## P.E.S. College of Engineering, Mandya - 571401

(An Autonomous Institution affiliated to VTU, Belagavi)

# Fifth Semester, B.E. - Electronics and Communication Engineering <br> Semester End Examination; February / March - 2022 <br> Java and Web Technologies (Technical Skills - I) 

Time: 2 hrs
Max. Marks: 50

## Course Outcomes

The Students will be able to:
CO1: Implement object oriented concepts in Java.
CO2: Design and Implement websites with client side scripting using Java script.
CO3: Understand the modern software tools like HTML5, CSS for advanced web developments
CO4: Design and Implement websites and connect to database with server side scripting using PHP
CO5: Develop the capability to learn on your own individually and in group to explore advanced technologies in SQL, HTML5, CSS \& PHP.
Note: All questions are compulsory and each question carries TWO marks.
Q. No.

Questions
Marks BLs COs

1. Which of the following is not a Java features
a) Dynamic
b) Architecture Neural
c) Use of pointers
d) Object-oriented
2
L2 CO1
2. Evaluate the following Java expression, if $x=3, y=5$ and $z=10$ :
$++z+y-y+z+x++$
2 L3 CO1
a) 24
b) 23
c) 20
d) 25
3. What will be the output of the following program?
public class Test \{
public static void main(String[] args) \{
int count=1;
while(count <=15) \{
System.out.println(count\%2==1?"***" :"+++++");
\}
$2 \quad \mathrm{~L} 5 \quad \mathrm{CO} 1$
++count;
\}//end while
\}//end main
\}
a) 15 times ${ }^{* * *}$
b) 8 times $* * *$ and 7 times +++++
c) 15 times ++++++
d) 7 times ${ }^{* * *}$ and 8 times +++++
4. What will be the output of the following Java program
class evaluate \{
public static void main(String args[]) \{
int $\operatorname{arr}[]=$ new int[] $\{0,1,2,3,4,5,6,7,8,9\}$;
int $\mathrm{n}=6$;
$\mathrm{n}=\operatorname{arr}[\operatorname{arr}[\mathrm{n}] / 2]$;
System.out.println(arr[n]/2); \} \}
a) 2
b) 1
c) 4
d) 0
5. Out of the following, the benefit of the object oriented programming is :

2 L1 CO1
a) polymorphism
b) Flexibility
c) Inheritance
d) None of these
6. Which of the following variables takes precedence over the others if the names are the same?
a) Global variables
b) The local element
c) The two of the above
d) None of the above
7. Why the names of Java Script and Java are similar?
a) Java script is a stripped-down version of java
b) the syntax of Java script is loosely based on the syntax of java

2 L 2 CO 2
c) Java script and Java both are originated on the island of java
d) None of the above
8. In JavaScript the $x===y$ statement implies that
a) both $x$ and $y$ are equal in value, type and reference address as well
b) both are $x$ and $y$ are equal in value only
c) both are equal in the value and data type
d) both are not same at all
9. What will be thye output of the following program?
<!DOCTYPE html>

<html>
<body>
<h2> Use JavaScript to change Text </h2>
<p> This example writes "Hello Java SCript" into an HTML element with
id="demo":</p>
<p id="demo"></p>
<script>
Document.getElementById("demo").innerHTML = "Hello JavaScript!";
L 2 CO 2
</script>
</body>
</html>
a) Use Java script to change text

This example writes "Hello Java script" into an HTML element with id="demo" Hello Java script!
b) this will output an error
c) there is no Java Script Inserted here
d) none of the above
10. What will happen, if the following Javascript code is executed?

Var count $=0$;
While (count < 10) \{
Console. $\log$ (count);
Count++; \}
a) An error is displayed
b) An exception is thrown
c) The values of count variable are logged or stored in a particular location or storage
d) The value of count from 0 to 9 is displayed in the console
11. Which of the following markup is correct?
i) $\langle\mathrm{b}\rangle\langle\mathrm{i}\rangle$ is in error as tags cross $\langle/ \mathrm{b}\rangle\langle/ \mathrm{i}\rangle$
ii) $\langle b><i>$ is not since tags nest</i>/b>
a) I
b) ii
c)i and ii
d) None of the mentioned
12. Which of the following are table tags?
a) table, thread,tr,td
b) colspan, table, tr
c) table, $\mathrm{tt}, \mathrm{tr}, \mathrm{td}$
d) none of the mentioned
13. Which doctype is correct for HTML5?

L2 CO3
a) <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 5.0//EN"
http://www.w3.org/TR/html5/strict.dtd>
b) <!DOCTYPR html>
c) <!DOCTYPE HTML5>
d) None of the above
14. Which of the following syntax is correct in CSS to make each word of a sentence start with a capital letter?
a) text-style : capital;
b) transform : capitalize;
c) text- transform : capital;
d) text-transform : capitalize

2 L 2 CO 3
15. Which is the correct HTML syntax for inserting an image?
a) <img src = "image.gif" alt="My image">
b) $<$ img alt $=$ "My image" $>$ image. gif $</$ img $>$
c) <image src="image.gif" alt="My iamge">
d) <img href = "image.gif" alt="My image">
16. How does PHP work
a) the PHP code is compiled on the server and sent to the client as an executable
b) the PHP code is compiled on the server and sent to the client as HTML
c) the server invokes a PHP processor to interpret PHP code
d) It does not work $n$ any of these ways
17. Loops supported in PHP:

2 L 2 CO 4
a) for loop
b) do-while loop
c) for each loop
d) all of the above
18. How does the start and Finish of a PHP block of code is handled
a)Start: ?php and ends with ?|
block: ?php [--content of PHP code--] ?>
b) Start: ?phhp and ends with ?>|
block: <?php [--content of PHP code--] !>
c) Start: ?php and ends with !>|
block: <?php [--content of PHP code--] ?>
d) None of the these
19. Which statement will output " $\$ 1 f c$ " on the screen
a) echo "\$\$lfc"
b) echo "/\$1fc"
c) echo "\$lfc;";
d) echo " $\$ \mathrm{lfc}$ ";
20. PHP variables are preceded by $\qquad$
a) _
b) @
c) \$
d) \&

2 L 2 CO 4
21. What will be the output for the following programme?
public class First_c \{
public void myMethod() \{
System.out.println("Method")\}
\{
System.out.println("Instance block"); \}
2 L2 CO5
Public void First_c()\{
System.out.ptintln("Construtor"); \}

Static $\{$
System.out.println("static block"); \}
Public static void main(string[] args) \{
First_C c =new First_C();
c.First_C();
c.myMethod();\} \}
a) Instance Block, Method, Static Block and Constructor
b) Method, Constructor, Instance Block, and Static Block
c) Static Block, Method, instance Block, and Constructor
d) Static Block, Instance Block, Constructor, and Method
22. Identify and choose the number of errors in the following program

Puvlic class Palindrome\{
Public static void main (String args []) \{
String a, b = """;
Scanner s = new Scanner(System.in);
System.out.println("Enter the string to check);
A == s.nextLine();
Int $\mathrm{n}=$ a.length () ;
For (int $\mathrm{i}=\mathrm{n}=\mathrm{n}-1 ; \mathrm{i}>=0 ; \mathrm{i}--$ ) $\{\backslash$
$\mathrm{B}=\mathrm{b}+\mathrm{a} . \operatorname{charAt}(\mathrm{i}) ;\}$
If(a.equalsIgnoreCase(b)) \{
System.out.println("The string is palindrome")
\}
Else \{
System.out.println("The string is not palindrome") \}\}\}
a) Only one
b) Seven
c) Three
d) No errors
23. Which of the following is the correct way to change the font face in HTML?
a)<font name="Calibri">..........</font>
b) <font face="Calibri"> ...........</font>

2 L2 CO5
c) <font="Calibri"> $\qquad$ </font>
d)None of the above
24. Which of the following statements are TRUE about an SQL query?

P: An SQL query can contain a HAVING clause even if it does not have a GROUP BY clause
Q: An SQL query can contain a HAVING clause only if it has a GROUP BY clause
R: All attributes used in the GROUP BY clause must appear in the SELECT clause
S: Not all attributes used in the GROUP BY clause need to appear in the SELECT clause
a) $P$ and $R$
b)P and S
c) Q and R
d) Q and $S$
25. How can you change "Thomas" into "Michel" in the "Last Name" column in the users table?
a) UPDATE user SET Last name='Thomas' into Last name='Michel'
b) MODIFY users SET Last Name = 'Michel' WHERE Last Name='Thomas'
c) MODIFY users SET Last Name='Thomas' INTO Last Name='Michel'
d) UPDATE users SET Last Name = 'Michel' WHERE Last Name='Thomas'

