_____

1.

```java
public class Test2
{
   public static int x;
   public static int foo(int y)
   {
      return y * 2;
   }
   public static void main(String [] args)
   {
      int z = 5;
      assert z > 0; /* Line 11 */
      assert z > 2: foo(z); /* Line 12 */
      if ( z < 7 )
         assert z > 4; /* Line 14 */

      switch (z)
      {
         case 4: System.out.println("4 ");
         case 5: System.out.println("5 ");
         default: assert z < 10;
```

```
        }


    if ( z < 10 )

        assert z > 4: z++; /* Line 22 */

    System.out.println(z);

  }

}
```

which line is an example of an inappropriate use of assertions?

A. Line 11

B. Line 12

C. Line 14

D. Line 22

Correct Answer: Option D


2).What is the value of "d" after this line of code has been executed?

double d = Math.round ( 2.5 + Math.random() );


A. 2

B. 3

C. 4

D. 2.5

Correct Answer: Option B


3) What will be the output of the program?

```java
public class Test
{
    private static int[] x;
    public static void main(String[] args)
    {
        System.out.println(x[0]);
    }
}
```

    A. 0

    B. null

    C. Compile Error

    D. NullPointerException at runtime

Correct Answer: Option D

4)What will be the output of the program?

```java
import java.util.*;
class H
{
    public static void main (String[] args)
    {
        Object x = new Vector().elements();
        System.out.print((x instanceof Enumeration)+",");
        System.out.print((x instanceof Iterator)+",");
        System.out.print(x instanceof ListIterator);
    }
}
```

```
    }
```

A. Prints: false,false,false

B. Prints: false,false,true

C. Prints: false,true,false

D. Prints: true,false,false

Correct Answer: Option D

5) Which statement is true about a static nested class?

A. You must have a reference to an instance of the enclosing class in order to instantiate it.

B. It does not have access to nonstatic members of the enclosing class.

C. It's variables and methods must be static.

D. It must extend the enclosing class.

Correct Answer: Option B

6.

```
class Boo
{
    Boo(String s) { }
    Boo() { }
}
class Bar extends Boo
{
    Bar() { }
    Bar(String s) {super(s);}
```

```
void zoo()
{
// insert code here
}
}
```

which one create an anonymous inner class from within class Bar?

A. Boo f = new Boo(24) { };

B. Boo f = new Bar() { };

C. Bar f = new Boo(String s) { };

D. Boo f = new Boo.Bar(String s) { };

Correct Answer: Option B

7.Which statement is true for the class java.util.HashSet?

A. The elements in the collection are ordered.

B. The collection is guaranteed to be immutable.

C. The elements in the collection are guaranteed to be unique.

D. The elements in the collection are accessed using a unique key.

Correct Answer: Option C

8. What will be the output of the program?

```
for (int i = 0; i < 4; i += 2)
{
   System.out.print(i + " ");
}
System.out.println(i); /* Line 5 */
```

A. 0 2 4

B. 0 2 4 5

C. 0 1 2 3 4

D. Compilation fails.

Correct Answer: Option D

9.

public class While

{

  public void loop()

  {

    int x= 0;

    while ( 1 ) /* Line 6 */

    {

      System.out.print("x plus one is " + (x + 1)); /* Line 8 */

    }

  }

}

Which statement is true?

  A. There is a syntax error on line 1.

  B. There are syntax errors on lines 1 and 6.

  C. There are syntax errors on lines 1, 6, and 8.

  D. There is a syntax error on line 6.

Correct Answer: Option D

10.Which two statements are true about wrapper or String classes?

1.If x and y refer to instances of different wrapper classes, then the fragment x.equals(y) will cause a compiler failure.

2.If x and y refer to instances of different wrapper classes, then x == y can sometimes be true.

3.If x and y are String references and if x.equals(y) is true, then x == y is true.

4.If x, y, and z refer to instances of wrapper classes and x.equals(y) is true, and y.equals(z) is true, then z.equals(x) will always be true.

5.If x and y are String references and x == y is true, then y.equals(x) will be true.

   A.  1 and 2

   B. 2 and 3

   C. 3 and 4

   D. 4 and 5

Correct Answer: Option D

11.Which collection class allows you to access its elements by associating a key with an element's value, and provides synchronization?


   A. java.util.SortedMap

   B. java.util.TreeMap

   C. java.util.TreeSet

   D. java.util.Hashtable

Correct Answer: Option D

12.What will be the output of the program?

```java
interface Count
{
    short counter = 0;
    void countUp();
}
public class TestCount implements Count
{
    public static void main(String [] args)
    {
        TestCount t = new TestCount();
        t.countUp();
    }
    public void countUp()
    {
        for (int x = 6; x>counter; x--, ++counter) /* Line 14 */
        {
            System.out.print(" " + counter);
        }
    }
}
```

A. 0 1 2

B. 1 2 3

C. 0 1 2 3

D. 1 2 3 4

E. Compilation fails

13 Which of the following are legal lines of code?

int w = (int)888.8;

byte x = (byte)1000L;

long y = (byte)100;

byte z = (byte)100L;

    A. 1 and 2

    B. 2 and 3

    C. 3 and 4

    D. All statements are correct.

14. Which two statements are equivalent?

16*4

16>>2

16/2^2

16>>>2

A.1 and 2

B. 2 and 4

C. 3 and 4

D. 1 and 3

15. Which three are valid method signatures in an interface?

private int getArea();

public float getVol(float x);

public void main(String [] args);

public static void main(String [] args);

boolean setFlag(Boolean [] test);

   A. 1 and 2

   B.  2, 3 and 5

   C.  3, 4, and 5

   D.  2 and 4

Correct Answer: Option B

16.What will be the output of the program?

```
class MyThread extends Thread
{
   public static void main(String [] args)
   {
      MyThread t = new MyThread(); /* Line 5 */
      t.run();  /* Line 6 */
   }

   public void run()
   {
      for(int i=1; i < 3; ++i)
```

```
        {
            System.out.print(i + "..");
        }
    }
}
```

  A. This code will not compile due to line 5.

  B.This code will not compile due to line 6.

  C.  1..2..

  D.  1..2..3..

Correct Answer: Option C

17. Which two are valid constructors for Thread?

Thread(Runnable r, String name)

Thread()

Thread(int priority)

Thread(Runnable r, ThreadGroup g)

Thread(Runnable r, int priority)

A.1 and 3

B.2 and 4

C.1 and 2

D.2 and 5

Correct Answer: Option C

18.

```java
public class MyRunnable implements Runnable
{
    public void run()
    {
        // some code here
    }
}
```

which of these will create and start this thread?

    A. new Runnable(MyRunnable).start();

    B. new Thread(MyRunnable).run();

    C. new Thread(new MyRunnable()).start();

    D. new MyRunnable().start();

Correct Answer: Option C


19.    Which of the following will not directly cause a thread to stop?

    A. notify()

    B. wait()

    C. InputStream access

    D. sleep()

Correct Answer: Option A


20.

```
System.out.print("Start ");

try

{

    System.out.print("Hello world");

    throw new FileNotFoundException();

}

System.out.print(" Catch Here "); /* Line 7 */

catch(EOFException e)

{

    System.out.print("End of file exception");

}

catch(FileNotFoundException e)

{

    System.out.print("File not found");

}
```

and given that EOFException and FileNotFoundException are both subclasses of IOException, and further assuming this block of code is placed into a class, which statement is most true concerning this code?

A. The code will not compile.

B. Code output: Start Hello world File Not Found.

C. Code output: Start Hello world End of file exception.

D. Code output: Start Hello world Catch Here File not found.

Correct Answer: Option A

# PART-2(HTML-CSS-JAVASCRIPT)

Ques 1 : Is it possible to link within the current page ?

(A) Only in framesets

(B) Yes

(C) No

(D)  null

Answer : Yes

Ques 2 : Which section is used for text and tags that are shown directly on your web page ?

(A) Head

 (B) Metatags

(C)  Body

Answer : Body

Ques 3 : Why should you add alternative text to your images ?

(A) In case the user wishes to load a different picture

 (B) So the users can get an idea of what the image is before it loads

 (C) So the user can save the image using the text as a name

Answer : So the users can get an idea of what the image is before it loads

Ques 4 : What is used to store information usually relevant to browsers and searchengines?

(A) Cookies

(B) Metatags

(C) Tabs

Answer : Metatags

Ques 5 : Why should you specify a background color if you are using an image for the actual background of your page ?

(A) The background color will be shown until the image loads

(B) In case the image doesnt fit right

(C) So the text shows up better

Answer : The background color will be shown until the image loads

Ques 6 : What tag tells the browser where the page starts and stops ?

(A) < body >

(B) < head >

(C) < html >

Answer : < html >

Ques 7 : One should never combine the "start" and "type" option ?

(A) True

(B) False

(C) Sometimes True, sometimes False

Answer : False

Ques 8 : Adding a border to your image helps the visitor to recognize it as what ?

(A) A Link

(B) A really great picture

(C) A frame

Ques 9 : Which of the following is NOT a valid pair for browser safe colors ?

(A) CC

(B) 00

 (C)  AA

Answer : AA

Ques 10 : Imagelinks can show a text label if you add which property?

(A) alternative

(B) alt

(C) str

Answer : alt

Ques 11 : Defining clickable sub-areas on an image is called?

(A) multiple linking

 (B) imagemapping

 (C) imagelinking

Answer : imagemapping

Ques 12 : What tag adds a paragraph break after the text ?

(A) < P >

 (B) < PARAGRAPH >

(C)  < BR >

 Answer : < P >

Ques 13 : What is the most important tool for adding colors to certain areas of the page rather than the entire background ?

(A) Tables

 (B) Fonts

 (C)  Images

Answer : Tables

Ques 14 : Which two meta tags have special relevance for search engines ?

(A) Description and Keywords

 (B) Cookies and Keywords

(C)  Description and Name

 Answer : Description and Keywords

Ques 15 : All normal webpages consist of what two parts ?

(A) Head and body

 (B) Top and bottom

(C)  Body and frameset

Answer : Head and body

Ques 16 : The <i> tag makes text... ?

(A) Inline

(B) Italic

 (C) Bold

Answer : Italic

Ques 17 : Use what to prevent confusion on numbers higher than 9 with hexadecimal colors ?

(A) #

 (B) % (

C) !

<span style="color:green">Answer : #</span>

Ques 18 : There are how many "browser safe colors" ?

(A) 16 Million

 (B) 256

(C) 216

<span style="color:green">Answer : 256</span>

Ques 19 : Which tag is used to insert images into your web page ?

(A) pic

(B) img

 (C) scr

Answer : img

Ques 20 : Why do designers often use slight variations of black and white as background colors ?

(A) To make the page more readable

 (B) Black and white are ugly colors

(C)  Personal choice

 <span style="color:green">Answer : To make the page more readable</span>

21. What does CSS stand for?

1.Cascading Style Sheets

2.Creative Style Sheets

3.Colorful Style Sheets

4.Computer Style Sheets

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

1. <stylesheet>mystyle.css</stylesheet>

2. <style src="mystyle.css">

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

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

1. At the end of the document

2. In the <body> section

3. In the <head> section

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

1. <style>

2. <script>

3. <css>

25.Which is the correct CSS syntax?

1. body:color=black;

2. {body:color=black;}

3. {body;color:black;}

4. body {color: black;}

26)Inside which HTML element do we put the JavaScript?

1.<scripting>

2.<script>

3.<js>

4.<javascript>

27)What is the correct JavaScript syntax to change the content of the HTML element below?

1. <p id="demo">This is a demonstration.</p>

2. document.getElementByName("p").innerHTML = "Hello World!";

3. #demo.innerHTML = "Hello World!";

4. document.getElementById("demo").innerHTML = "Hello World!";

5. document.getElement("p").innerHTML = "Hello World!";

Answer:4

28)Where is the correct place to insert a JavaScript?

1. Both the <head> section and the <body> section are correct

2. The <body> section

3. The <head> section

Answer:1

29)What is the correct syntax for referring to an external script called "xxx.js"?

1.<script name="xxx.js">

2.<script href="xxx.js">

3.<script src="xxx.js">

Answer:3

30)The external JavaScript file must contain the <script> tag.

1.False

2.True

## PART-3(Differences)

1.What is the difference between sleep and wait method?

2. What is the difference between HashMap and Hashtable?

3,What is the difference between Comparable and Comparator?

4.When to override hashCode() and equals()?

5.What is the difference between Exception and Error?

6. What is the difference between Statement and Preparedstatement?

7. What is the difference between ResultSet and ResultSetMetaData?

8. What is the difference between ServletConfig and ServletContext ?

9. What is the difference between RequestDispatcher and ServletContext?

10.What is the difference between include directive and jsp:include ?


## PART-4(Practical MVC Application)


1. Create Login Application by using MVC-2 Architecture based application

   -> create a database table

-> create html/jsp pages

->create bean class

->create dao's

->create dao implementation classes

->create servlet controller

->create db.properties file

->create DatabaseUtility class