maintained by the database administrator
B. Data elements in the database can be modified by changing the data dictionary.
C. The data dictionary contains the name and description of each data element.
D. A data dictionary is a tool used exclusively by the database administrator.
ANSWER: B

Which of the following are the properties of entities?
A. Groups
B. Table
C. Attributes
D. Switchboards
ANSWER: C

Which database level is closest to the users?
A. External
B. Internal
C. Physical
D. Conceptual
ANSWER: A

Which are the two ways in which entities can participate in a relationship?
A. Passive and active
B. Total and partial
C. Simple and Complex
D. All of the above
ANSWER: B

...... data type can store unstructured data
A. RAW
B. CHAR
C. NUMERIC
D. VARCHAR
ANSWER: A

DBMS is a collection of ............ that enables user to create and maintain a database.
A. Keys
B. Translators
C. Program
D. Language Activity
ANSWER: C

In a relational schema, each tuple is divided into fields called
A. Relations
B. Domains
C. Queries
D. All of the above
ANSWER: B

In an ER model, ............... is described in the database by storing its data.
A. Entity
B. Attribute
C. Relationship
D. Notation
ANSWER: A

DFD stands for
A. Data Flow Document
B. Data File Diagram
C. Data Flow Diagram
D. None of the above
ANSWER: C

A top-to-bottom relationship among the items in a database is established by a
A. Hierarchical schema
B. Network schema
C. Relational Schema
D. All the mentioned options
ANSWER: A

................. table store information about database or about the system.
A. SQL
B. Nested
C. System
D. None of these
ANSWER: C

.................defines the structure of a relation which consists of a fixed set of attribute-domain pairs.
A. Instance
B. Schema
C. Program
D. Super Key
ANSWER: B

................. clause is an additional filter that is applied to the result.
A. Select
B. Group-by
C. Having
D. Order by
ANSWER: C

A logical schema
A. is the entire database
B. is a standard way of organizing information into accessible parts.
C. Describes how data is actually stored on disk.
D. All of the above
ANSWER: B

............... is a full form of SQL.
A. Standard query language
B. Sequential query language
C. Structured query language
D. Server side query language
ANSWER: C

A relational database developer refers to a record as
A. a criteria
B. a relation
C. a tuple
D. an attribute
ANSWER: C

............... keyword is used to find the number of values in a column.
A. TOTAL
B. COUNT
C. ADD
D. SUM
ANSWER: B

An advantage of the database management approach is
A. data is dependent on programs
B. data redundancy increases
C. data is integrated and can be accessed by multiple programs
D. none of the above
ANSWER: C
The way the browser displays the object can be modified by _____
A. attributes  
B. parameters  
C. modifiers  
D. None of above  
ANSWER: A

Which of the following HTML code is valid?
A. <font colour="red">  
B. <font color="red">

INTERMEDIATE
C. `<red>`<font>
D. All of above are style tags
ANSWER: B

Which of the following is an attribute related to font tag?
A. size
B. face
C. color
D. All of above are style tags
ANSWER: D

HTML supports
A. ordered lists
B. unordered lists
C. both type of lists
D. does not support those types
ANSWER: C

What tag is used to list individual items of an ordered list?
A. LI
B. OL
C. UL
D. None of above
ANSWER: A

When should you use path along with file name of picture in IMG tag?
A. path is al and not necessary
B. when the location of image file andhtml file are different
C. when image file and html file both are on same location
D. path is always necessary when inserting image
ANSWER: B

Which of the following is not a valid alignment attribute?
A. Left
B. Right
C. Top
D. All the mentioned options
ANSWER: C

Which attribute is used with img tag to display the text if image could not load in browser?
A. description
B. name
C. alt
D. id
ANSWER: C

Which attribute can be used with BODY tag to set background color green?
A. background="green"
B. bgcolor="green"
C. vlink="green"
D. None of above
ANSWER: B

Which attribute you’ll use with TD tag to merge two cells horizontally?
A. merge=colspan2
B. rowspan=2
C. colspan=2
D. merge=row2
ANSWER: C

A webpage displays a picture. What tag was used to display that picture?
A. picture
B. mage
C. img
D. src
ANSWER: C

<b> tag makes the enclosed text bold. What is other tag to make text bold?
A. <strong>
B. <dar>
C. <black>
D. <emp>
ANSWER: A

Tags and test that are not directly displayed on the page are written in _____ section.
A. <html>
B. <head>
C. <title>
D. <body>
ANSWER: B

Which tag inserts a line horizontally on your web page?
A. <hr>
B. <line>
C. <line direction="horizontal">
D. <tr>
ANSWER: A

What should be the first tag in any HTML document?
A. <head>
B. <title>
C. <html>
D. <document>
ANSWER: C

Which tag allows you to add a row in a table?
A. <td> and </td>
B. <cr> and </cr>
C. <th> and </th>
D. <tr> and </tr>
ANSWER: D

How can you make a bulleted list?
A. <list>
B. <dl>
C. <ul>
D. <ol>
ANSWER: C

How can you make a numbered list?
A. <dl>
B. <ol>
C. <list>
D. <ul>
ANSWER: B

How can you make an e-mail link?
A. <a href="xxx@yyy">
B. <mail href="xxx@yyy">
C. <mail>xxx@yyy</mail>
D. <a href="mailto:xxx@yyy">
ANSWER: D

What is the correct HTML for making a hyperlink?
A. <a href="http://data.com">Link</a>
B. <a name="http://data.com"> Link </a>
C. <http://data.com></a>
D. url="http://data.com"> Link
ANSWER: A

Choose the correct HTML tag to make a text italic
A. <ii>
B. <italics>
C. <italic>
D. <i>
ANSWER: D

Choose the correct HTML tag to make a text bold?
A. <b>
B. <bold>
C. `<bb>`  
D. `<bld>`  
**ANSWER:** A

What is the correct HTML for adding a background color?  
A. `<body color="yellow">`  
B. `<body bgcolor="yellow">`  
C. `<background>yellow</background>`  
D. `<body background="yellow">`  
**ANSWER:** B

Choose the correct HTML tag for the smallest size heading?  
A. `<heading>`  
B. `<h6>`  
C. `<h1>`  
D. `<head>`  
**ANSWER:** B

What is the correct HTML tag for inserting a line break?  
A. `<br>`  
B. `<lb>`  
C. `<break>`  
D. `<newline>`  
**ANSWER:** A

What does `vlink` attribute mean?  
A. visited link  
B. virtual link  
C. very good link  
D. active link  
**ANSWER:** A

Which attribute is used to name an element uniquely?  
A. `class`  
B. `d`  
C. `dot`  
D. all the mentioned options
Which tag creates a check box for a form in HTML?
A. <checkbox>
B. <input type="checkbox">
C. <input=checkbox>
D. <input checkbox>
ANSWER: B

To create a combo box (drop down box) which tag will you use?
A. <select>
B. <list>
C. <input type="dropdown">
D. all the mentioned options
ANSWER: A

Which of the following is not a pair tag?
A. <p>
B. < u >
C. <i>
D. <img>
ANSWER: D

PHP

Doubt
Which of the following functions retrieve the entire contents of a file in such a way that it can be used as part of an expression? (Choose 2)
A. file_get_contents()
B. fgets()
C. fopen()
D. file()
E. readfile()
ANSWER: A,D

fgets() is used to read a file one line at a time
What is the difference between stat() and fstat()?
A. While stat() works on open file pointers, fstat() works on files specified by pathname
B. While fstat() works on open file pointers, stat() works on files specified by pathname
C. fstat() has nothing to do with files
D. stat() has nothing to do with files
E. fstat() is an alias of stat()
ANSWER: B

flock() is used to unlock a file so that two or more people do not get access to it at the same time.
A. True
B. False
ANSWER: B

Doubt
Which of the following functions reads the entire contents of a file?
A. fgets()
B. file_get_contents()
C. fread()
D. readline()
E. file()
ANSWER: B,D,E

What is the purpose of basename() function?
A. Returns the last accessed time of the file
B. Returns the first accessed time of the file
C. Strips of the path and returns the file name.
D. Strips of the path and returns the folder name.
ANSWER: C

Assuming that image.jpg exists and is readable by PHP, how will the following script be displayed if called directly from a browser?

```php
<?php
header("Content-type: image/jpeg");
?>

<?php
readfile("image.jpg");
?>
```

A. As a JPEG image
B. As a binary file for display within the browser
C. As a binary file for download
D. As a JPEG file for download
E. As a broken image

ANSWER: E

What should you do if your script is having problem recognizing file endings from a text file saved on a platform different from the one you’re reading it on?

A. Change the auto_detect_line_endings INI setting
B. Use a regular expression to detect the last letter of a line
C. Use `fpos()`
D. Use `ftok()`
E. Read the file one character at a time

ANSWER: A

The .......... function checks if the "end-of-file" (EOF) has been reached.
A. `f_eof()`
B. `f_of()`
C. `feof()`
D. `feof()`

ANSWER: D

The .......... function is used to read a single character from a file.
A. `fgetc()`
B. `fgets()`
C. fgets()
D. fgetsf()
ANSWER: A

You can test the type of any variable with the ..... function.
A. whattype()
B. showtype()
C. gettype()
D. settype()
ANSWER: C

Assigning the empty string (like ' '). to a variable automatically renders it empty.
A. True
B. False
ANSWER: B

If you echo a Boolean variable, the value FALSE displays as a .... and the value TRUE echoes as a ..... 
A. 0, 1
B. blank string, 2
C. empty variable, 1
D. blank string, 1
ANSWER: D

When a simple data type is casted to an array, an array is created with the original value in the first element.
A. True
B. False
ANSWER: A

String values must be enclosed in ..... 
A. single quotes
B. double quotes
C. both A and B
D. none of above
PHP does not support numbers written in hexadecimal, octal or scientific notation.
A. True
B. False
ANSWER: B

PHP ..... demand that you declare a data type when you create a variable.
A. does
B. does not
ANSWER: B

strval()
A. Accepts a value and converts it into a string array
B. Accepts a value and converts it into an string dictionary
C. Accepts a value and converts it into string equivalent
D. None of above
ANSWER: C

What is the limit of a PHP integer value?
A. 16384
B. 65536
C. 1048576
D. 2147483647
ANSWER: D

PHP considers the following values as False
A. the integer 0
B. the one-character string 0
C. constant NULL
D. both A and B
E. All the mentioned options
ANSWER: E

HTML
What is the full form of HTML?
A. Hyper text markup language
B. Hyphenation text markup language
C. Hyphenation text marking language
D. Hyper text marking language
ANSWER: A

What is the full form of HTTP?
A. Hyper text transfer protocol
B. Hyper text transfer package
C. Hyphenation text test program
D. none of the mentioned above
ANSWER: A

**PYTHON**

Which of the following statements is used to create an empty set?
A. {}  
B. set() 
C. [ ] 
D. ( ) 
ANSWER: B

What is the output of the following piece of code when executed in the python shell?
a={1,2,3}
a.intersection_update({2,3,4,5})
a
A. {2,3}  
B. Error, duplicate item present in list  
C. Error, no method called intersection_update for set data type  
D. {1,4,5}  
ANSWER: A

Which of the following lines of code will result in an error?
A. s={abs}  
B. s={4, ‘abc’, (1,2)}  
C. s={2, 2.2, 3, ‘xyz’}  
D. s={san}  

ANSWER: D

What is the output of the code shown below?
s=set([1, 2, 3])
s.union([4, 5])
s|([4, 5])
A. {1, 2, 3, 4, 5}
   {1, 2, 3, 4, 5}
B. Error
   {1, 2, 3, 4, 5}
C. {1, 2, 3, 4, 5}
   Error
D. Error
   Error
ANSWER: C

What is the output of the line of code shown below, if s1= {1, 2, 3}?
s1.issubset(s1)
A. True
B. Error
C. No output
D. False
ANSWER: A

Suppose t = (1, 2, 4, 3), which of the following is incorrect?
A. print(t[3])
B. t[3] = 45
C. print(max(t))
D. print(len(t))
ANSWER: B

What will be the output?
d = {"john":40, "peter":45}
d["john"]
A. 40
B. 45
C. “john”
D. “peter”
ANSWER: A

What is the output of the following piece of code when executed in Python shell?
a=("Check")*3
a
A. (’Check’,’Check’,’Check’)
B. * Operator not valid for tuples
C. (’CheckCheckCheck’)
D. Syntax error
ANSWER: C

Is the following piece of code valid?
a=2,3,4,5
a
A. Yes, 2 is printed
B. Yes, [2,3,4,5] is printed
C. No, too many values to unpack
D. Yes, (2,3,4,5) is printed
ANSWER: D

What is the output of the following code?
a,b=6,7
a,b=b,a
a,b
A. (6,7)
B. Invalid syntax
C. (7,6)
D. Nothing is printed
ANSWER: C

What is the output of the code shown below?
import math
[str(round(math.pi)) for i in range (1, 6)]
C. ['3', '3', '3', '3', '3']  
ANSWER: C

What is the output of the code shown below?
```python
t=32.00  
[round((x-32)*5/9) for x in t]
```
A. [0]  
B. 0  
C. [0.00]  
D. Error  
ANSWER: D

What is the output of the following?
```python
print([i.lower() for i in "HELLO"])
```
A. ['h', 'e', 'l', 'l', 'o'].  
B. 'hello'  
C. ['hello'].  
D. hello  
ANSWER: A

Suppose list1 is [3, 5, 25, 1, 3], what is min(list1) ?
A. 3  
B. 5  
C. 25  
D. 1  
ANSWER: D

Suppose list1 is [1, 3, 2], What is list1 * 2 ?
A. [2, 6, 4].  
B. [1, 3, 2, 1, 3]  
C. [1, 3, 2, 1, 3, 2].  
D. [1, 3, 2, 3, 2, 1]  
ANSWER: C

What is the output when the following code is executed ?
```
"Welcome to Python".split()```
A. ["Welcome", "to", "Python"].
B. ("Welcome", "to", "Python")
C. {"Welcome", "to", "Python"}
D. "Welcome", "to", "Python"
ANSWER: A

What will be the output?
names1 = ['Amir', 'Bala', 'Charlie']
names2 = [name.lower() for name in names1]
print(names2[2][0])
A. None
B. a
C. b
D. c
ANSWER: D

What will be the output?
values = [[3, 4, 5, 1], [33, 6, 1, 2]]
v = values[0][0]
for lst in values:
    for element in lst:
        if v > element:
            v = element
print(v)
A. 1
B. 3
C. 5
D. 6
ANSWER: A

What is the output of the following code?
import copy
a=[10,23,56,[78]]
b=copy.deepcopy(a)
a[3][0]=95
a[1]=34
print(b)
A. [10,34,56,[95]].
B. [10,23,56,[78]].
C. [10,23,56,[95]].
D. [10,34,56,[78]].
ANSWER: B

What is the output of the following piece of code?
```python
a=list((45,)*4)
print((45)*4)
print(a)
```
A.
```
180
[(45),(45),(45),(45)].
```
B.
```
(45,45,45,45).
[45,45,45,45].
```
C.
```
180
[45,45,45,45].
```
D. Syntax error
ANSWER: C

What is the output of the code shown below?
```python
A = [[1, 2, 3],
     [4, 5, 6],
     [7, 8, 9]]
[A[i][len(A)-1-i] for i in range(len(A))]
```
A. [1, 5, 9]
B. [4, 5, 6]
C. [3, 5, 7]
D. [2, 5, 8]
ANSWER: C

**DBMS**

The natural join is equal to:
A. Cartesian Product
B. Combination of Union and Cartesian product
C. Combination of selection and Cartesian product
D. Combination of projection and Cartesian product
ANSWER: D

Which one of the following is not true for a View:
A. View is derived from other tables.
B. View is a virtual table.
C. A view definition is permanently stored as part of the database.
D. View never contains derived columns.
ANSWER: C

A primary key if combined with a foreign key creates __________.
A. Parent-Child relationship between the tables that connect them.
B. Many to many relationship between the tables that connect them.
C. Network model between the tables that connect them.
D. None of the above
ANSWER: A

In E-R Diagram relationship type is represented by __________.
A. Ellipse
B. Dashed Ellipsed
C. Rectangle
D. Diamond
ANSWER: D

Hierarchical model is also called __________.
A. Tree structure
B. Plex Structure
C. Normalize Structure
D. Table Structure
ANSWER: A

To delete a particular column in a relation the command used is:
A. UPDATE  B. DROP  
C. ALTER  D. DELETE  
ANSWER: C

The ________ operator is used to compare a value to a list of literals values that have been specified.

A. BETWEEN  B. ANY  
C. WHERE  D. ALL  
ANSWER: A

A logical schema ________.
A. is the entire database.
B. is a standard way of organizing information into a accessible part.
C. describes how data is actually stored on disk.
D. None of these.
ANSWER: D

A B-tree of order \( m \) has maximum of ________ children?
A. \( m \)  B. \( (m+1) \)  C. \( (m-1) \)  D. \( m/2 \)  
ANSWER: A

__________ function divides one numeric expression by another and returns the remainder.
A. POWER  B. MOD  
C. ROUND  D. REMAINDER  
ANSWER: B

A data manipulation command that combines the records from one or more tables is called ________?
A. SELECT  B. PROJECT  
C. JOIN  D. PRODUCT
In E-R diagram generalization is represented by __________.
A. Ellipse
B. Dashed ellipse
C. Rectangle
D. Triangle
ANSWER: D

__________ is a virtual table that draws its data from the result of an SQL SELECT statement.
A. View
B. Synonym
C. Sequence
D. Transaction
ANSWER: A

The method of access which uses key transformation is known as __________.
A. Direct
B. Hash
C. Random
D. Sequential
ANSWER: B

A table joined with itself is called __________.
A. Join
B. Self Join
C. Outer Join
D. Equi Join
ANSWER: B

In the relational modes, cardinality is termed as:
A. Number of tuples.
B. Number of attributes.
C. Number of tables.
D. Number of constraints.
ANSWER: A

Relational calculus is a ________?
A. Procedural language.
B. Non-Procedural language.
C. Data definition language. D. High level language.
ANSWER: B

Given the basic ER and relational models, which of the following is INCORRECT?
A. In a row of a relational table, an attribute can have more than one value
B. An attribute of an entity can have more than one value
C. In a row of a relational table, an attribute can have exactly one value or a NULL value
D. An attribute of an entity can be composite
ANSWER: A

Cartesian product in relational algebra is ________?
A. A Unary operator. B. A Binary operator.
C. A Ternary operator. D. Not defined.
ANSWER: B

DML is provided for ________?
A. Description of logical structure of database.
B. Addition of new structures in the database system.
C. Manipulation & processing of database.
D. Definition of physical structure of database system.
ANSWER: C

'AS' clause is used in SQL for ________?
A. Selection operation. B. Rename operation.
C. Join operation. D. Projection operation.
ANSWER: B

ODBC stands for ________?
A. Object Database Connectivity.  
B. Oral Database Connectivity.  
C. Oracle Database Connectivity.  
D. Open Database Connectivity.  
ANSWER: D

96. Which of the following command is used to delete a table in SQL?  
A. delete command  
B. truncate command  
C. drop command  
D. remove command  
ANSWER: C

In a relational model, relations are termed as ________ .  
A. Tuples  
B. Attributes  
C. Tables  
D. Rows  
ANSWER: C

The database schema is written in ________ .  
A. HLL  
B. DML  
C. DDL  
D. DCL  
ANSWER: C

In the architecture of a database system external level is the ________ .  
A. Physical level  
B. Logical level  
C. Conceptual level  
D. View level  
ANSWER: D

An entity set that does not have sufficient attributes to form a primary key is a ________ .  
A. Strong entity set  
B. Weak entity set  
C. Simple entity set  
D. Primary entity set  
ANSWER: B

In a Hierarchical model records are organized as ________ ?  
A. Graph  
B. List
C. Links  D. Tree
ANSWER: D

In an E-R diagram attributes are represented by ________ .
A. Rectangle  B. Square
C. Ellipse  D. Triangle
ANSWER: C

In case of entity integrity, the primary key may be ________ .
A. Not Null  B. Null
C. Both Null & not Null.  D. Any value.
ANSWER: A

Doubt
Consider Join of a relation R with a relation S. If R has m tuples and S has n tuples, then maximum and minimum sizes of the Join respectively are
A. m + n and 0  B. mn and 0
C. m + n and |m - n|  D. mn and m + n
ANSWER:  B, mn and 0

Doubt
For two union compatible relations R1(A, B) and R2(C, D), what is the result of the operation R1 A=C AB=D R2?
A. R1 U R2  B. R1 X R2
C. R1 - R2  D. R1 intersection R2
ANSWER:  D, R1 intersection R2

Doubt
Relations produced from an E-R model will always be in ___________.
A. 1 NF  B. 2 NF
C. 3 NF  
D. B CNF

ANSWER: C, 3 NF

A primary key, if combined with a foreign key creates __________.
A. parent child relationship between the tables that connect them
A. many-to-many relationship between the tables that connect them
B. network model between the tables connect them
D. none of these

ANSWER: A

Network models are complicated by physical keys, but the Relation model is __________?
A. faster because it uses logical keys
B. faster because it uses physical keys
C. slower because it uses physical keys
D. slower because it uses logical keys

ANSWER: A

A Relational model which allows non-atomic domains is __________.
A. nested relational data model
B. non-atomic data model
C. hierarchical data model
D. none of the mentioned options

ANSWER: A

Which of the following is not true for the traditional approach to information processing?
A. There is common sharing of data among the various applications
B. It is file oriented
C. Programs are dependent on the files
D. it is inflexible

ANSWER: A
The database environment has all the following components except __________.
A. users          B. separate files
C. database       D. database administration
ANSWER: B

The way a particular application views the data from the database that the application uses is a __________.
A. module          B. relational model
C. schema          D. subschema
ANSWER: D

Which of the following is true about Data Manipulation Language (DML)?
A. DML refers to data using physical addresses  B. DML cannot interface with high-level programming language
C. DML is used to define the physical characteristics of each record  D. None of these
ANSWER: D

The relational model uses some unfamiliar terminology. A tuple is equivalent to __________.
A. record          B. field
C. file            D. database
ANSWER: A

Database administrator is, in effect, the coordinator between __________ and __________.
A. DBMS; Database  B. Application program; Database
C. Database; Users D. Application programs; Users
ANSWER: C

A network structure __________.
A. is a physical representation of the data
B. allows a many-to-many relationship
C. is conceptually simple
D. will be the dominant database of the future
ANSWER: B

An advantage of the database approach is __________.
A. elimination of the data redundancy
B. ability to associate related data
C. increases security
D. all of these
ANSWER: D

Which of the following hardware components is the most important to the operation of a database management system?
A. High resolution video display
B. Printer
C. High speed, large-capacity disk
D. Plotter
ANSWER: C

**PYTHON**

Python is said to be easily
A. readable language
B. writable language
C. bug-able language
D. script-able language
ANSWER: A

Extensible programming language that can be extended through classes and programming interfaces is
A. Python
B. Perl
C. PHP
Python was released publicly in
A. 1941
B. 1971
C. 1981
D. 1991
ANSWER: D

The value of the expression:
\[ 4 + 3 \% 5 \]
A. 4
B. 7
C. 2
D. 0
ANSWER: B

What is the output of the code shown below?

```python
def mk(x):
    def mk1():
        print("Decorated")
        x()
    return mk1

def mk2():
    print("Ordinary")

p = mk(mk2)
p()
```

A. Decorated Decorated
B. Ordinary Ordinary
C. OrdinaryDecorated
D. Decorated Ordinary
ANSWER: D

What is the output of the code shown below?
def f(x):
    def f1(a, b):
        print("hello")
        if b==0:
            print("NO")
            return
        return f(a, b)
    return f1
@f
def f(a, b):
    return a%b
f(4,0)

A. hello NO
B. hello Zero Division Error
C. NO
D. hello
ANSWER: A

What is the output of the code shown below?

def d(f):
    def n(*args):
        return '$' + str(f(*args))
    return n
@d
def p(a, t):
    return a + a*t
print(p(100,0))

A. 100
B. $100
C. $0
D. 0
ANSWER: B

What is the output of print(k) in the following?

k = [print(i) for i in my_string if i not in "aeiou"]
print(k)
A. all characters of my_string that aren’t vowels
B. a list of Nones
C. list of Trues
D. list of Falses
ANSWER: B

What is the output of the code shown below?
l1=[2,4,6]
l2=[-2,-4,-6]
for i in zip(l1, l2):
    print(i)
A. 2, -2
   4, -4
   6, -6
B. [(2, -2), (4, -4), (6, -6)]
C. (2, -2)
   (4, -4)
   (6, -6)
D. [-4, -16, -36]
ANSWER: C

Which of these about a dictionary is false?
A. The values of a dictionary can be accessed using keys
B. The keys of a dictionary can be accessed using values
C. Dictionaries aren’t ordered
D. Dictionaries are mutable
ANSWER: B

What is the output of the following code?
count={}
count[(1,2,4)] = 5
count[(4,2,1)] = 7
count[(1,2)] = 6
count[(4,2,1)] = 2
tot = 0
for i in count:
    tot=tot+count[i]
print(len(count)+tot)
A. 25
B. 17
C. 16
D. Tuples can’t be made keys of a dictionary
ANSWER: C

What is the output of the line of code shown below?
```
re.split('\W+', 'Hello, hello, hello.')
```
A. ['Hello', 'hello', 'hello.]
B. ['Hello, hello', 'hello']
C. ['Hello', 'hello', 'hello', '.']
D. ['Hello', 'hello', 'hello', '']
ANSWER: D

What is the output of the following code?
```
>>> class demo():
    def __repr__(self):
        return '__repr__ built-in function called'
    def __str__(self):
        return '__str__ built-in function called'
>>> s=demo()
>>> s
```
A. Error
B. Nothing is printed
C. __str__ called
D. __repr__ called
ANSWER: D

What is the output of the following piece of code?
```
class A:
    def __init__(self, x, y):
        self.x = x
        self.y = y
    def __str__(self):
        return 1
```
def __eq__(self, other):
    return self.x * self.y == other.x * other.y

obj1 = A(5, 2)
obj2 = A(2, 5)
print(obj1 == obj2)

A. False
B. 1
C. True
D. An exception is thrown
ANSWER: C

**DBMS WITH MONGODB**

A collection and a document in MongoDB is equivalent to which of the SQL concepts respectively?
A. Table and Row
B. Table and Column
C. Column and Row
D. Database and Table
ANSWER: A

Which is the default mode in which the explain() command runs?
A. queryPlanner
B. executionStats
C. allPlansExecution
D. customExecutionStats
ANSWER: A

Which of the following is the most important consideration while designing the schema for MongoDB?
A. The schema should match the data access and query patterns
B. The schema should be kept in 3NF similar to SQL schemas
C. The schema should focus on creating possible embedded documents
D. The schema should contain maximum indexes
ANSWER: A
Consider that the posts collection contains an array called ratings which contains ratings given to the post by various users in the following format:

```
{
   _id: 1,
   post_text: "This is my first post",
   ratings: [5, 4, 2, 5],
   //other elements of document
}
```

Which of the following query will return all the documents where the array ratings contains at least one element between 3 and 6?

A. `db.inventory.find( { ratings: { $elemMatch: { $gt: 3, $lt: 6 } } } )`
B. `db.inventory.find( { ratings: { $gt: 5, $lt: 9 } } )`
C. `db.inventory.find( { ratings: { ratings.$: { $gt: 5, $lt: 9 } } } )`
D. `db.inventory.find( { ratings: { $elemMatch: { $gte: 3, $lte: 6 } } } )`

ANSWER: A

What does the totalKeysExamined field returned by the explain method indicate?

A. Number of documents that match the query condition
B. Number of index entries scanned
C. Number of documents scanned
D. Details the completed execution of the winning plan as a tree of stages

ANSWER: B

For capped collection, cursors which do not automatically close and remain open after the client exhausts the results are called:

A. Capped Cursors
B. Tailable Cursors
C. Open Cursors
D. Indexing Cursors

ANSWER: B
Consider that you have a collection called population which has fields state and city. Which of the following query will calculate the population grouped by state and city?

A. `db.population.aggregate([ { $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: "$pop" } } } ])`

B. `db.population.aggregate([ { $group: { _id: { state: "$state", city: "$city" }, pop: { $sum: 1 } } } ])`

C. `db.population.aggregate([ { $group: { _id: { state: "$state", city: "$city" }, pop: { "$pop" : 1 } } } ])`

D. `db.population.aggregate([ { $group: { _id: { city: "$city" }, pop: { $sum: "$pop" } } } ])`

Multi Document Transaction is not supported by MongoDB

ANSWER: A

In a replica set, a __________ number of members ensures that the replica set is always able to select a primary.

A. Odd

B. Even

C. Depends on the application architecture

D. 2

ANSWER: A

Consider that you have the following two documents in the products collection:

`{ "_id": 1, "prices": [ 60, 100, 200 ] }`

`{ "_id": 2, "prices": [ 20, 90, 150 ] }`

What will the following query result into:

```javascript
db.products.update(
    { _id: 1, prices: 100 },
    { $set: { "prices.$": 111 } }
)
```

A. Updates 60 to 100

B. Updates 100 to 111

C. Updates 60,100 and 200 to 111
D. Removes the three elements of the prices array and replaces it with only a single element 111
ANSWER: B

What does the following $slice query return using the following command?

```
    db.posts.find( {}, { comments: { $slice: [10, 5] } } )
```

A. Returns 5 comments, beginning with the last 10 items
B. Returns 10 comments, beginning with the first
C. Returns 10 comments, beginning with the last
D. Returns 5 comments, beginning with the first 10 items
ANSWER: A

What kind of database MongoDB is?
A. Graph Oriented
B. Document Oriented
C. Key Value Pair
D. Column Based
ANSWER: B

Which of the following is correct about MongoDB?
A. MongoDB uses JSON format to represent documents
B. MongoDB supports collection joins
C. MongoDB supports some of the SQL functions
D. MongoDB supports geospatial indexes
ANSWER: D

Which of the following is a valid MongoDB JSON document:
A. `{}
B
Which of the following is correct explanation of MongoDB processes?
A. mongod.exe is the shell process and mongo.exe is the actual database process
B. mongo.exe is the shell process and mongod.exe is the actual database process
C. mongos.exe is the MongoDB server process needed to run database
D. mongodump.exe can be used to import database backup dump
ANSWER: B

Consider a collection posts which has fields: _id, post_text, post_author, post_timestamp, post_tags etc. Which of the following query retrieves ONLY the key named post_text from the first document retrieved?
A. db.posts.find({},{_id:0, post_text:1})
B. db.posts.findOne({post_text:1})
C. db.posts.findOne({},{post_text:1})
D. db.posts.findOne({},{_id:0, post_text:1})
ANSWER: D

Which of the following is incorrect statement about find and findOne operations in MongoDB?
A. find() returns all the documents in a collection while findOne() retrieves only the first one.
B. find() and findOne() returns cursors to the collection documents
C. findOne() returns the actual first document retrieved from a collection
D. find.limit(1) is not the same query as findOne()
ANSWER: B

In a collection that contains 100 post documents, what does the following command do?
```
db.posts.find().skip(5).limit(5)
```
A. Skip and limit nullify each other. Hence returning the first five documents.
B. Skips the first five documents and returns the sixth document five times
C. Skips the first five documents and returns the next five
D. Limits the first five documents and then return them in reverse order
ANSWER: C

Which of the following MongoDB query is equivalent to the following SQL query:
```
UPDATE users SET status = "C" WHERE age > 25
```
A
The MongoDB explain() method does not support which of the following verbosity mode:
A. queryPlanner
B. executionStats
C. allPlansExecution
D. customExecutionStats
ANSWER: D

Which is the default mode in which the explain() command runs?
A. queryPlanner
B. executionStats
C. allPlansExecution
D. customExecutionStats
ANSWER: A

Within how much time does MongoDB writes are written to the journal?
A. 60 s
B. 100 ms
C. 1 s
D. 100 s
ANSWER: B

Which of the following is true about sharding?
A. Sharding is enabled at the database level
B. Creating a sharded key automatically creates an index on the collection using that key
C. We cannot change a shard key directly/automatically once it is set up
D. A sharded environment does not support sorting functionality since the documents lie on various mongod instances
ANSWER: C

What is the maximum size of a MongoDB document?
A. 2 MB
B. 16 MB
C. 12 MB
D. There is no maximum size. It depends on the RAM.
ANSWER: B

What is the maximum size of Index Key Limit and Number of Indexes per collection?
A. 64 bytes and 1024 indexes
B. 12 mega bytes and 64 indexes
C. 1024 bytes and 64 indexes
D. 1024 bytes and unlimited indexes
ANSWER: C
What is the output of the following program?
A. 60 s
B. 100 ms
C. 1 s
D. 100 s
ANSWER: A

Which of the following commands finds all the documents in the posts collection with post timestamp field as null?
A. `db.posts.find( { post_timestamp : { $type: 10 } } )`
B. `db.posts.find( { post_timestamp: { $type: null } } )`
C. `db.posts.find( { post_timestamp: { $fieldtype: 10 } } )`
D. `db.posts.find( { post_timestamp: { $fieldtype: null } } )`
ANSWER: A

`mongoimport` command is used to:
A. import all the data from one database to another
B. import all the data from one collection to another
C. imports content from an Extended JSON, CSV, or TSV export created by `mongoexport`
D. import all the MongoDB data from one format to another
ANSWER: C

Which of the following command can be used in mongo shell to show all the databases in your MongoDB instance?
A. `show dbs`
B. `show databases`
C. `show dbs.all`
D. `ls dbs`
ANSWER: A

Which of the following replica sets vote in the election of a primary replica set?
A. Secondary
B. Hidden
C. Delayed
D. All of the above
ANSWER: D
Which of the following command can be used to check the size of a collection named posts?
A. `db.posts.stats()`
B. `db.posts.findStats()`
C. `db.posts.find({stats:1})`  
D. `db.stats({ collection : posts })`
ANSWER: A

Which of the following commands can cause the database to be locked?
A. Issuing a query
B. Inserting data
C. Map-reduce
D. All of the above
ANSWER: D

By default, the MongoDB cursor in mongo shell is configured to return how many documents? To get the next set of documents, which command is used?
A. 20, it
B. 200, more
C. 50, it
D. No limit, none
ANSWER: A

Which of the following commands will return all the posts with number of likes greater than 100 and less than 200, both inclusive?
A. `db.posts.find({ likes : { $gt : 100, $lt : 200 } } );`
B. `db.posts.find({ likes : { $gte : 100, $lt : 200 } } );`
C. `db.posts.find({ likes : { $gt : 100 , $lte : 200 } } );`
D. `db.posts.find({ likes : { $gte : 100 , $lte : 200 } } );`
ANSWER: D

In our posts collection, which command can be used to find all the posts whose author names begin lie between A and C in dictionary order?
A. `db.posts.find( { post_author : { $gte : "A" , $lte : "C" } } );`
B. `db.posts.find( { post_author : { $gte : "C" , $lte : "A" } } );`
C. `db.posts.find( { post_author : { $gt : "A" , $lt : "C" } } );`
D. This type of search is not supported by MongoDB. $lt and $gt operators are applicable only for numeric values.

ANSWER: A

A collection and a document in MongoDB is equivalent to which of the SQL concepts respectively?
A. Table and Row
B. Table and Column
C. Column and Row
D. Database and Table

ANSWER: A

ADVANCED

HTML

What is a search engine?
A. a program that searches engines
B. a web site that searches anything
C. a hardware component
D. a machinery engine that search data

ANSWER: B

What is the full form of TCP/IP?
A. transmission control protocol / internet protocol
B. telephone call protocol / international protocol
C. transport control protocol / internet protocol
D. none of the above

ANSWER: A

HTML document start and end with which tag pairs?
A. `<HEAD>....</HEAD>`
B. `<BODY>....</BODY>`
C. <HTML>....</HTML>
D. <WEB>....</WEB>
ANSWER: C

Which tag is used to create body text in HTML?
A. <HEAD>
B. <TEXT>
C. <TITLE>
D. <BODY>
ANSWER: D

"Yahoo", "Infoseek" and "Lycos" are __________?
A. Search Engines
B. Browsers
C. News groups
D. None of the above
ANSWER: A

What does the .com domain represents?
A. Education domain
B. Commercial domain
C. Network
D. None of the above
ANSWER: B

In Satellite based communication, VSAT stands for?
A. Very Small Aperture Terminal
B. Varying Size Aperture Terminal
C. Very Small Analog Terminal
D. None of the above
ANSWER: A

Outlook Express is a __________
A. E-Mail Client
B. Browser
C. SearchEngine
D. None of the above
<TITLE> ... </TITLE> tag must be within ________
A. Title
B. Form
C. Header
D. Body
ANSWER: C

Text within <EM> ... </EM> tag is displayed as ________
A. bold
B. italic
C. list
D. indented
ANSWER: B

Text within <STRONG> ... </STRONG> tag is displayed as ________
A. bold
B. italic
C. list
D. indented
ANSWER: A

<UL> ... </UL> tag is used to ________
A. display the numbered list
B. underline the text
C. display the bulleted list
D. bold the text
ANSWER: C

Which tag is used to display the numbered list?
A. <OL></OL>
B. <DL></DL>
C. <UL></UL>
D. <LI></LI>
ANSWER: A
Which tag is used to display the large font size?
A. <LARGE></LARGE>
B. <BIG></BIG>
C. <SIZE></SIZE>
D. <FONT></FONT>
ANSWER: B

<SCRIPT> ... </SCRIPT> tag can be placed within ________
A. Header
B. Body
C. both A and B
D. none of the above
ANSWER: C

using <P> tag will
A. start a new paragraph
B. break the line
C. end the current paragraph
D. none of the above
ANSWER: A

<TD> ... </TD> tag is used for ________
A. Table heading
B. Table Records
C. Table row
D. none of the above
ANSWER: B

Which is true to change the text color to red?
A. <BODY BGCOLOR=RED>
B. <BODY TEXT=RED>
C. <BODY COLOR=RED>
D. none of the above
ANSWER: B

With regards to e-mail addresses:
A.hey must always contain an @ symbol
B.hey can never contain spaces
C.they are case-insensitive
D.all of the above
ANSWER: D

A homepage is __________
A.an index of encyclopedia articles
B.where all Internet data is stored
C.required for access to the Internet
D.the first page of a website
ANSWER: D

Which of the following is used to explore the Internet?
A.Browser
B.Spreadsheet
C.Clipboard
D.Draw
ANSWER: A

What is Internet Explorer?
A.An Icon
B.A File Manager
C.A Browser
D.The Internet
ANSWER: C

What do I need to get onto the Internet?
A.Computer
B.Modem
C.Browser
D.All of the above
ANSWER: D

What is an ISP?
A.internet System Protocol
B. Internal System Program
C. Internet Service Provider
D. None of the above
ANSWER: C

25. Which of the following is valid IP address?
A. 984.12.787.76
B. 192.168.321.10
C. 1.888.234.3456
D. 192.168.56.115
ANSWER: D

Which is not a domain name extension
A. mil
B. org
C. .int
D. .com
ANSWER: C

What is a FTP program used for?
A. Transfer files to and from an Internet Server
B. Designing a website
C. Connecting to the internet
D. None of the above
ANSWER: A

Which of the following are commonly found on web pages?
A. Internet
B. hyperlinks
C. intranet
D. all of the above
ANSWER: B

What is the correct syntax in HTML for creating a link on a webpage?
A. <LINK SRC= "mcqsets.html">
B. <BODY LINK = "mcqsets.html">
C. <A SRC = "mcqsets.html">
D. < A HREF = "mcqsets.html">

Which of the following is an attribute of <Table> tag?
A. SRC
B. LINK
C. CELLPADDING
D. BOLD
ANSWER: C

Choose the correct HTML tag to make the text bold?
A. <B>
B. <BOLD>
C. <STRONG>
D. Both A) and C.
ANSWER: D

Which HTML tag would be used to display power in expression (A+B)^2?
A. <SUP>
B. <SUB>
C. <B>
D. <P>
ANSWER: A

Choose the correct HTML code to create an email link?
A. <A HREF = "admin@mcqsets.com ">
B. <A HREF = "mailto:suresh@mcqsets.com"">
C. <MAIL>admin@mcqsets.com</MAIL>
D. MAILHREF = "[email protected]"
ANSWER: B

Choose the correct HTML tag for the largest heading?
A. <H1>
B. <H6>
C. <H10>
D. <HEAD>
ANSWER: A
Output of XML document can be viewed in
A. Word Processor
B. Web browser
C. Notepad
D. None of the above
ANSWER: B

What is the correct way of describing XML data?
A. XML uses a DTD to describe data
B. XML uses a description node to describe data
C. XML uses XSL to describe the data
D. XML uses a validator to describe the data
ANSWER: C

Comments in XML document is given by:
A. <?-- _ _-->
B. <!_ _ _ _!>
C. <!_ _ _ _>
D. </_ _ _ _>
ANSWER: C

Which statement is true?
A. An XML document can have one root element
B. An XML document can have one child element
C. XML elements have to be in lowercase
D. All of the above
ANSWER: A

**PHP**

. . . . . . converts the keys of an array into values and the values into keys.
A. array_flips()
B. array_transpose()
C. array_trans()
D. array_flip()
ANSWER: D
usleep(1000000);
Above usleep() function pauses PHP for . . . .
A. 1 second  
B. 1 microseconds  
C. 10 seconds  
D. 100 microseconds  
ANSWER: A

$array = array(0, 1, 2);
$array = array_pad($array, -6, 'NEW');
Output will be:
ANSWER: D

phpinfo() will display about
A. OS version information  
B. PHP installation  
C. Variables  
D. HTTP headers  
ANSWER: A,B,C,D

. . . . returns a new DateTime object.
A. getdate()  
B. date_create()  
C. date_sunrise()  
D. date()  
ANSWER: B
It is always necessary to use parentheses with the print function.
A. True
B. False
ANSWER: B

$Var = substr("abcdef", -4, 1);
The above statement will return ....
A. returns "f"
B. returns "d"
C. returns "c"
D. returns "cd"
ANSWER: C

Returning values from functions may include ..... 
A. Arrays
B. Objects
C. Both A & B
D. None of above
ANSWER: C

The arguments in a function are evaluated from ..... 
A. left to right
B. right to left
C. sometimes left to right and sometimes right to left
ANSWER: A

strlen() returns the length of the string on success and . . . . if the string is empty.
A. -1
B. NULL
C. Garbage value
D. 0
ANSWER: D

PHP sessions are created using the . . . . . function.
A. session_starts()
B. sessions_start()
C. session_start()
D. none of above
ANSWER: C

When you want to store user data in a session use the . . . . array.
A. $_SESSION
B. SYS_SESSION
C. $SESSION
D. $_SESSIONS
ANSWER: A

Sessions allow you to
A. store persistent user preference on a site
B. save user authentication information from page to page
C. create multipage forms
D. all of above
ANSWER: D

A snapshot of the session data can be taken at any time and written out to a file.
A. True
B. False
ANSWER: A

When the session data is written to a file, it can be read back, decoded and applied to the current session using the . . . . function.
A. session_reset()
B. session_get_cookie_params()
C. session_encode()
D. session_decode()
ANSWER: D

session_destroy() instantly destroy elements of the $_SESSION array.
A. True
B. False
ANSWER: B
Appending session data to an absolute URL does not represent a security risk.
A. True
B. False
ANSWER: B

If the php.ini register_globals directive is set, session data becomes available in the . . . . namespace.
A. Global
B. Local
ANSWER: A

No expiry date is set in the cookie that PHP sets for the session. The session remains current only as long as the browser is active. When the browser is restarted the cookie is not stored. This behavior can be changed by altering . . . . . setting in php.ini file.
A. cookie_lifetime
B. session.cookie_life_time
C. session.cookie_lifetime
D. cookie_life_time
ANSWER: C

session_destroy() erases all session variable.
A. True
B. False
ANSWER: A

A valid class name starts with a ......., followed by any number of letters, numbers, or underscores.
A. Number
B. Letter
C. Period
D. Underscore
ANSWER: B,C

PHP makes it possible to automatically execute code when a new instance
of a class is created, using a special class method called a .......
A. destructor
B. constructor
C. friend
D. initial
ANSWER: B

Once a class has been defined, objects can be created from the class with the ....... keyword.
A. new object
B. construct
C. new
D. both A and C
ANSWER: C

The visibility of a property or method can be defined by prefixing the declaration with the keywords public, protected or private. Class members declared public can be accessed everywhere. Members declared protected can be accessed only within the class itself and by inherited classes. Members declared as private are not accessible.
A. True
B. False
ANSWER: B

All PHP classes come with a default constructor that takes .... arguments.
A. one
B. two
C. three
D. no
ANSWER: D

You access an object’s properties and methods using the ....... operator (a hyphen followed by a greater than symbol).
A. >>
B. =>
C. ->
D. none of above
ANSWER: C

When you extend a class, the subclass inherits all of the ........ methods from the parent class.
A. Public  
B. private  
C. protected  
D. both A and C  
ANSWER: D

The pseudo-variable ...... is available inside any class method when that method is called from within an object context.
A. $construct  
B. #this  
C. $those  
D. $this  
ANSWER: D

A class may contain its own ............
A. variables  
B. functions  
C. constants  
D. both A and B  
E) all of above  
ANSWER: E

Child classes are defined using the keyword .....  
A. extends  
B. extents  
C. child_class  
D. extend_class  
ANSWER: A

PHP recognises constructors by the name . . . . 
A. _construct  
B. __construct
C. __constructor  
D. _constructor  

ANSWER: B

In . . . . . constructors, it is important to remember that you have to call the parent constructor explicitly.  
A. Singleton  
B. secure  
C. public  
D. subclass  
ANSWER: D

Constructor and destructor methods have no . . . . . . and are called automatically - they cannot be called explicitly and consequently their declarations need no access specifier.  
A. parameters  
B. destructor  
C. return value  
D. approval  
ANSWER: C

Unlike constructors, you cannot pass information to a destructor, because you are never sure when its going to be run.  
A. True  
B. False  
ANSWER: A

You can invoke class constructors that don’t have any relation to the instantiated object by simply prefacing _constructor with the class name like  
A. classname::__construct()  
B. classname:__construct()  
C. classname=>__construct()  
D. classname->__construct()  
ANSWER: A

. . . . . . is a class which can only be instantiated once. You can effectively only have one object per . . . . . class in an application.
A. Constructor, Singleton
B. Singleton, Constructor
C. Singleton, Singleton
D. Loader, Loader
ANSWER: C

Even if you don’t delete the object yourself using . . . . . , PHP still calls the destructor when it determines that the object is no longer used.
A. destructor
B. del()
C. rem()
D. unset()
ANSWER: D

You can overwrite a Singleton with the wrong kind of data.
A. True
B. False
ANSWER: B

```php
class classname
{
    function __construct($var)
    {
        echo "Constructor is called with parameter ". $var."<br/>"
    }
}

$a = new classname("One");
$b = new classname("Two");
```

Because the constructor is called each time you create an object, this code produces the following output:
A. Constructor called with parameter One
Constructor called with parameter Two
B. Constructor is called with parameter One
C. Constructor is called with parameter One
Constructor is called with parameter Two
D. Constructor is called with parameter Two
PHP have not yet supported constructor overloading.
A. True
B. False
ANSWER: A

Which of the following DBMSs do not have a native PHP extension?
A. MySQL
B. IBM DB/2
C. PostgreSQL
D. Microsoft SQL Server
E. None of the above
ANSWER: E

In PHP in order to access MySQL database you will use:
A. mysqlconnect() function
B. mysql-connect() function
C. mysql_connect() function
D. sql_connect() function
ANSWER: C

Transactions are used to treat sets of SQL statements atomically.
A. True
B. False
ANSWER: A

SQL is not case sensitive. SELECT is the same as select.
A. True
B. False
ANSWER: A

Which of the following is not an SQL aggregate function?
A. AVG
B. SUM
C. MIN
What does the DESC keyword do in the following query?
```
SELECT *
FROM MY_TABLE
WHERE ID > 0
ORDER BY ID, NAME DESC
```
A. It causes the dataset returned by the query to be sorted in descending order
B. It causes rows with the same ID to be sorted by NAME in ascending order
C. It causes rows with the same ID to be sorted by NAME in descending order
D. It causes rows to be sorted by NAME first and then by ID
E. It causes the result set to include a description of the NAME field
ANSWER: C

The ............. statement is used to delete a table.
A. DROP TABLE
B. DELETE TABLE
C. DEL TABLE
D. REMOVE TABLE
ANSWER: A

What will happen at the end of the following sequence of SQL commands?
```
BEGIN TRANSACTION
DELETE FROM MYTABLE WHERE ID=1
DELETE FROM OTHERTABLE
ROLLBACK TRANSACTION
```
A. The contents of OTHERTABLE will be deleted
B. The contents of both OTHERTABLE and MYTABLE will be deleted
C. The contents of OTHERTABLE will be deleted, as will be all the contents of MYTABLE whose ID is 1
D. The database will remain unchanged to all users except the one that executes these queries.
E. The database will remain unchanged
Use the .............. to delete the data inside the table, and not the table itself?
A. DROP TABLE 
B. DELETE TABLE 
C. TRUNCATE TABLE 
D. REMOVE TABLE 
ANSWER: C

Can joins be nested?
A. True 
B. False 
ANSWER: A

**PYTHON**

What is the output of the code shown below if the system date is 18th August, 2016?
tday=datetime.date.today() 
print(tday.month()) 
A. August 
B. Aug 
C. 08 
D. 8 
ANSWER: D

What is the output of the following code, if the time module has already been imported?
def num(m):
    t1 = time.time()
    for i in range(0,m):
        print(i)
    t2 = time.time()
    print(str(t2-t1)) 
num(3)
A.
1 
2
What is the output of the code shown below?

```python
l=[-2, 4]
m=map(lambda x:x*2, l)
print(m)
```

A. [-4, 16]
B. Address of m
C. Error
D. -4 16

ANSWER:  B

92. What is the output of the following?
```python
def to_upper(k):
    k.upper()
x = ['ab', 'cd']
print(list(map(to_upper, x)))
```

A. ['AB', 'CD']
B. ['ab', 'cd']
C. none of the mentioned
D. error

ANSWER:  C
x = [12, 34]
print(len(''.join(list(map(str, x)))))
A. 4
B. 5
C. 6
D. Error
ANSWER: A

What is the output of the following?
x = abcd
print(list(map(list, x)))
A. ['a', 'b', 'c', 'd']
B. ['abcd']
C. [['a'], ['b'], ['c'], ['d']]
D. none of the mentioned
ANSWER: D

Is the output of the function abs() the same as that of the function math.fabs()?
A. sometimes
B. always
C. never
D. none of the mentioned
ANSWER: A

What is returned by math.isfinite(float('nan'))?
A. True
B. False
C. None
D. error
ANSWER: B

What is the default base used when math.log(x) is found?
A. e
B. 10
C. 2
D. none of the mentioned
What does os.getlogin() return?
A. name of the current user logged in
B. name of the superuser
C. gets a form to login as a different user
D. all of the above
ANSWER: A

What is the output of the line of code shown below?
pickle.HIGHEST_PROTOCOL
A. 4
B. 5
C. 3
D. 6
ANSWER: A

Which of the following is true about top-down design process?
A. The details of a program design are addressed before the overall design
B. Only the details of the program are addressed
C. The overall design of the program is addressed before the details
D. Only the design of the program is addressed
ANSWER: C

What is the output of the function shown below (random module has already been imported)?
random.choice('sun')
A. sun
B. u
C. either s, u or n
D. error
ANSWER: C

Which of the following will not be returned by random.choice("1 ,")?
A. 1
B. (space)
C. ,
D. none of the mentioned
ANSWER: D

What is the output of this code?
import sys
eval(sys.stdin.readline())
"India"
A. India5
B. India
C. 'India\n'
D. 'India'
ANSWER: D

Which of the following functions does not accept any arguments?
A. position
B. fillcolor
C. goto
D. setheading()
ANSWER: A

What is the output of the following code?
import turtle
t=turtle.Pen()
t.right(90)
t.forward(100)
t.heading()
A. 0.0
B. 90.0
C. 270.0
D. 360.0
ANSWER: C

The output of the code shown is similar to the alphabet
t=turtle.Pen()
t1=turtle.Pen()
t2=turtle.Pen()
t.forward(100)
t1.forward(100)
t2.forward(100)
t1.left(90)
t1.forward(75)
t2.right(90)
t2.forward(75)
A. X
B. N
C. T
D. M
ANSWER: C

What is setattr() used for?
A. To access the attribute of the object
B. To set an attribute
C. To check if an attribute exists or not
D. To delete an attribute
ANSWER: B

What are the methods which begin and end with two underscore characters called?
A. Special methods
B. In-built methods
C. User-defined methods
D. Additional methods
ANSWER: A

Which of these is a private data field?
def Demo:
def __init__(self):
    ___a = 1
    self.__b = 1
    self.__c__ = 1
    ___d___ = 1
When will the else part of try-except-else be executed?
A. always
B. when an exception occurs
C. when no exception occurs
D. when an exception occurs in to except block
ANSWER: C

What is the output of the code shown below?
def f(x):
    yield x+1
    print("test")
    yield x+2
g=f(9)
A. Error
B. test
C. 
    test
    10
    12
D. No output
ANSWER: D

The output of the code shown below is:
int('65.43')
A. ImportError
B. ValueError
C. TypeError
D. NameError
ANSWER: B

What is the output of the following piece of code?
class A():
def disp(self):
    print("A disp()")

class B(A):
    pass

obj = B()
obj.disp()

A. Invalid syntax for inheritance
B. Error because when object is created, argument must be passed
C. Nothing is printed
D. A disp()

ANSWER: D

Which of the following statements is true?
A. The __new__() method automatically invokes the __init__ method
B. The __init__ method is defined in the object class
C. The __eq__(other) method is defined in the object class
D. The __repr__() method is defined in the object class

ANSWER: C

Which function overloads the == operator?
A. __eq__()
B. __equ__()
C. __isequal__()
D. none of the mentioned

ANSWER: A

What is the output of the following piece of code?
class Demo:
    def __init__(self):
        self.x = 1
    def change(self):
        self.x = 10
class Demo_derived(Demo):
    def change(self):
        self.x = self.x + 1
        return self.x
def main():
    obj = Demo_derived()
    print(obj.change())
main()
A. 1
B. 2
C. 1
D. An exception is thrown
ANSWER: D

DBMS

The___condition allows a general predicate over the relations being joined.
A. On
B. Using
C. Set
D. Where
ANSWER: A

Which of the join operations do not preserve non matched tuples.
A. Left outer join
B. Right outer join
C. Inner join
ANSWER: C

What type of join is needed when you wish to include rows that do not have matching values?
A. Equi-join
B. Natural join
C. Outer join
D. All of the mentioned
ANSWER: C

How many tables may be included with a join?
A. One
B. Two
C. Three
D. All of the mentioned
Which are the join types in join condition:
A. Cross join
B. Natural join
C. Join with USING clause
D. All of the mentioned

ANSWER: D

How many join types in join condition:
A. 2
B. 3
C. 4
D. 5

ANSWER: D

Which join refers to join records from the right table that have no matching key in the left table are included in the result set:
A. Left outer join
B. Right outer join
C. Full outer join
D. Half outer join

ANSWER: B

The operation which is not considered a basic operation of relational algebra is
A. Join
B. Selection
C. Union
D. Cross product

ANSWER: A

In SQL the statement select * from R, S is equivalent to
A. Select * from R natural join S
B. Select * from R cross join S
C. Select * from R union join S

ANSWER: D
D. Select * from R inner join S
ANSWER: B

A relational database consists of a collection of
A. Tables
B. Fields
C. Records
D. Keys
ANSWER: A

A ________ in a table represents a relationship among a set of values.
A. Column
B. Key
C. Row
D. Entry
ANSWER: C

The term ________ is used to refer to a row.
A. Attribute
B. Tuple
C. Field
D. Instance
ANSWER: B

The term attribute refers to a ____________ of a table.
A. Record
B. Column
C. Tuple
D. Key
ANSWER: B

For each attribute of a relation, there is a set of permitted values, called the ________ of that attribute.
A. Domain
B. Relation
C. Set
A. Instance, Schema
B. Relation, Schema
C. Relation, Domain
D. Schema, Instance
ANSWER: D

A domain is atomic if elements of the domain are considered to be ________ units.
A. Different
B. Indivisible
C. Constant
D. Divisible
ANSWER: B

The tuples of the relations can be of ________ order.
A. Any
B. Same
C. Sorted
D. Constant
ANSWER: A

Using which language can a user request information from a database?
A. Query
B. Relational
C. Structural
D. Compiler
ANSWER: A

Student(ID, name, dept name, tot_cred) In this query which attribute form the primary key?
A. Name
B. Dept
C. Tot_cred
D. ID
ANSWER: D

The____ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.
A. Select
B. Join
C. Union
D. Intersection
ANSWER: B

A ...................... specifies the actions needed to remove the drawbacks in the current design of a database.
A. 1 NF
B. 2 NF
C. 3 NF
D. Normal form
ANSWER: D

A relation is in ...................... if an attribute of a composite key is dependent on an attribute of another composite key.
A. 2NF
B. 3NF
C. BCNF
D. 1NF
ANSWER: B

The fifth Normal form is concerned with
A. Functional dependency
B. Multivalued dependency
C. Join dependency
D. Domain key
ANSWER: C
A table is in the .................. if only candidate keys are the determinants.
A. functional dependency
B. transitive dependency
C. 4 NF
D. BCNF
ANSWER: D

In 2NF
A. No functional dependencies exist.
B. No multivalued dependencies exist.
C. No partial functional dependencies exist
D. No partial multivalued dependencies exist.
ANSWER: C

The normal form that is not necessarily dependency preserving is
A. 2NF
B. 3NF
C. BCNF
D. 4NF
ANSWER: A

The ................. is related to the concept of multi-valued dependency.
A. fourth normal form
B. fifth normal form
C. boyce codd normal form
D. third normal form
ANSWER: A

Which normal form is considered adequate for normal relational database design?
A. 2NF
B. 5NF
C. 4NF
D. 3NF
ANSWER: D
Dependency preservation is not guaranteed in
A. BCNF
B. 3NF
C. 4NF
D. DKNF
ANSWER: A

A relation is .................. if every field contains only atomic values that are, no lists or sets.
A) 1 NF
B) 2 NF
C) 3 NF
D) BCNF
ANSWER: A

Reflexivity property says that X – Y is true if Y is ..................
A. Subset of X
B. Null set of X
C. Super set of Y
D. Subset of Y
ANSWER: A

Anything that affects the database schema is a part of
A. DML
B. DCL
C. DDL
D. All of the above
ANSWER: C

An instance of a relation is a time varying set of ..................
A. Tuples
B. Rows
C. Both of them
D. None of them
ANSWER: C
In the ................. mode any record in the file can be accessed at random
A. Sequential access
B. Random access
C. Standard access
D. Source access
ANSWER: B

Which can be used to delete all the rows if a table?
A. Delete * from table_name
B. Delete from table_name
C. Delete table_name
D. all rows cannot be deleted at a time.
ANSWER: A

Which if the following is not the type of data integrity.
A. Key integrity
B. Domain integrity
C. Entity integrity
D. Referential integrity
ANSWER: A

4NF stands for ..
A. Fourth Normal File
B. Fourth Normal Form
C. Fourth Normal Fraction
D. Fourth Negative File
ANSWER: B

A ................. allows to make copies of the database periodically to help in the cases of crashes & disasters.
A. Recovery utility
B. Backup Utility
C. Monitoring utility
D. Data loading utility
ANSWER: B
……………… Allows definitions and query language statements to be entered; query results are formatted and displayed.
A. Schema Processor
B. Query Processor
C. Terminal Interface
D. None of the above
ANSWER: C

The main task carried out in the …………… is to remove repeating attributes to separate tables.
A. First Normal Form
B. Second Normal Form
C. Third Normal Form
D. Fourth Normal Form
ANSWER: D

The relational model is based on the concept that data is organized and stored in two-dimensional tables called ………………………
A. Fields
B. Records
C. Relations
D. Keys
ANSWER: C

………………. contains information that defines valid values that are stored in a column or data type.
A. View
B. Rule
C. Index
D. Default
ANSWER: C

Which of the syntax is correct for insert statement?
i. insert into <table_name> values <list of values>
ii. insert into <table_name> (column list) values <list of values>
A. i-only
B. ii-only
C. Both of them
D. None of them
ANSWER: C
first proposed the process of normalization in DBMS.
A. Edgar. W
B. Edgar F. Codd
C. Edward Stephen
D. Edward Codd
ANSWER: B

For using a specific database command is used.
A. use database
B. database name use
C. Both A &B
D. None of them
ANSWER: A

Which of the following is not comparison operator?
A. <>
B. <
C. =<
D. >=
ANSWER: C

An outstanding functionality of SQL is its support for automatic to the target data.
A. programming
B. functioning
C. navigation
D. notification
ANSWER: C

is a special type of integrity constraint that relates two relations & maintains consistency across the relations.
A. Entity Integrity Constraints
B. Referential Integrity Constraints
C. Domain Integrity Constraints
D. Domain Constraints
E. Key Constraints
ANSWER: B

specifies a search condition for a group or an aggregate.
A. GROUP BY Clause
B. HAVING Clause
C. FROM Clause
D. WHERE Clause
ANSWER: B

Drop Table cannot be used to drop a table referenced by a ............... constraint.
A. Local Key
B. Primary Key
C. Composite Key
D. Foreign Key
ANSWER: D