MILESTONE -1 SET

Topic: Abstract Classes, Interfaces

1. Which is a valid method signature in an interface?
a)private int getArea();
b)protected float getVol(float x);
c) public static void main(String []
args); d)boolean setFlag(Boolean [] test
[]);

2. Which statement is true about interfaces?
a)Interfaces allow multiple implementation inheritance.
b)Interfaces can extend any number of other interfaces.
c) Members of an interface are never static.
d)Members of an interface can always be declared static.

3. Which statement is true about interfaces?
a) The keyword extends is used to specify that an interface inherits from another interface.
b) The keyword extends is used to specify that a class inherits from an interface.
c) The keyword implements is used to specify that an interface inherits from another interface.
d) The keyword implements is used to specify that a class inherits from another class.

4. Which of the field declaration is legal within the body of an interface?
a) protected static int answer = 42;
b)volatile static int answer = 42;
c)int answer = 42;
d)private final static int answer = 42;

5. Which declaration prevents creating a subclass of a top level class?
a) private class Javacg{}
b)abstract public class
Javacg{} c)final public class
Javacg{} d)final abstract class
Javacg{}

6. Here is an abstract method defined in the parent:
public abstract int sumUp (int[] arr);
Which of the following is required in a non-abstract child?
a)public abstract int sumUp (int[] arr) { . . .
} b)public int sumUp (int[] arr) { . . . }
c)public double sumUp (int[] arr) { . . . }
d)public int sumUp (long[] arr) { . . . }

7. Which statement is true for any concrete class implementing the java.lang.Runnable interface?
a) The class must contain an empty protected void method named run().
b) The class must contain a public void method named runnable().
c) The class definition must include the words implements Threads and contain a method called run().
d) The mandatory method must be public, with a return type of void, must be called run(), and cannot take any arguments.

8. Which is a valid declaration within an interface?
a)protected short stop = 23;
b)final void madness(short stop);
c)public Boolean madness(long bow);
d)static char madness(double duty);

9. Can an abstract class define both abstract methods and non- abstract methods ?
a) No-it must have all one or the other.
b) No-it must have all abstract methods.
c) Yes-but the child classes do not inherit the abstract methods.
d) Yes-the child classes inherit both.

10. Which one of the following statements is true ?
a) An abstract class can be instantiated.
b)An abstract class is implicitly final.
c)An abstract class can declare non-abstract methods.
d)An abstract class can not extend a concrete class.

11. What is an abstract method?
a) An abstract method is any method in an abstract class.
b) An abstract method is a method which cannot be inherited.
c)An abstract method is one without a body that is declared with the reserved word abstract.D)An abstract method is a method in the child class that overrides a parent method.

12. What is an abstract class?
a) An abstract class is one without any child classes.
b) An abstract class is any parent class with more than one child class.
c) An abstract class is a class which cannot be instantiated.
d)An abstract class is another name for "base class."

13. Which declaration in the below code represents a valid declaration within the interface ?
1. public interface TestInterface {
2. volatile long value=98L;
3. transient long amount=67L;
4. Long calculate(long input);
5. static Integer getValue();
6. }
a) Declaration at line 2.
b)Declaration at line 3.
c)Declaration at line 4.
d)Declaration at line 5.

14.Given:
1. public interface Constants {
2. static final int SEASON_SUMMER=1;
3. final int SEASON_SPRING=2;
4. static int SEASON_AUTUMN=3;
5. public static const int
SEASON_WINTER=4; 6. }
What is the expected behaviour on compiling the above code?
a)Compilation error occurs at line 2.
b) Compilation error occurs at line 3.
c)Compilation error occurs at line 4.
d)Compilation error occurs at line 5.

15.Given the following,
1. abstract class A {
2. abstract short m1() ;
3. short m2() { return (short) 420; }
4. }
5.
6. abstract class B extends A {
7. // missing code ?
8. short m1() { return (short) 42; }
9. }
Which of the following statements is true?
a) Class B must either make an abstract declaration of method m2() or implement method m2() to allow the code to compile.
b) It is legal, but not required, for class B to either make an abstract declaration of method m2() or implement method m2() for the code to compile.
c) As long as line 8 exists, class A must declare method m1() in some way.
d) If class A was not abstract and method m1() on line 2 was implemented, the code would not compile.

16.Given the following,

```
1. interface Base {
2.    boolean m1 ();
3.    byte m2(short s);
4. }
```

Which of the following code fragment will compile?
a)interface Base2 implements Base {}
b) abstract class Class2 extends Base
{public boolean m1() { return true; }
}
c) abstract class Class2 implements Base {
public boolean m1() { return (7 > 4); } }
d) class Class2 implements Base
{boolean m1() { return false; }
byte m2(short s) { return 42; } }

17.Given:

```
1. interface I1 {
2.    int process();
3. }
4. class C implements I1 {
5.    int process() {
6.       System.out.println("process of C invoked");
7.       return 1;
8.    }
9.    void display() {
10.      System.out.println("display of C invoked");
11. }
12.}
13. public class TestC {
14.    public static void main(String... args) {
15.       C c = new C();
16.       c.process();
17. }
18.}
```

What is the expected behaviour?
a)Compilation error at line 5.
b)Compilation error at line 9.
c) Runtime error occurs.
d)Prints "process of C
invoked".

18.Given:

```
1. public interface Alpha {
2. String MESSAGE = "Welcome";
3. public void
display(); 4. }
```

To create an interface called Beta that has Alpha as its parent, which interface declaration is correct?
a)public interface Beta extends Alpha { }
b)public interface Beta implements Alpha
{}
c)public interface Beta instanceOf Alpha {}
d)public interface Beta parent Alpha { }

19.Given:

```
1. abstract class AbstractClass {
2.    void setup() { }
3.    abstract int execute();
4. }
5. class EC extends AbstractClass {
6.    int execute() {
7.       System.out.println("execute of EC invoked");
8.       return 0;
9.    }
10.}
11. public class TestEC {
12.    public static void main(String... args) {
13.       EC ec = new EC();
14.       ec.setup();
15.       ec.execute();
16. }
17.}
```

What is the expected behaviour?
a)Compilation error at line 2.
b)Compilation error at line 14.
c)Runtime error occurs.
d)Prints "execute of EC invoked".

20.Given the code below:

```
interface MyInterface {
   void doSomething ( )
   ;
}
class MyClass implements MyInterface {
   // xx
}
```

Choose the valid option that can be substituted in place of xx in the MyClass class .
a) public native void doSomething ( ) ;
b) void doSomething ( ) { /* valid code fragments */ }
c)private void doSomething ( ) { /* valid code fragments */ }
d)protected void doSomething ( ) { /* valid code fragments */ }

21.

```
interface I1 {
   void draw();
}
class C implements I1
   { xxxxxx
}
```

Which of the following when inserted at xxxxxx is a legal definition and implementation ?
a)void draw() { }
b)public void draw() {
}
c) protected void draw() {
}d)abstract void draw() {
}

22. Given the following,

```
1. interface Count {
2.    short counter = 0;
3.    void
countUp(); 4. }
5. public class TestCount implements Count
{ 6.
7.    public static void main(String [] args) {
8.       TestCount t = new TestCount();
9.       t.countUp();
10. }
11.   public void countUp() {
12.      for (int x = 6; x>counter; x--, ++counter) {
13.         System.out.print(" " + counter);
14.    }
15.   }
16. }
```

What is the result?
a)1 2 3
b)0 1 2 3
c)1 2 3 4
d) Compilation fails

23.Given the following,

```
1. interface DoMath {
2. double getArea(int rad); }
3.
4. interface MathPlus {
5. double getVol(int b, int h);
}6.
```

7.
8.
Which code fragment inserted at lines 7 and 8 will compile?
a) class AllMath extends DoMath
{double getArea(int r); }
b) interface AllMath implements MathPlus {
double getVol(int x, int y); }
c) interface AllMath extends DoMath
{float getAvg(int h, int l); }
d) class AllMath implements MathPlus
{double getArea(int rad); }

24.interface I1 {}
interface I2 {}
class Base implements I1 {}
class Sub extends Base implements I2
{} class Red {
public static void main(String args[])
{ Sub s1 = new Sub();I2 i2 = s1; //
1I1 i1 = s1; // 2
Base base = s1; // 3
Sub s2 = (Sub)base; // 4

}
}
A compile-time error is generated at which line?
a) 2
b) 3
c) 4
d) No error will be generated.

25.Given:
1. public interface IDrawable {
2. static final int SHAPE_CIRCLE=1;
3. final int SHAPE_SQUARE=2;
4. static int SHAPE_RECTANGLE=3;
5. public static const int
SHAPE_TRIANGLE=4; 6. }
What is the expected behaviour on compiling the above code?
a) Compilation error occurs at line 2.
b) Compilation error occurs at line 3.
c) Compilation error occurs at line 4.
d) Compilation error occurs at line 5.

26.Given:
1. abstract class MyClass {
2. void init() { }
3. abstract int calculate();
4. }
5. class MyImpl extends MyClass {
6. int calculate() {
7. System.out.println("Invoking calculate...");
8. return 1;
9. }
10.}
11. public class TestMyImpl {
12. public static void main(String[] args) {
13. MyImpl mi = new MyImpl();
14. mi.init();
15. mi.calculate();
16. }
17.}
What is the expected behaviour?
a) Prints "Invoking calculate...".
b) Runtime error occurs.
c) Compilation error at line 2.
d) Compilation error at line 14.

Topic: Access Modifiers

27. Which one of the following modifiers can be applied to amethod?
a) transient
b) native
c) volatile
d) friend

28. Given a method in a class, what access modifier do you use to restrict access to that method to only the other members of the same class?
a) static
b) private
c) protected
d) volatile

29. Which of the following modifiers can be applied to aconstructor?
a) protected
b) static
c) synchronized
d) transient

30. Which of the following member level (i.e. nonlocal) variable declarations will not compile?
a) transient int b = 3;
b) public static final int c;
c) volatile int d;
d) private synchronized int e;

31. Which of the following modifiers can be applied to the declaration of a field?
a) abstract
b) volatile
c) native
d) synchronized

32. Which statement is true about the use of modifiers?
a) If no accessibility modifier (public, protected, and private) is specified for a member declaration, the member is only accessible for classes in the same package and subclasses of its class in any package.
b) You cannot specify accessibility of local variables. They are only accessible within the block in which they are declared.
c) Subclasses of a class must reside in the same package as the class they extend.
d) Local variables can be declared static.

33. What is the most restrictive access modifier that will allow members of one class to have access to members of another class in the same package?
a) abstract
b) protected
c) synchronized
d) default access

34. Which statement is true?
a) Constructors can be declared abstract.
b) A subclass of a class with an abstract method must provide an implementation for the abstract method.

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c) Transient fields will be saved during serialization.
d) Instance methods of a class can access its static members implicitly.

35. Which statement is true?

a) A static method can call other non-static methods in the same class by using the this keyword.
b) A class may contain both static and non-static variables and both static and non-static methods.
c) Each object of a class has its own instance of each static variable.
d) Instance methods may access local variables of static methods.

36. Which of the following modifiers cannot be applied to a top level class?
a) public
b) private
c) abstract
d) final

37. Which of the following modifiers cannot be applied to amethod?
a) final
b) synchronized
c) transient
d) native

38. Which of the following modifiers can be applied to aconstructor?
a) private
b) abstract final volatile

39. Which statement is true about modifiers?
a) Fields can be declared native.
b) Non-abstract methods can be declared in abstract classes.
c) Classes can be declared native.
d) Abstract classes can be declared final.

40.Before which of the following can the keyword "synchronized" be placed, without causing a compile error.
a) class variables
b) instance methods
c) instance variables
d) a class

41.A protected method can be overridden by
a) A private method
b) A method without any access specifiers (i.e. default)
c) A protected method
d) All of the above

42. Which statement is true about accessibility of members?
a) Private members are always accessible from within the same package.
b)Private members can only be accessed by code from within the class of the member.
c) A member with default accessibility can be accessed by any subclass of the class in which it is defined.
d) Package/default accessibility for a member can be declared using the keyword default.

43. Which of the following modifiers cannot be applied to the declaration of a field?
a) final
b) transient
c) volatile
d) synchronized

44. How restrictive is the default accessibility compared to public, protected, and private accessibility?
a) Less restrictive than public.
b) More restrictive than public, but less restrictive than protected.
c)More restrictive than protected, but less restrictive than private.
d)More restrictive than private.

45. What is printed out following the execution of the code below ?

```
1. class Test {
2.    static String s;
3.    public static void main(String []args) {
4.       int x = 4;
5.       if (x < 4)
6.          System.out.println("Val = " + x);
7.       else
8.     System.out.println(s); 9.
       }
10. }
```

a) Nothing. The code fails to compile because the String s isn't declared correctly.
b) The text "Val = null" is displayed.
c) The text "null" is displayed.
d) Runtime error due to NullPointer exception.

46.Analyse the following 2 classes and select the correct statement.

```
class A {
   private int x = 0;
  static int y = 1;
  protected int q = 2;
}
class B extends A
   { void method()
   {
      System.out.println(x);
      System.out.println(y);
      System.out.println(q);
   }
}
```

a) The code fails to compile because the variable x is not available to class B.
b) The code compiles correctly, and the following is displayed:012
c) The code fails to compile because you can't subclass a class with protected variables.
d) The code fails to compile because you can't subclass a class with static variables.

47. Given the following class, which of these is valid way of referring to the class from outside of the package com.test? package com.test;

```
public class MyClass {
   // ...
}
```

a) By simply referring to the class as MyClass.
b) By simply referring to the class as test.MyClass.
c) By simply referring to the class as com.test.MyClass.
d) By importing with com.* and referring to the class as test.MyClass.

48. Given the following member declarations, which statement is true?

```
int a;                    // (1)
static int a;             // (2)
int f() { return a; }     // (3)
static int f() { return a; } // (4)
```

Declarations (1) and (3) cannot occur in the same class definition.

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Declarations (2) and (4) cannot occur in the same class definition.
Declarations (1) and (4) cannot occur in the same class definition.

Declarations (2) and (3) cannot occur in the same class definition.

49.// Class A is declared in a file named A.java.
```
package com.test.work;
public class A {
   public void m1() {System.out.print("A.m1, ");}
   void m2() {System.out.print("A.m2, ");}
}
// Class D is declared in a file named
D.java. package com.test.work.other;
import com.test.work.A;
public class D {
   public static void main(String[] args)
      { A a = new A();
      a.m1(); // 1
      a.m2(); // 2
}}
```
What is the result of attempting to compile and run the program?
a) Prints: A.m1, A.m2,
b) Runtime error occurs.
c) Compile-time error at 1.
d) Compile-time error at 2.

50.
```
public class MyClass
   { int calculate(int i, int
   j)
   {
      return 2+i*j;
   }
public static void main(String [] args) {

      int k =
      MyClass.calculate(5,10);
      System.out.println(k);
   }
}
```
What is the result?
a) 70
b) 52
c) Compilation error
d) An exception is thrown at runtime

51. Given the following,
```
1. package testpkg.p1;
2. public class ParentUtil {
3.    public int x = 420;
4.    protected int doStuff() { return x; }
5. }
1. package testpkg.p2;
2. import testpkg.p1.ParentUtil;
3. public class ChildUtil extends ParentUtil {
4.    public static void main(String [] args) {
5.    new ChildUtil().callStuff();
6.    }
7.    void callStuff() {
8.       System.out.print("this " + this.doStuff() );
9.       ParentUtil p = new ParentUtil();
10.      System.out.print(" parent " + p.doStuff() );
11. }
12. }
```
Which statement is true?
a) The code compiles and runs, with output this 420 parent 420.
b) If line 8 is removed, the code will compile and run.
c) If line 10 is removed, the code will compile and run.
d) Both lines 8 and 10 must be removed for the code to compile.

52. What would be the result of attempting to compile and run the following program?
```
class MyClass {
   static MyClass
   ref;
   String[] arguments;
   public static void main(String[] args)
      {ref = new  MyClass();
      ref.func(args);
   }
   public void func(String[] args)
      { ref.arguments = args;
   }
}
```
a) The program will fail to compile, since the static method main() cannot have a call to the non-static method func().
b) The program will fail to compile, since the non-static method func() cannot access the static variable ref.
c) The program will fail to compile, since the argument args passed to the static method main() cannot be passed on to the non-static method func().
d) The program will compile and run successfully.

53.
```
package com.test.work;
public class A {
   public void m1() {System.out.print("A.m1, ");}
   protected void m2() {System.out.print("A.m2,
   ");} private void m3() {System.out.print("A.m3,
   ");}
   void m4() {System.out.print("A.m4, ");}
}
class B {
   public static void main(String[] args)
      { A a = new A();
      a.m1(); // 1
      a.m2(); // 2
      a.m3(); // 3
      a.m4(); // 4
}}
```
Assume that the code appears in a single file named A.java.
What is the result of attempting to compile and run the program?

a) Prints: A.m1, A.m2, A.m3, A.m4,
b) Compile-time error at 2.
c) Compile-time error at 3.
d) Compile-time error at 4.

54. Given the following source code, which comment line can be uncommented without introducing errors?
```
abstract class MyClass
   {abstract void f();
   final void g() {}
//  final void h() {}                          // (1)
   protected static int i;
   private int j;
}
final class MyOtherClass extends MyClass {
//  MyOtherClass(int n) { m = n; }             // (2)
   public static void main(String[] args) {
      MyClass mc = new MyOtherClass();
   }
   void f() {}
   void h() {}
//  void k() { i++; }                          // (3)
//  void l() { j++; }                          // (4)
   int m;
}
```

a) final void h() {} // (1)

b) MyOtherClass(int n) { m = n; } // (2)
c) void k() { i++; } // (3)
d) void l() { j++; } // (4)

55. Given the following code, which statement can be placed at the indicated position without causing compilation errors?

```
public class ThisUsage {
   int planets;
   static int suns;
  public void gaze()
      { int i;
      // ... insert statements here ...
   }
}
```

a) this = new ThisUsage();
b) this.i = 4;
c) this.planets = i;
d) i = this.planets;

56. Given the following:

```
class Gamma {
   public int display() {
      return 3;
   }
}
public class Delta extends Gamma {
   @Override
   protected int display() {
      return 4;
   }
}
```

What will be the result of compiling the above code ?
a) The code compiles correctly without any errors.
b) The code fails to compile, because you can't override a method to be more private than its parent.
c) The code fails to compile, because @Override cannot be mentioned above a protected method.
d) The code fails to compile, because public methods cannot be overriden.

57. Given the following:

```
class TestAccess {
   public int calculate()
   {
      int a=5,b=6;
      return a+b;
   }
}
public class MyChild extends TestAccess
   { @Override
   int calculate()
      { return 100;
   }
}
```

What will be the result of compiling the above code ?
a) The code fails to compile, because you can't override a method to be more private than its parent.
b) The code fails to compile, because @Override cannot be mentioned above a default method.
c) The code fails to compile, because public methods cannot be overriden.
d) The code compiles correctly without any errors.

Topic: Arrays

58. What is the value of seasons.length for the following array? String[] seasons = {"winter", "spring", "summer", "fall", }; undefined
a) 4
b) 5
c) 22

59. Which of the following will declare an array and initialize it ?
a) Array a = new Array(5);
b) int array[] = new int [5];
c) int a[] = new int(5);
d)int [5] array;

60. Which of the following is an illegal declaration of array ?
a) int [] myscore[];
b) char [] mychars;
c) Dog mydogs[7];
d) Dog mydogs[];

61. Which will legally declare, construct, and initialize an array?
a) int [] myList = {"5", "8", "2"};
b) int [3] myList = (5, 8, 2);
c) int myList[] [] = {5,8,2,0};
d) int [] myList = {5, 8, 2};

62. Which of these array declaration statements is not legal?
a) int[] i[] = { { 1, 2 }, { 1 }, {}, { 1, 2, 3 } };
b) int i[][] = new int[][] { {1, 2, 3}, {4, 5, 6} };
c) int i[4] = { 1, 2, 3, 4 };
d) int i[][] = { { 1, 2 }, new int[2] };

63. Which of the following is a legal declaration of a two- dimensional array of integers?
a) int[5][5]a = new int[][];
b) int a = new int[5,5];
c) int[]a[] = new int[5][];
d) int[][]a = new int[][5];

64. How would you declare and initialize the array to declare an array of fruits ?
a) String[] arrayOfFruits = {"apple", "mango", "orange"};
b) String[] arrayOfFruits= ("apple", "mango", "orange");
c) String[] arrayOfFruits= ["apple", "mango", "orange"];
d) String[] arrayOfFruits = new String{"apple, mango, orange"};

65. What type parameter must the following method be called with?

```
int myMethod ( double[] ar )
{
   . . . .
}
```

a) An empty double array.
b) A reference to an array that contains elements of type double.
c) A reference to an array that contains zero or more elements of type int.
d) An array of any length that contains double and must be named ar
.

66. After the declaration:
char[] c = new char[100];
What is the value of c[50]?
a) 49
b) 50
c) '\u0020'
d) '\u0000'

67. Which will legally declare, construct, and initialize an array?
a) int [] myList = {"9", "6", "3"};
b) int [3] myList = (9, 6, 3);
c) int myList[] [] = {9,6,3,0};

d) int [] myList = {9, 6, 3};

68. Given the following code snippet:
float average[] = new float[6];
Assuming the above declaration is a local variable in a method of a class, after the above statement is executed, which of the following statement is false ?
a) average.length is 6
b) average[0] is 0.0
c) average[5] is undefined
d) average[6] is undefined

Topic: Assignments, Expressions, Operators

69. Which one of the below expression is equivalent to 16>>2 ?
a) 16/4
b) 16/2
c) 16*2
d) 16/2^2

70. Which of the following is correct?
a) 8 >> 2 gives 2
b) 16 >>> 2 gives 2
c) 4 << 2 gives 2
d) 2 << 1 gives 2

71. Which of the following is correct?
128>>> 1 gives
a) 32
b)64
c) -64
d) -32

72. What is the value of -32 % 6 ?
a) 5
b) -5
c) 2
d) -2

73. Which one of the following is a short-circuit operator ?
a)|
b) &&
c) &
d) ^

74. Given the following code snippet:
double sum = 10.0, price=100;
sum += price>=100 ? price*1.1 : price;
What value is placed in sum? Choose the most appropriate answer.
a) 90
b) 100
c) 110
d) 120

75. If x, y, and z are all integers, which expression will produce aruntime error?
NOTE: The expressions are always evaluated with all the integers having a value of 1.
a) z = x/y--;
b) z = -x/x;
c) z = y/x--;
d) z = y%--x

76. Given a variable x of type int (which contains a positive value), which is the correct way of doubling the value of x, barring any wrapping of out-of-range intermediate values ?
a) x << 1;
b) x >> 1;
c) x >>> 1;
d) x << -1;

77. Suppose you have four int variables: x, y, z, and result.
Which expression sets the value of z to x if result has a value of 1, and the value of y to x otherwise?
a) x = (result == 1) ? z : y;
b) x = (result == 1) ? y : z;
c) x = (result == 1) : y ? z;
d) x = (result == 1) : z ? y;

78. Given a variable x of type int (which can contain a negative value), which of these expressions always gives a positive number irrespective of the value of x?
a) x << 1;
b) x >> 1;
c) x >>> 1;
d) x << 2;

79.Given:
int x = 7;
x <<= 2;
What best describes the second line of code?
a) It assigns the value of 2 to x, and shifts it to left by one place.
b) It assigns the value to x after shifting x to 2 places left.
c) It assigns the value to x after shifting 2 to x places left.
d) It is invalid because there is no such operator as <<=.

80. Given the variables defined below:
int one = 1;
int two = 2;
char initial = '2';
boolean flag = true;
Which one of the following is invalid?
a) if(one == two){}
b) switch(one){}
c) switch(flag){}
d) switch(initial){}

81. Identify the shift operator that returns -1 as the value of the variable in the following statement:
int a= -4 MISSING OPERATOR
2; a) >>>
b) >>
c) <<<
d) <<

82. public class TestOperator {
public static void main(String[] args)
{byte x = 0x0F;
byte y = 0x08;
byte z = x & y;logical operations returns
int System.out.println(z);
}
}
What is the result?
a) 8
b) 15
c) 23
d) Compilation error

83. public class TestExpression {
private static int value=0;
private static boolean method2(int k) {
value+=k;

```
    return true;
  }
  public static void method1(int index) {
    boolean b;
    b = index >= 15 &&
    method2(30); b = index >= 15 &
    method2(15);
  }
public static void main ( String args[])
{ method1(0);
    System.out.println(value);
  }
}
```

What is the output?

a) 0
b) 15
c) 30
d) 45

84.

```
public class TestCondition {
  public static void main (String... args) {
    int i=1;
    int j=2;
    int k=2;
    if ((i ^ j) && (j ^ k)) {
      System.out.println("true");
    }
    else {
      System.out.println("false");
    }
  }
}
```

What is the expected output ?

a) Prints true
b) Prints false
c)Compilation error occurs
d) Runtime error occurs

85.1.

```
public class TestFloatDouble {
2.   public static void main(String[] args) {
3.     float f1 = 2.0f;
4.     double d1 = 4.0;
5.     double result = f1 * d1;
6.   System.out.println(result); 7.
     }
8. }
```

What is the output ?

a) 8.0
b) Compilation error at Line 3
c) Compilation error at Line 4
d) Compilation error at Line 5

86.

```
public class Test {
  public static void main(String[] args)
  {
    System.out.println( 6 ^ 4);
  }
}
```

What is the output?

a) 1296
b) 24
c) 2
d) Compilation error

87. What will happen if you try to compile and run the following code?

```
int a = 200;
byte b = a;
System.out.println ("The value of b is " + b );
```

a) It will compile and print The value of b is 200
b) It will compile but cause an error at runtime
c) Compile-time error
d) It will compile and print The value of b is -56

88..Given:

```
public class TestOperator {
  int x=15;
  public void method(int x)
    { x+=x;
    System.out.println(x);
  }
  public static void main(String... args) {
    TestOperator t = new TestOperator();
    t.method(10);
  }
}
```

What is the output of the above code?

a) 10
b)20
c) 25
d) 30

89.1.

```
public class TestLiterals {
2.   public static void main(String[] args) {
3.     float f1 = 2.0;
4.     float f2 = 4.0f;
5.     float result = f1 * f2;
6.   System.out.println(result); 7.
     }
8. }
```

What is the output?

a) A value which is exactly 8.0 b)Compilation error at Line 3 c)Compilation error at Line 4
d) Compilation error at Line 5

90.

```
public class TestChar {
  static double a; static float b; static int c; static char d;
  public static void main(String[] args) {
    a = b = c = d = 'a';
 System.out.println(a+b+c+d == 4 * 'a');
  }
}
```

What is the output?

a) true
b) false
c) Compile-time error
d) Run-time error

91.

```
public class TestOperator {
  public static void main (String[] args)
    { int x = 2, y = 4;
    System.out.printf("%d,%d", (x ^ y), (y ^ x));
  }
}
```

What is the expected output ?a) 8,8
b) 6,8
c) 6,6
d) 8,6

92.

```
public class Test {
 private static int value =0;
  private static boolean method2(int k) {
    value+=k;
    return true;
```

```
   }
   public static void method1(int index) {
      boolean b;
      b = index < 10 | method2(10);
      b = index < 10 || method2(20);
   }
   public static void main ( String args[])
{ method1(0);
      System.out.println(value);
   }
}
```
What is the output?
a) 0
b) 10
c) 20
d) 30

93.Given:
```
1.  public class B {
2.     Integer x;not initialized
3.     int sum;
4.     public B(int y) {
5.        sum=x+y;
6.     System.out.println(sum); 7.
       }
8.     public static void main(String[] args) {
9.        new B(new Integer(23));
10. }
11. }
```
What is the expected output ?
a) The value "23" is printed at the command line.
b) Compilation fails because of an error in line 9.
c) A NullPointerException occurs at runtime.
d) A NumberFormatException occurs at runtime.

94.
```
public class TestOperator {
   public static void main(String[] args)
      { int x = 0x04;
      int y = 0x20;
      int z = x &&
      y;
      System.out.println(z);
   }
}
```
What is the result?
a) 0
b) 24
c) 36
d) Compilation error

95.
```
public class TestOperation {
   public static void main (String... args)
      {int a = 4;
      int b = 3;
      a += (--b + a * 3);
      System.out.printf("a=%d,b=%d",a,b)
      ;
   }
}
```
What is the value of a after this code is run?
a) a=19,b=3
b) a=18,b=2
c) a=19,b=1
d) a=18,b=3

96.
```
public class TestIncrement {
   public static void main(String[] args)
   {
      int index=10;
int result=0;
      if (index++ > 10)
      {
         result = index;
      }
      System.out.println("index=" + index);
      System.out.println("result=" + result);
}
```
What is the output?
a) index=10
result=0
b) index=11
result=0
c) index=10
result=10
d) index=11
result=11

97.below:
```
if( val > 4 )
{ System.out.println( "Test A" );
}
else if( val > 9 )
{ System.out.println( "Test B" );
}
else System.out.println( "Test C" );
```
Which values of val will result in "Test C" NOT being printed?
a) val < 0
b) val = 0
c) 0 < val < 4
d) 4 < val < 9

98.
```
public class TestIncrement {
   public static void main(String[] args)
   {
      int index=10;
      int result=0;
      if (++index > 10)
      {
         result = index;
      }
      System.out.println("index=" + index);
      System.out.println("result=" + result);
   }
}
```
What is the output?
a) index=10
result=0
b) index=11
result=0
c) index=11
result=10
d) index=11
result=11

99.
```
public class Test{
   public static void main(String[] args) {
      System.out.print((-1 & 0x1f) + "," + (8 << -
      1));
   }
}
```
What is the result of attempting to compile and run the program?
a) 0,0
b) 0x1f,8
c) 31,16
d) 31,0

100. What is the value of x after this code is run?
int x = 3 ;
int y = 2 ;
x += (y + x * 2);
a) 9
b) 10
c) 11

Topic: Class / Method Concepts

101. Which of the following is illegal for a method declaration?
a) protected abstract void m1();
b) static final void m2(){}
c) transient private native void m3() {}
d) synchronized public final void m4() {}

102. Which one of these statements is true about constructors?
a) Constructors must not have arguments if the superclass
b)constructor does not have arguments.
c) Constructors are inherited.
d)Constructors cannot be overloaded.
e)The first statement of every constructor is a legal call to the super() or this()method.

103. Here is a method definition:
int compute(int a, double y){ ..... }
Which of the following has a different signature?
a) int compute(int sum, double value){ ..... }
b) double compute(int a, double y){ .....}
c) double compute(int sum, double y){ ..... }
d) int compute(int a, int y){ .....}

104. Which one of the following is not a legal method declaration?
a) static final void m2(){}
b) transient private native void m3() {}
c) synchronized public final void m4() {}
d) private native void m5();

105. In a constructor, where can you place a call to the super class constructor?
a) The first statement in the constructor
b) The last statement in the constructor
c) You can't call super in a constructor
d) Any where

106. Which one of the below statements is true?
a) When a class has defined constructors with parameters, the compiler does not create a default no-args constructor.
b) When a constructor is provided in a class, a corresponding destructor should also be provided.
c)The compiler always creates the default no-args constructor for every class.
d) The no-args constructor can invoke only the no-args constructor of the superclass. It cannot invoke any other constructor of the superclass.

107. Which of the following techniques can be used to prevent the instantiation of a class by any code outside of the class?
a) Do not declare any constructors.
b) Do not use a return statement in the constructor.
c) Declare all constructors using the keyword void to indicate that nothing is returned.
d) Declare all constructors using the private access modifier.

108. Which one of the following is legal declaration for nonnested classes and interfaces?
a) final abstract class Test {}
b) public static interface Test {}
c) final public class Test {}
d) protected interface Test {}

109. What is a method's signature?
a) The signature of a method is the name of the method and the type of its return value.
b) The signature of a method is the name of the method and the names of its parameters.
c) The signature of a method is the name of the method and the data types of its parameters.
d) The signature of a method is the name of the method, its parameter list, and its return type.

110. public class MethodTest {
  public void methodSam(int a, float b, byte c) {}
}
Which of the following is considered as overloaded methodSam ?
a) private int methodSam(int a, float b, byte c) {}
b) private int methodSam(float a, int b, byte c) {return b;}
c) private float methodSam(int a, float b, byte c) {return b;}
d) public void methodSam(int x, float y, byte z) {}

111. Which one of the following is not a legal declaration for top level classes or interfaces ?
a) public abstract interface Test {}
b) final abstract class Test {}
c) abstract interface Test {}
d) public abstract class Test {}

112.A constructor is used to
a) Free memory
b) Initialize a newly created object.
c) Import packages
d) Clean up the object

113. public class Constructor {
  public Constructor (int x, int y, int z)
  {}
}
Which of the following is considered as overloaded constructor?
a) Constructor() {}
b) protected int Constructor(){}
c) private Object Constructor() {}
d) public void Constructor(int x, int y, byte z){}

114. If MyProg.java were compiled as an application and then run from the command line as
  java MyProg I like myprogram
What would be the value of args[1] inside the main( ) method?
a) MyProg
b) I
c) like
d) 4

115. Given the following,
1. long test(int x, float y)
{ 2.
3. }
Which one of the following line inserted at line 2 would not compile?
a) return (long) y;
b) return (int) 3.14d;
c)return (y / x);
d)return x / 7;

116. Which one of the following is generally a valid definition of an application's main() method ?
a) public static void main();
b) public static void main(String args);
c) public static void main(String[] args);
d) public static void main(Graphics g);

117. Consider the following code segment and select the correct statement:

```
1. class Test {
2.    final int tst;
3.    final int w =
0; 4.
5.    Test() {
6.       tst = 1;
7.    }
8.
9.    Test(int x) {
10.      tst = x;
11. }
12. }
```

a) The code fails to compile because a class cannot have more than 1 constructor.
b) The code fails to compile because the class Test has no constructors.
c) The code compiles correctly without any warnings or errors.
d) The code fails to compile because an attempt is made to initialise a final variable at lines 6 and 10.

118.Given the following,

```
1. class A {
2.    public int foo;
3. }
4. public class B extends A {
5.    private int bar;
6.    public void setBar(int b) {
7.       bar = b;
8.    }
9. }
```

Which is true about the classes described above?
a)Class A is tightly encapsulated.
b) Class B is tightly encapsulated.
c) Classes A and B are both tightly encapsulated.
d) Neither class A nor class B is tightly encapsulated.

119.Given the following,

```
1. public class Barbell {
2.    public int getWeight() {
3.       return weight;
4.    }
5.    public void setWeight(int w) {
6.       weight = w;
7.    }
8.    public int weight;
9. }
```

Which is true about the class described above?
a) Class Barbell is tightly encapsulated.
b) Line 2 is in conflict with encapsulation.
c) Line 5 is in conflict with encapsulation.
d) Line 8 is in conflict with encapsulation.

120. Examine the following code:

```
String str = "Hot Java";
boolean bValue = str instanceof String;
```

What value is placed in bValue?
a) true
b) false
c)"Hot Java"
d) null

121.

```
class A
   {A() { }
   void display() {
      System.out.println("display of A called");
   }
}
class B
   { B()
   { }
   void display() {
      System.out.println("display of B called");
   }
}
public class C extends A, B {
   public static void main(String[] args)
      { C c = new C();
      c.display();
   }
}
```

What is the output ?
a) Compilation error is generated
b) display of A
called display of B
called
c) display of B
called display of A
called
d)order of output is not predictable and can come in any order

122. Given the following,

```
1. import java.util.*;
2. public class NewTreeSet2 extends NewTreeSet {
3.    public static void main(String [] args) {
4.       NewTreeSet2 t = new NewTreeSet2();
5.       t.count();
6.    }
7. }
8. protected class NewTreeSet {
9.    void count() {
10.      for (int x = 0; x < 7; x++,x++ ) {
11.         System.out.print(" " + x);
12.      }
13. }
14. }
```

What is the result?
a) 0 2 4
b) 0 2 4 6
c) Compilation fails at line 4
d) Compilation fails at line 8

123.Given:

```
1. class Fruit {
2.    private String name;
3.    public Fruit(String name) { this.name = name; }
4.    public String getName() { return name;
}5. }
6. public class MyFruit extends Fruit {
7.    public void displayFruit() {
}9. }
```

Which of the following statement is true?
a) The code will compile if public MyFruit() { Fruit(); } is added to the MyFruit class.
b) The code will compile if public Fruit() { MyFruit(); } is added to the Fruit class.
c) The code will compile if public Fruit() { this("apple"); } is added to the Fruit class.

d) The code will compile if public Fruit() { Fruit("apple"); } is added to the Fruit class.

124.Given the following, 1.
```
2. public class NewTreeSet extends java.util.TreeSet{
3.    public static void main(String [] args) {
4.       java.util.TreeSet t = new java.util.TreeSet();

5.       t.clear();
6.    }
7.    public void clear() {
8.       TreeMap m = new TreeMap();
9.       m.clear();
10. }
11. }
```
Which statement added at line 1, allow the code to compile?
a) No statement is required
b) import java.util.*;
c) import.java.util.Tree*;
d) import java.util.*Map;

125. Given the following,
```
public class TestConstructor extends Object
{
   TestConstructor()
   {
      super();
      this(10);
   }
   TestConstructor(int i)
   {
      this(i, 11);
   }
   TestConstructor(int i, int j)
   {
      System.out.println("i=" + i + " j=" + j);
   }
   public static void main(String[] args)
   {
      TestConstructor tc = new TestConstructor();
   }
}
```
What will be the output?
a) No output
b) i=10 j=11
c)Compilation error
d) Runtime error

126. Given the following,
```
1. import java.util.*;
2. class Ro {
3.    Object[] testObject()
{4.
5.
6.    }
7. }
```
Which one of the following code fragments inserted at lines 4, 5 will not compile?
a) return null;
b) Object t = new Object(); return t;
c) Object[] t = new Object[10]; return t;
d) Object[] t = new Integer[10]; return t;

127.Given the following,
```
1. public class ThreeConst {
2.    public static void main(String [] args) {
3.    new ThreeConst(); 4.
      }
5.    public void ThreeConst(int x) {
6.    System.out.print(" " + (x * 2));
7.    }
8.    public void ThreeConst(long x) {
9.       System.out.print(" " + x);
10. }
11.
12.   public void ThreeConst() {
13.      System.out.print("no-arg ");
14. }
15. }
```
What is the result?
a) 8 4 no-arg
b) no-arg 8 4
c) Compilation fails.
d) No output is produced.

128.Given the following,
```
1. class Dog {
2.    Dog(String name) {
}3. }
```
If class Beagle extends Dog, and class Beagle has only one constructor, which of the following could be the legal constructor for class Beagle?
a) Beagle() { }
b) Beagle() { super(); }
c)Beagle() { super("fido");
}
d) No constructor, allow the default constructor to get generated automatically.

129.Given the following,
```
1. public class CheckType {
2.    int check()
{3.
4.       return y;
5.    }
6.    public static void main(String [] args) {
7.       CheckType c = new CheckType();
8.       int x = c.check();
9.    }
10.}
```
Which line of code, inserted independently at line 3, will not compile?
a) short y = 7;
b) int y = (int) 7.2d;
c) Long y = 7;
d) int y = 0xface;

130. Given the following, class TestFooBar { public static Foo f = new Foo(); public static Foo f2; public static Bar b = new Bar(); 5. public static void main(String [] args) { for (int x=0; x<4; x++) { f2 = getFoo(x); f2.react(); } } static Foo getFoo(int y) { if (0 == y % 2) {

```
return f;
} else {
return b;
}
}
}
20.
21. class Bar extends Foo {
22.    void react() { System.out.print("Bar "); }
23.
}
24.
25. class Foo {
26.    void react() { System.out.print("Foo "); }
27. }
```

What is the result?
a) Bar Bar Bar Bar
b)Foo Bar Foo Bar
c) Foo Foo Foo Foo
d) Compilation fails.

131. Consider the following piece of code:

```
class A {
  int x =
  0;
  A(int w)
    {x =
    w;
  }
}
class B extends A {
  int x = 0;
  B(int w) {
    x = w + 1;
  }
}
```

a) The code compiles correctly.
b) The code fails to compile, because both class A and B do not have valid constructors.
c) The code fails to compile because there is no default no-args constructor for class A.
d) The code fails to compile because there is no default no-args constructor for class B.

132. Given the following,

```
1. class Base {
2.    Base() {
3.    System.out.println("Base constructor invoked..."); 4.
      }
5. }
6.
7. public class Derived extends Base {
8.    Derived() {
9.       System.out.println("Derived constructor invoked...");
10. }
11.
12.   public static void main (String[] args) {
13.      Base b = new Derived();
14. }
15.}
```

What is the output ?
a)Base constructor invoked...
Derived constructor invoked...
b) Base constructor invoked...
c) Derived constructor invoked...
d) Derived constructor invoked...
Base constructor invoked...

133.Given the following,

```
1. public class ThreeConst {
2.    public static void main(String [] args) {
3.    new ThreeConst(4L);
4.    }
5.    public ThreeConst(int x) {
6.       this();
7.    System.out.print(" " + (x * 2));
8.    }
9.    public ThreeConst(long x) {
10.      this((int) x);
11.      System.out.print(" " + x);
12. }
13.
14.   public ThreeConst() {
15.      System.out.print("no-arg ");
16. }
17. }
```

What is the result?
a) 4 8
b) 8 4 no-arg
c) no-arg 8 4
d) Compilation fails.

134.Given the following, 1.

```
2. public class MyHashSet extends java.util.HashSet{
3.    public static void main(String [] args) {
4.       java.util.HashSet hs = new java.util.HashSet();
5.       hs.clear();
6.    }
7.    public void hmClear() {
8.       HashMap hm = new HashMap();
9.       hm.clear();
10. }
11. }
```

Which statement added at line 1, allow the code to compile?
a) import java.util.*;
b) import java.util.*Map;
c) import java.util.Hash*;
d) No statement is required

Topic: Exceptions

135. Which statement is TRUE about catch{} blocks?
a) There can only be one catch{} block in a try/catch structure.
b) The catch{} block for a child exception class must PRECEDE that of a parent exception class.
c) The catch{} block for a child exception class must FOLLOW that of a parent exception class.
d) A catch{} block need not be present even if there is no finally{} block.

136. Both class Error and class Exception are children of this parent:
a) Throwable
b) Catchable
c) Runnable
d) Problem

137. What type of exception is thrown by parseInt() if it gets illegal data?
a) ArithmeticException
b) RunTimeException
c) NumberFormatException
d) NumberError

138. Which of the following lists exception types from MOST specific to LEAST specific?
a) Error, Exception
b) Exception, RunTimeException
c) Throwable, RunTimeException
d) ArithmeticException, RunTimeException

139. Which of these statement is true ?
a) finally block gets executed only when there are exceptions.
b) Finally gets always executed irrespective of the flow in try catch block.
c) finally block can be present only when a catch block is present.
d) finally block gets executed only when there are no exceptions.

140. On occurrence of which of the following is it possible for aprogram to recover?
a) Errors
b) Exceptions
c) Both errors and exceptions
d) Neither

141. Which statement is true?
a) If an exception is uncaught in a method, the method will terminate and normal execution will resume.
b) An overriding method must declare that it throws the same exception classes as the method it overrides.
c) The main() method of a program cannot declare that it throws checked exceptions.
d) A method declaring that it throws a certain exception class may throw instances of any subclass of that exception class.

142. class A {A() throws Exception {}} // 1
class B extends A {B() throws Exception {}}
// 2 class C extends A {C() {}} // 3
Which one of the following statements is true?
a) Compile-time error at 1.
b) Compile-time error at 2.
c) Compile-time error at 3.
d) No compile-time errors.

143. When is a finally{} block executed?
a) Only when an unhandled exception is thrown in a try{} block.
b) Only when any exception is thrown in a try{} block.
c) Always after execution has left a try catch{} block, no matter for what reason
d) Always just as a method is about to finish.

144. Which statement is TRUE about the try{} block?
a) It is mandatory for statements in a try{} block to throw at least one exception type.
b) The statements in a try{} block can only throw one exception type and not several types.
c) The try{} block can contain loops or branches.
d) The try{} block can appear after the catch{} blocks.

145. class A {
```
  public static void main (String[] args)
    { Object error = new Error();
    Object runtimeException = new RuntimeException();
    System.out.print((error instanceof Exception) + ",");
    System.out.print(runtimeException instanceof Exception);
}}
```
What is the result of attempting to compile and run the program?
a) Prints: false,false
b) Prints: false,true
c) Prints: true,false
d) Prints: true,true

146. What is the result of compiling and executing the below code with the mentioned arguments ?
java TestInvocation Welcome Year
2009 public class TestInvocation
```
{
  public static void main(String... args)
  {
    String arg1 =
 args[1]; String arg2 =
 args[2];
    String arg3 = args[3];
  }
}
```
a) Compilation succeeds
b) Throws exception at runtime
c) Compilation fails
d) None of the above.

147. Given the following,
```
1. public class MyProgram {
2.    public static void main(String args[]){
3.       try {
4.       System.out.print("Hello world "); 5.
         }
6.       finally {
7.       System.out.println("Finally executing ");
8.       }
9.    }
10. }
```
What is the result?
a) Nothing. The program will not compile because no exceptions are specified.
b) Nothing. The program will not compile because no catch clauses are specified.
c) Hello world.
d) Hello world Finally executing

148. What is the result of compiling and executing the below code ?
```
public class TryTest {
  public static void main(String[] args)
  {
    try
    {
      return;
    }
    finally
    {
      System.out.println("Finally");
    }
  }
}
```
a) Outputs nothing
b) Finally
c) Compilation Error
d) Runtime Error

149. class A {
```
  public static void main (String[] args)
    { Error error = new Error();
    Exception exception = new Exception();
    System.out.print((exception instanceof Throwable) + ",");
    System.out.print(error instanceof Throwable);
}}
```
What is the result of attempting to compile and run the program?
a) Prints: false,false
b) Prints: false,true
c) Prints: true,false

d) Prints: true,true

150.public class MyClass
{
public static void main(String[] args)
{ RuntimeException re = null;
throw re;
}
}

What will be the result of attempting to compile and run the above program?

a) The code will fail to compile, since the main() method does not declare that it throws RuntimeException in its declaration.
b) The program will compile without error and will throw java.lang.RuntimeException when run.
c) The program will compile without error and will throw java.lang.NullpointerException when run.
d) The program will compile without error and will run and terminate without any output.

151. Given the following program, which one of the statements is true?

```
public class Exceptions {
  public static void main(String[] args)
    { try {
      if (args.length == 0) return;
      System.out.println(args[0]);
    } finally {
      System.out.println("The end");
    }
  }
}
```

a) If run with one argument, the program will produce no output.
b) If run with one argument, the program will simply print the given argument.
c) If run with one argument, the program will print the given argument followed by "The end".
d) The program will throw an ArrayIndexOutOfBoundsException.

152. Given the following:

```
public class TestDivide {
  public static void main(String[] args)
    { int value=0;
    try {
      int result = 10/value;
    } finally {
      System.out.println("f");
    }
  }
}
```

What is the result ?

a) Compilation fails since a catch block is not present.
b) Prints only "f" in the output.
c) Only a runtime error is displayed.
d)Prints an "f" in the output and a runtime error is also displayed.

153. Given the following code in the 3 java files:

NewException.java
class NewException extends Exception {
}
Welcome.java
class Welcome {
public String displayWelcome(String name) throws
NewException {
if(name == null) {
throw new NewException();
}
return "Welcome "+ name;
}
10.}
TestNewException.java
11.class TestNewException
{
public static void main(String... args) {
Welcome w = new Welcome();
System.out.println(w.displayWelcome("Ram"))
;
}
16.
}

What is the result on compiling and executing it ?

a) Compiles successfully and displays Ram when TestNewException is executed.
b) Runtime exception occurs on executing the class TestNewException.
c) Compilation of Welcome.java fails.
d)Compilation of TestNewException.java fails

154. Given the following code:

```
public class ArithmeticTest {
  public static void main(String[]
    args){ try
    {
      int x=0;
      int y=5/x;
      System.out.println(y);
    }
    catch (Exception e)
    {
      System.out.println("Exception");
    }
    catch (ArithmeticException ae)
    {
      System.out.println("ArithmeticException");
    }
  }
}
```

What is the output?

a) Exception
b) ArithmeticException
c) NaN
d) Compilation Error

155. Given the following,

```
1.  import java.io.*;
2.  public class MyProgram {
3.  public static void main(String args[]){
4.  FileOutputStream out = null;
5.  try {
6.  out = new FileOutputStream("test.txt");
7.  out.write(122);
8.  }
9.  catch(IOException io) {
10. System.out.println("IO Error.");
11. }
12. finally {
13. out.close();unhandled exception
14. }
15. }
16. }
```

and given that all methods of class FileOutputStream, including close(), throw an IOException, which one of these is true?

a) This program will compile successfully.
b) This program fails to compile due to an error at line 13.
c) This program fails to compile due to an error at line 9.
d) This program fails to compile due to an error at line 6.

156. Given the following:

```
1.  class Base {
```

```
2.  void display() throws Exception { throw new
    Exception();
    }
3.  }
4.  public class Derived extends Base {
5.  void display() { System.out.println("Derived"); }
6.  public static void main(String[] args) {
7.  new
Derived().display(); 8.  }
9.  }
```

What is the result ?

a) Derived

b) The code runs with no output.

c) Compilation fails because of an error in line 2.

d) Compilation fails because of an error in line 7.

157. Given the following,

```
1.  public class RTExcept {
2.  public static void throwit () {
3.  System.out.print("throwit ");
4.  throw new RuntimeException();
5.  }
6.  public static void main(String [] args) {
7.  try {
8.  System.out.print("hello ");
9.  throwit();
10. }
11. catch (Exception re ) {
12. System.out.print("caught ");
13. }
14. finally {
15. System.out.print("finally ");
16. }
17. System.out.println("after ");
18.  }
19.  }
```

What is the output ?

a) hello throwit caught

b) hello throwit RuntimeException caught after

c) hello throwit caught finally after

d) hello throwit caught finally after RuntimeException

158.

```
public class ExceptionTest {
  public static void main(String[]
  args)
  {
    try
    {
      ExceptionTest a = new
      ExceptionTest(); a.badMethod();
      System.out.println("A");
    }
    catch (Exception e)
    {
      System.out.println("B");
    }
    finally
    {
      System.out.println("C");
    }
  }

  void badMethod()
  {
    throw new Error();
  }
}
```

What is the output?

a) BC followed by Error exception

b) Error exception followed by BC

c) C followed by Error exception

d) Error exception followed by C

159. Given the following,

```
public class MyProgram
{
public static void throwit() {
throw new RuntimeException();
}
public static void main(String
args[]){ try {
System.out.println("Hello world ");
throwit();
System.out.println("Done with try block ");
}
finally {
System.out.println("Finally executing ");
}
}
}
```

Which answer most closely indicates the behavior of the program?

a) The program will not compile.

b) The program will print Hello world, then will print that a RuntimeException has occurred, then will print Done with try block, and then will print Finally executing.

c) The program will print Hello world, then will print that a RuntimeException has occurred, and then will print Finally executing.

d) The program will print Hello world, then will print Finally executing, then will print that a RuntimeException has occurred.

160. Given the following,

```
1. System.out.print("Start ");
2. try {
3.    System.out.print("Hello world");
4.    throw new
FileNotFoundException(); 5. }
6. System.out.print(" Catch Here ");
7. catch(EOFException e) {
8.    System.out.print("End of file exception");
9. }
10. catch(FileNotFoundException e) {
11.    System.out.print("File not found");
12. }
```

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.

161.Given the following code:

```
1. import java.io.IOException;
1.    2. public class
ExceptionTest 2.          {
3.    public static void main(String[]
args) 4.          {
5.    try
6.    {
7.    methodA();
8.    }
9.    catch(IOException e)
10. {
11. System.out.println("Caught IO Exception");
```

```
12. }
13. catch(Exception e)
14. {
15. System.out.println("Caught Exception");
16.  }
17.  }
18. static public void methodA()
19. {
20. throw new IOException();
21.  }
22.  }
```

What is the output ?

a) The output is "Caught Exception".
b) The output is "Caught IO Exception".
c) Code will not compile.
d) Program executes normally without printing a message.

162.Given:

```
public class TestException {
  public static void main(String... args)
    { try {
      // some piece of code
    } catch (NullPointerException e1) {
      System.out.print("n");
    } catch (RuntimeException e2) {
      System.out.print("r");
    } finally {
      System.out.print("f");
    }

  }
}
```

What is the output if NullPointerException occurs when executing the code in the try block ?

a) f
b)nf
c) rf
d) nrf

163.Given the following:

```
1. class ShapeException extends Exception
{} 2.
3. class CircleException extends ShapeException {}
4.
5. public class Circle2 {
6.    void m1() throws ShapeException {throw new
CircleException();}
7.
8.    public static void main (String[] args) {
9.       Circle2 circle2 = new Circle2();
10.      int a=0, b=0;
11.
12.      try {circle2.m1(); a++;} catch (ShapeException e)
{b++;} 13.
14.      System.out.printf("a=%d, b=%d", a, b);
15. }
16.}
```

What is the expected output ?a)

a=0, b=0
b) a=1, b=0
c)a=0, b=1
d) Compile time error at line 6.

164.Given the following:

```
1. class ShapeException extends Exception
{} 2.
3. class CircleException extends ShapeException {}
4.
5. public class Circle1 {
6.    void m1() throws CircleException {throw
new ShapeException();}
7.
8.    public static void main (String[] args) {
9.       Circle1 circle1 = new Circle1();
10.      int a=1, b=1;
11.
12.      try {circle1.m1(); a--;} catch (CircleException e) {b-
-;} 13.
14.      System.out.printf("a=%d, b=%d", a, b);
15. }
16.}
```

What is the expected output ?

a) a=1, b=1
b) a=0, b=1
c) a=1, b=0
d)Compile time error at line 6.

Topic: Flow Control

165.Suppose your code needs to traverse through an array named array1. Which code would you use to do this ?

a) for(int i = 0; i <= array1.length;
i++) b)for(int i = 0; i < array1.length;
i++)
c) for(int i = 0; i <= array1.length(); i++)
d) for(int i = 0; i < array1.length(); i++)

166.Which of the following is legal?

a)for (int i=0, j=1; i<10; i++, j++)
{ } b) for (int i=0, j=1; i<10; i++;
j++) { }
c) for (int i=0, j=1; i<10,j<10; i++, j++) { }
d) for (int i=0, float j=1.0; ; i++, j++) { }

167. Which option completes the code to print the message as long as number is greater than 20?

```
int number = 100 ;
MISSING CODE
{
  System.out.println("The number = " + number);
  number --;
}
```

a) do while (number > 20)
b) for (number > 20)
c)while (number > 20)
d) if (number >20)

168. Suppose you are writing code for a for loop that must execute three times.Which is the correct declaration for the loop?

a) for (int i < 4; i = 1; i++)
b) for (int i = 0; i < 4; i++)
c) for (int i = 1; i++; i < 4)
d) for (int i = 3; i >=1; i--)

169. Which flow control mechanism determines when a block of code should run more than once?

a) iteration
b) sequence
c) selection
d) exceptions

170. Which of the following is a legal loop definition?

a) while (int a == 0) { /* whatever */ }
b) do { /* whatever */ } while (int a = 0);
c) do { /* whatever */ } while (int a == 0);
d) for (int a=0; a<100; a++) { /* whatever */ }

171. Given the following code:

```
public class SwitchTest {
   public static void main(String [] args)
      { int i=5, j=0;
      switch(i){
         case 2: j+=3;
  case 4: j+=5;
         default : j+=1;
         case 0: j+=7;
      }
      System.out.println("j value " + j);
   }
}
```

What is the result?

a) j value 16
b) j value 8
c) j value 7
d) Compilation error ("default" should be at the last of the switch statement)

172. Given the following code:

```
public class TestBreak {
   public static void main(String [] args)
      { int i = 2;
      if (i < 2)
         { i++;
         break printAndExit;
      }
      i++
      ;
printAndExit:
      System.out.print(i);
   }
}
```

What will be the result of the above code?

a) 2
b) 3
c) 4
d) Compilation error

173. Given the following:

```
public class DoWhileTest {
    public static void main(String [] args)
      { int i=2, j=5;
      do
      {
         if(i++ > --j) continue;
      }while(i < 3);
      System.out.printf("i=%d,
      j=%d",i,j);
   }
}
```

After execution, what are the values of i and j?

a) i=4, j=4
b) i=3, j=4
c) i=2, j=4
d) i=2, j=5

174. Which statement is true about the following code fragment?

```
1. int j = 2;
2. switch (j) {
3.    case 2:
4.       System.out.println("value is two");
5.    case 2 + 1:
6.       System.out.println("value is three");
7.       break;
8.    default:
9.       System.out.println("value is " + j);
10.      break;
11. }
```

The code is illegal because of the expression at line 5.

a) The output would be
value is two
b) The output would be
value is two
value is three
c) The output would be
value is two
value is three
d) value is 2

175.Given the following:

```
public class TestLoop
{
   public static void main(String... args)
   {
      int index = 2;
      while( --index > 0
      )
         System.out.println( index );
   }
}
```

What is printed to standard output?

a)1
0
b) 1
2
c) 1
d) Nothing is printed

176.Given the following,

```
1. int i = 0;
2. label:
3.    if (i < 2) {
4.       System.out.print(" i is " +
i); 5.    i++;
6.       continue label;
7.    }
```

What is the result?

a) Compilation fails.
b) Produces no output
c) i is 0
d) i is 0 i is 1

177. Given the following:

```
public class TestLoop {
   public static void main(String... args)
      { outer: for( int i = 0; i <2; i++ )
      { inner: for( int j = 0; j < 2; j++ )
         { if( j==1 )
            continue outer;
            System.out.printf( "i=%d, j=%d\n",i,j);
         }
      }
   }
}
```

What is printed to standard output?

a) i=0, j=0
b) i=0, j=0
i=1, j=0
c) i=0,
j=0 i=0,
j=1
d) i=0, j=0
i=1, j=1

178. Given the following code:

```
public class PESTest {
   public static void main (String[] args)
      { int j = 0;
      do for (int i = 0; i++ <
         2;)
         System.out.print(i);
      while (j++ < 1);
   }
}
```
What is the result of attempting to compile and run the program?
a) Prints: 12
b)Prints: 1212
c) Prints: 121212
d) Compile-time error

179.Given:
```
  switch( i)
   {
      default :
        System.out.println("Hello");
   }
```
What is the acceptable type for the variable i?

a) byte
b) float
c) double
d) Object

180.Given the following code:
```
public class TestSwitch {
    public static void main(String args[])
        { byte b = -1;
        switch(b) {
            case -1: System.out.print("-1"); break;
            case 127: System.out.print("127"); break;
            case 128: System.out.print("128"); break;
            default: System.out.print("Default ");
}}
}
```
What is the result of attempting to compile and run the program?
a) Prints: -1
b) Prints: 128
c) Prints: Default
d) Compile-time error

181. Given the following code:
```
public class TestFor
    { static int i;
    public static void main(String args[]) {
        for (i=1; i<2; i++) {System.out.print(i);}    // Line 1
        for (int i=1; i<2; i++) {System.out.print(i);} // Line
        2int i;                                        // Line 3
        for (i=0; i<1; i++) {System.out.print(i);}    // Line 4
        System.out.print(TestFor.i);
}}
```
What is the result of attempting to compile and run the program?
a) Prints: 1100
b) Prints: 1102
c) Compile-time error at Line 1
d) Compile-time error at Line 4

182. For the code snippet:
```
int m = 0;
while( ++m < 2 )
    System.out.println( m );
```
What is printed to standard output?
a) 0
b)1
c) 2
d) Nothing is printed

183. Given the following code:
```
public class TestForSwitch {
    public static void main (String[] args)
        { for (int i = 0; i < 3; i++) {
 switch (i) {
                default: System.out.print("D");
                case 0: System.out.print("0");
                case 1: System.out.print("1");
}}}}
```
What is the result of attempting to compile and run the program?
a) Prints: DDD
b) Prints: 01D
c) Prints: 01D01
d)Prints 011D01

184. Given the following code:
```
class SwitchTest {
   public static void main(String args[])
      { int x = 3; int success = 0;
      do {
         switch(x) {
            case 0: System.out.print("0"); x += 5; break;
            case 1: System.out.print("1"); success++; break;
            case 2: System.out.print("2"); x += 1; break;
            case 3: System.out.print("3"); x -= 2; break;
            default: break;
         }
      } while ((x != 1) || (success < 2));
}}
```
What is the result of attempting to compile and run the program?
a) Prints: 3631
b) Prints: 3621
c) Prints: 311
d) Compile-time error

185.Given the following,
```
1. public class Test {
2.    public static void main(String [] args) {
3.       int i = 1;
4.       do while ( i < 1 )
5.          System.out.print(" i is " + i);
6.       while ( i > 1 ) ;
7.    }
8. }
```
What is the result?
a) i is 1
b) i is 1 i is 1
c)No output is produced.
d) i is 1 i is 1 ... in an infinite loop.

186. Given the following code:
```
public class JavaRunTest {
    public static void main (String[] args)
        { int i = 0, j = 8;
        do {
            if (j < 4) {break;} else if (j-- < 7)
            {continue;} i++;
        } while (i++ < 5);
        System.out.print(i + "," +
        j);
    }
}
```
What is the result of attempting to compile and run the program?
a) Prints: 5,4
b) Prints: 6,5
c) Prints: 6,4

d) Prints: 5,7

187. Given the following:

```
public class DoTest
{
   public static void main(String[] args)
   {
      boolean flag; int index=3;
      do
      {
         flag = false;
         System.out.print(index);
         index--;
         flag =
         (index>0);
         continue;
      } while ((flag) ? true : false);
   }
}
```

What will be the output of above code?
a) 3210
b)321
c) Will go into an infinite loop d)Compilation error

188. Given the following code:

```
1. public class
Test1 2. {
3.     public static void main(String[]
args) 4.  {
5.         int i=0;
6.         while(i)
7.         {
8.             if(i==4) break;
9.             i++;
10.        }
11.    }
12. }
```

What will be the value of i at line 11?
a) 0
b)4
c)5
d)The code will not compile.

189. Given the following code what is the effect of the parameter "num" passed a value of 1.

```
public class LoopTest {
   public static void process(int num)
   { loop: for (int i = 1; i < 2; i++){
            for (int j = 1; j < 2; j++)
               { if (num > j) {
                  break loop;
               }
               System.out.println(i * j);
            }
      }
   }
   public static void main (String[] args)
      { process(1);
   }
}
```

a) Generates a runtime error
b) 3
c) 2
d) 1

190. Given the following code:

```
public class TestIf {
public static void main(String[] args)
        { boolean bFlag = true;
        if (bFlag = false) {System.out.print("X");
        } else if (bFlag) {System.out.print("Y");
        } else {System.out.print("Z");}
}}
```

What is the result of attempting to compile and run the program?
a) Prints: X
b) Prints: Y
c) Prints: Z
d) Compile-time error

192. Given the following:

```
public class TestLoop2
{
   public static void main(String... args)
   {
      int count = 10;
      while( count++ < 11
      )
         System.out.println( count );
   }
}
```

What is the output ?
a) 10
11
b) 10
c) 11
d) Nothing is printed

193. Given the following:

```
public class TestDoWhile
{
   public static void main(String... args)
   {
      int count = 20;
      do {
         System.out.println( count );
      } while ( count++ < 21 );
   }
}
```

What is the output ?
a) 20
21
b) 20
c) 21
d) Nothing is printed

194. Given the following:

```
public class TestIfBoolean {
   public static void main(String[] args)
      { Boolean bFlag=null;
      if (bFlag) {
         System.out.print("A");
      } else if (bFlag == false)
         {
         System.out.print("B");
      } else {
         System.out.print("C");
      }
   }
}
```

What is the expected output ?
a) A
b) B
c) C

d) java.lang.NullPointerException is thrown at runtime

195. Given the following,
1. int j = 7;
2. label:
3. if (j > 5) {
4. System.out.print(" j is " +
j); 5. j--;
6. continue label;
7. }
What is the result?
a) j is 7
b) j is 7 j is 6
c) Compilation fails
d) Produces no output

Topic: Inheritance Concepts

195.Which statement is true?
a) A super() or this() call must always be provided explicitly as the first statement in the body of a constructor.
b) If both a subclass and its superclass do not have any declared constructors, the implicit default constructor of the subclass will call super() when run.
c) If neither super() nor this() is declared as the first statement in the body of a constructor, then this() will implicitly be inserted as the first statement.
d) If super() is the first statement in the body of a constructor, then this() can be declared as the second statement.

197.A class Car and its subclass Yugo both have a method run() which was written by the programmer as part of the class definition. If junker refers to an object of type Yugo, what will the following code do?
junker.run();
a) The run() method defined in Yugo will be called.
b) The run() method defined in Car will be called.
c) The compiler will complain that run() has been defined twice.
d) Overloading will be used to pick which run() is called.

198. Here is a situation:
Birthday happy;
happy = new AdultBirthday("Joe",
39); happy.greeting();
Which greeting() method is run ?
a) The one defined for Birthday because that is the type of the variable happy.
b) The one defined for AdultBirthday because that is the type of the object referred to by happy.
c) The one closest in the source code to the happy.greeting() statement.
d) The assignment statement where the AdultBirthday object is assigned to happy variable is an error.

199. Can an object of a child type be assigned to a variable of the parent type? For example,
Card crd;
BirthDay bd = new BirthDay("Lucinda",
42); crd = bd; // is this correct?
a) No-there must always be an exact match between the variable and the object types.
b) No-but a object of parent type can be assigned to a variable of child type.
c)Yes-an object can be assigned to a reference variable of the parent type.
d) Yes-any object can be assigned to any reference variable.

200. class A { A(int i) {} } // 1
class B extends A { } // 2
Which one of the following statements is correct?

a) compiler attempts to create a default constructor for class A.
b)Compile-time error at 1.
c) Compile-time error at 2.
d) Compiles successfully without any errors.

201. You want subclasses in any package to have access members of a superclass. Which is the most restrictive access modifier that will accomplish this objective?
a) public
b) private
c)protected
d)transient

202. What determines what method is run in the following:
Card crd = new BirthDay("Lucinda", 42);
crd.greeting();
a) The type of the object or the type of the reference variable?
b) The type of the object.
c) The type of the reference variable.
d) Both (type of object as well as the reference variable).

203. Which one of the following statement is false?
a) A subclass must override all the methods of the superclass.
b)It is possible for a subclass to define a method with the same name and parameters as a method defined by the superclass.
c) Aggregation defines a has-a relationship between a superclass and its subclasses.
d) Inheritance defines a is-a relationship between a superclass and its subclasses.

204. Which statement is true?
a) Inheritance defines a has-a relationship between a superclass and its subclasses.
b) Every Java object has a public method named equals.
c) Every Java object has a public method named length.
d) A final class can be extended by any number of classes

205. Which statement is true?
a) Private methods of a superclass cannot be overridden in subclasses.
b) A subclass can override any method present in a superclass.
c) An overriding method can declare that it throws more exceptions than the method it is overriding.
d) The parameter list of an overriding method must be a subset of the parameter list of the method that it is overriding.

206. Which statement is true?
a) The subclass of a non-abstract class can be declared abstract.
b) All the members of the superclass are inherited by the subclass.
c) A final class can be abstract.
d) A class in which all the members are declared private, cannot be declared public.

207. What restriction is there on using the super reference in a constructor?
a) It can only be used in the parent's constructor.
b) Only one child class can use it.
c) It must be used in the last statement of the constructor.
d) It must be used in the first statement of the constructor.

208. Given classes A, B, and C, where B extends A, and C extends B, and where all classes implement the instance method void doIt().

How can the doIt() method in A be called from an instance method in C?
a) super.doIt();
b) super.super.doIt();
c) A.this.doIt();
d) It is not possible.

209. Which one of the following statement is false?
a) The subclass of a non-abstract class can be declared abstract.
b) All members of the superclass are inherited by the subclass.
c) A final class cannnot be abstract.
d) A top level class in which all the members are declared private, can be declared public.

210. Which statement is true?
a) Public methods of a superclass cannot be overridden in subclasses.
b) Protected methods of a superclass cannot be overridden in subclasses.
c) Methods with default access in a superclass cannot be overridden in subclasses.
d) Private methods of a superclass cannot be overridden in subclasses.

211. Which statement is true?
a) A subclass must define all the methods from the superclass.
b) It is possible for a subclass to define a method with the same name and parameters as a method defined by the superclass.
c) Aggregation defines a is-a relationship between a superclass and its subclasses.
d) It is possible for two classes to be the superclass of each other.

212. Given the following:
```
class Vehicle { }
class FourWheeler extends Vehicle {
} class Car extends FourWheeler { }
public class TestVehicle
{
   public static void main(String[] args)
   {
      Vehicle v = new Vehicle();
      FourWheeler f = new FourWheeler();
      Car c = new Car();
      xxxxxxx
   }
}
```
Which of the following statement is legal, which can be substituted for xxxxxxx ?
a) v = c;
b) c = v;
c) f = v;
d) c = f;

213. Given the following,
```
1. class ParentClass {
2.    public int doStuff(int x) {
3.       return x * 2;
4.    }
5. }
6.
7. public class ChildClass extends ParentClass {
8.    public static void main(String [] args ) {
9.       ChildClass cc = new ChildClass();
10.      long x = cc.doStuff(7);
11.      System.out.println("x = " + x);
12. }
13.
14.  public long doStuff(int x) {
15.      return x * 3;
16. }
17. }
```
What is the result?
a) x = 14
b) x = 21
c) Compilation fails at line 2.
d) Compilation fails at line 14.

214.
```
1. public class TestPoly {
2.    public static void main(String [] args ){
3.    Parent p = new Child();
4.    }
5. }
6.
7. class Parent {
8.    public Parent() {
9.       super();
10.      System.out.println("instantiate a parent");
11. }
12.
}
13.
14. class Child extends Parent {
15.  public Child() {
16.      System.out.println("instantiate a child");
17.   }
18. }
```
What is the result?
a) instantiate a child
b) instantiate a parent
ic) nstantiate a child
instantiate a parent
d) instantiate a parent
instantiate a child

215.
```
1 abstract class AbstractIt
2 {
3    abstract float getFloat();
4 }
5 public class Test1 extends AbstractIt
6 {
7     private float f1 = 1.0f;
8     private float getFloat(){ return
f1;} 9
10 public static void main(String[] args)
11 {
12    }
13 }
```
a) Compilation error at line no 5
b) Runtime error at line 8
c)Compilation error at line no 8
d) Compilation succeeds

216.Given:
```
interface I1 {}
class A implements I1 {
}class B extends A {}
class C extends B {
   public static void main( String[] args)
      {B b = new B();
      xxxxxxx // insert statement here
   }
}
```
Which code, inserted at xxxxxxx, will cause a cte?
a) A a = b;
b) I1 i= (C)b;

c) I1 i= (A)b;
d) B b2 = (B)(A)b;

217.What will be the result of attempting to compile and run the following program?

```
public class Polymorphism {
   public static void main(String[] args)
    { A ref1 = new C();
      B ref2 = (B) ref1;
      System.out.println(ref2.f());
   }
}
class A { int f() { return 0; } }
class B extends A { int f() { return 1;
} } class C extends B { int f() { return
2; } }
```

a) The program will fail to compile.
b) The program will compile without error, but will throw a ClassCastException when run.
c) The program will compile without error and print 1 when run.
d) The program will compile without error and print 2 when run.

218. Say that class Rodent has a child class Rat and another child }class Mouse. Class Mouse has a child class PocketMouse. Examine the following

```
Rodent rod;
Rat rat = new Rat();
Mouse mos = new Mouse();
PocketMouse pkt = new PocketMouse();
```

Which one of the following will cause a compiler error?
a) rod = rat;
b) rod = mos;
c) pkt = null;
d) pkt = rat;

219. What would be the result of attempting to compile and executing the following code?

```
// Filename: MyClass.java
public class MyClass {
   public static void main(String[] args)
      { C c = new C();
      System.out.println(c.max(13, 29));
   }
}
class A {
   int max(int x, int y) { if (x>y) return x; else return y; }
}
class B extends A{
   int max(int x, int y) { return super.max(y, x) - 10; }
}
class C extends B {
   int max(int x, int y) { return super.max(x+10, y+10); }
}
```

a) The code will fail to compile because the max() method in B passes the arguments in the call super.max(y, x) in the wrong order.
b) The code will fail to compile because a call to a max() method is ambiguous.
c) code will compile without errors and will print 29 when run.
d) code will compile without errors and will print 39 when run.

220. Consider the following class heirarchies class A { }

```
class B extends A {
} class C extends B
{ }
```

And the following method declaration

```
public B doSomething ( ) {
   // some valid code fragments
   return xx;
}
```

Objects of which class (from the heirarchy shown above) can be safely substituted in place of xx in the method doSomething ( ) ?
a) Object of class A
b) An array object of class B
c) Object of class C
d) An array object of class C

221.Given the following code, which is the simplest print statement that can be inserted into the print() method?

```
// Filename: MyClass.java
public class MyClass extends MySuperclass
   { public static void main(String[] args) {
      MyClass object = new
      MyClass(); object.print();
   }
   public void print() {
      // INSERT CODE HERE THAT WILL PRINT
      // THE "Hello, world!" STRING FROM THE Message
      // CLASS.

}
class MySuperclass {
   Message msg = new Message();
}
class Message {
   // The message that should be printed:
   String text = "Hello, world!";
}
```

a) System.out.println(Message.text);
b) System.out.println(msg.text);
c) System.out.println(object.msg.text);
d) System.out.println(super.msg.text);

222. Given the following code, which of these constructors can be added to MySub class without causing a compile-time error? class

```
MySuper {
   int number;
   MySuper(int i) { number = i; }
}
class MySub extends MySuper
   { int count;
   MySub(int cnt, int num)
      { super(num);
      count=cnt;
   }
   // INSERT ADDITIONAL CONSTRUCTOR HERE
}
```

a) MySub() {}
b) MySub(int cnt) { count = cnt; super(cnt);
}c)MySub(int cnt) { this(cnt, cnt); }
d) MySub(int cnt) { super(cnt); this(cnt, 0); }

223. Given the following, class A {

```
   public void baz() {
      System.out.println("A");
   }
}
public class B extends A {
   public static void main(String [] args)
      { A a = new B();
      a.baz();
   }
   public void baz() {
      System.out.println("B");
```

```
   }
}
```
What is the result?
a)
A
b)B
c)Compilation fails.
d) An exception is thrown at runtime.

224. Given the following:
```
1. public class MyClass {
2.    public static void main(String[] args) {
3.    Derived d = new Derived("hello");
4.    }
5. }
6.
7. class Base {
8.    Base() { this("a", "b");
}9.
10. Base(String x, String y) { System.out.println(x + y); }
11.
}
12.
13. class Derived extends Base {
14.   Derived(String s) { System.out.println(s); }
15. }
```
What is the output?
a) It will print hello followed by ab.
b) It will print ab followed by hello.
c) It will print hello.
d) It will print ab

225. Given the code below:
```
1.    class Fruit {
2.    Fruit getInstance() {
3.    return this;
4.    }
5.    void print()
6.    {
7.    System.out.println("Fruit");
8.    }
9.    }
10. 10.
11.   public class Apple extends Fruit {
12.   Apple getInstance() {
13.   return this;
14. }
15. void print()
16. {
17. System.out.println("Apple");
18. }
19. public static void main(String... args)
20. {
21.   Fruit fr = new Apple().getInstance();
22.   fr.print();
23.   }
24.   }
```
What will be the output?
a) Fruit
b)Apple
c) Compilation error at Line 12; Return type of the overriding method getInstance() cannot be different from the return type of the overridden method of the super class.
d) java.lang.ClassCast Exception at Line 21 since Apple instance cannot be assigned to Fruit.

226. Given the following,
```
1. class B extends A {
2.    int getID() {
3.       return id;
4.    }
5. }
6. class C {
7.    public int name;
8. }
9. class A {
10.   C c = new C();
11.   public int id;
12. }
```
Which one is correct about instances of the classes listed above?
a) A is-a B
b) C is-a A
c) B has-a A
d) B has-a C

227.Given the following,
```
1. class Over {
2.    int doStuff(int a, float b) {
3.       return 7;
4.    }
5. }
6.
7. class Over2 extends Over {
8.    // insert code here
9. }
```
Which method, if inserted at line 8, will not compile?
a) public int doStuff(int x, float y) { return 4; }
b) protected int doStuff(int x, float y) {return 4;
}c)private int doStuff(int x, float y) {return 4; }
d)private int doStuff(int x, double y) { return 4;
}

228.Given:
```
abstract class Shape {
   public abstract void draw();
}
public class Circle extends Shape
   { public void draw() { }
}
```
Which one of the following statement is correct?
a) Shape s = new Shape();
s.draw();
b) Circle c = new
Shape(); c.draw();
c) Shape s = new
Circle(); s.draw();
d) Shape s = new
Circle(); s->draw();

229. Given the following code, which statement is true?
```
public interface HeavenlyBody { String describe(); }
class Star implements HeavenlyBody {
   String starName;
   public String describe() { return "star " + starName; }
}
class Planet {
   String name;
   Star orbiting;
   public String describe() {
      return "planet " + name + " orbiting " + orbiting.describe();
   }
}
```
a) The code will fail to compile.
b)The use of aggregation is justified, since Planet has-a Star.
c) The code will fail to compile if the name starName is replaced with the name bodyName throughout the declaration of the Star class.

d) An instance of Planet is a valid instance of a HeavenlyBody.

230. Given the
following, class Foo {
String doStuff(int x) { return "hello"; }
}
Which method would not be legal in a subclass of Foo?
a) String doStuff(int x) { return "hello"; }
b) int doStuff(int x) { return 42; }
c) public String doStuff(int x) { return "Hello"; }
d) protected String doStuff(int x) { return "Hello"; }

231.Given:
1. public class TestOverload
{ 2.
3. public void process()
{4. }
5.
6. public String process() {
7. return "hello";
8. }
9.
10. public float process(int x) {
11. return 67.5f;
12. }
13.}
What is the result?
a) An exception is thrown at runtime.
b) Compilation fails because of an error in line 10.
c) Compilation fails because of an error in line 6.
d) Compilation succeeds and no runtime errors with class TestOverload occur.

232. Given the following code:
```
class MySuper {
  final int calculate(int i, int j)
  {
    return i*j;
  }
}
public class MySub extends MySuper
  { int calculate(int i, int j)
  {
    return 2*i*j;
  }

  public static void main(String [] args)
    { MySuper sup = new MySub();
    int k = sup.calculate(2,5);
    System.out.println(k);
  }
}
```
What is the result?
a) 10
b) 20
c) Compilation error
d) An exception is thrown at runtime

233. Given the following classes and declarations, which statement is true?
```
// Classes
class Foo
{
  private int i;
  private void f() { /* ... */ }
  public void g() { /* ... */ }
}
class Bar extends Foo {
  public int j;
  public void g() { /* ... */ }
}
// Declarations:
// ...
  Foo a = new
  Foo(); Bar b =
  new Bar();
// ...
```
a) The statement b.f(); is legal.
b) The statement a.j = 5; is legal.
c) The statement a.g(); is legal.
d) The statement b.i = 3; is legal

234. **Say that class Rodent has a child class Rat and another child class Mouse. Class Mouse has a child class** PocketMouse. Examine the
following Rodent rod;
Rat rat = new Rat();
Mouse mos = new Mouse();
PocketMouse pkt = new PocketMouse();
Which of the following array declarations is correct for an array that is expected to hold up to 10 objects of types Rat, Mouse, and PocketMouse?
a) Rat[] array = new Rat[10];
b) Rodent[] array = new Rat[10];
c) Rodent[] array = new Rodent[10];
d) Rodent[10] array;

235. Given the following,
```
1. class MySuper {
2.   public MySuper(int i) {
3.   System.out.println("super " + i); 4.
     }
5. }
6.
7. public class MySub extends MySuper {
8.   public MySub() {
9.     super(2);
10.    System.out.println("sub");
11. }
12.
13. public static void main(String [] args) {
14.    MySuper sup = new MySub();
15.  }
16. }
```
What is the result?
a) sub
super 2
b) super 2
sub
c) Compilation fails at line 9.
d) Compilation fails at line 14.

236.Given:
```
public class Employee {

  private String empID;
  public String empName;
  private Integer age;
  public void setEmployeeInfo(String empID, String
empName, Integer age) {
    this.empID = empID;
    this.empName = empName;
    this.age = age;
  }
}
```
Which is true?

a) The class is fully encapsulated.
b)The empName variable breaks encapsulation.
c) The empID and age variables break polymorphism.
d) The setEmployeeInfo method breaks encapsulation.

237. Assuming Card is the base class of Valentine, Holiday and Birthday, in order for the following code to be correct, what must be the type of the reference variable card?

```
_____card;
card = new Valentine( "Joe", 14 ) ;
card.greeting();
card = new Holiday( "Bob" ) ;
card.greeting();
card = new Birthday( "Emily", 12 ) ;
card.greeting();
```

a) Valentine
b) Holiday
c) Birthday
d)Card

238. Given the following:

```
1. class Animal {
2.    String name = "No name";
3.    public Animal(String nm) { name = nm;
}4. }
5.
6. class DomesticAnimal extends Animal {
7.    String animalFamily = "nofamily";
8.    public DomesticAnimal(String family) { animalFamily =
      family;
}
9.  }
10.
11. public class AnimalTest {
12.    public static void main(String[] args) {
13.       DomesticAnimal da = new DomesticAnimal("cat");
14.       System.out.println(da.animalFamily);
15. }
16. }
```

What is the result ?
a) cat
b) nofamily
c) An exception is thrown at runtime.
d) Compilation fails due to an error in line 8.

239. What will be the result of attempting to compile and run the following program?

```
public class Polymorphism2 {
   public static void main(String[] args)
      { A ref1 = new C();
      B ref2 = (B) ref1;
      System.out.println(ref2.g());
   }
}
class A {
   private int f() { return 0;
   } public int g() { return
   3; }
}
class B extends A {
   private int f() { return 1; }
   public int g() { return f();
   }
}
class C extends B {
   public int f() { return 2; }
}
```

a) The program will compile without error and print 0 when run.
b) The program will compile without error and print 1 when run.
c) The program will compile without error and print 2 when run.
d) The program will compile without error and print 3 when run.

240. Given the following code:

```
class B { int m = 7; }
class D extends B { int m = 9;
} public class
TestBaseDerived {
   public static void main(String[] args)
   { B b = new B();
      D d = new D();
      B bd = new
      D();
      System.out.printf("%d %d %d", b.m, d.m, bd.m);
   }
}
```

What will be the output on executing the above code ?
a) 7 9 7
b) 7 9 9
c) 9 7 9
d) 9 9 7

241. Given the following,

```
1. class MyInherit {
2.    int calculate(int m, float n) {
3.       return 9;
4.    }
5. }
6.
7. class MyInheritChild extends MyInherit {
8.    // insert code here
9. }
```

Which method, if inserted at line 8, will NOT compile?
a) private int calculate(int a, float b) {return 25; }
b) private int calculate(int a, double b) { return 25; }
c) public int calculate(int a, float b) { return 25; }
d) protected int calculate(int a, float b) {return 25; }

Topic: Keywords, Literals, Identifiers

242. Which of the following keywords is reserved but not used in Java?
a) delete
b) const
c) constant
d) unsigned

243. Which of the following is a valid initialization ?
a) boolean b = TRUE;
b) float f = 27.893;
c) int i = 0xDeadCafe;
d) long l = 79,653;

244. Which of the following is a valid declaration of String ?
a) String S1=‘null’;
b) String S2=null;
c) String S3 = (String) ‘face’;
d) String S4=(String)\ufeed;

245. What is the correct way to create a String object whose value can be shared and which does not create new object for each similar declaration ?
a) StringBuffer hello = new StringBuffer(14);
b) String hello = new String("Welcome to Java");
c) String hello = "Welcome to Java";
d) String hello[] = "Welcome to Java";

246. What is the default data type of the literal represented as 48.0 ?
a) float

b)double
c) int
d) byte

247. Which of the following is a valid declaration of char ?
a) char ch="a";
b) char ch = ‘cafe’;
c) char ch = ‘\ucafe’;
d) char ch = ‘\u10100’;

248. Which of the following is a non-primitive data type in Java?
a) int
b) float
c) String
d) double

249. Which of the following is a reserved word in the Java programming language ?
a) reference
b) method
c)native
d) array

250. Which of the following describes an incorrect default value for the types indicated?
a) float -> 0.0f
b) boolean -> false
c) Dog -> null
d) String -> "null"

251. Which statement is true?
a) return, goto, and default are keywords in the Java language.
b) new and delete are keywords in the Java language.
c) exit, class, and while are keywords in the Java language
d) static, unsigned, and long are keywords in the Java language

252. Which of the following variable initialization is invalid?
a) byte myByte=254;
b) double myDouble=12341.509D;
c) int myInt = 0xFACE;
d)long myLong=45678L;

253. Which of the following is a valid Java identifier?
a) _underscore
b) %percent
c) @attherate
d) 3numbers

254. To create a class level constant, which of the following two keywords should be used:
a) public and constant
b) const and final
c) final and constant
d) final and static

255. Which of the following is an invalid initialization ?
a) byte y=0x7a;
b) short s=679;
c)boolean b=FALSE;
d) double d=14.67f;

256. Which of the following is an invalid intialization ?
a) float f = 85.3f;
b) byte t = 0x5e;
c) long l = 9876L;
d)boolean n = TRUE;

257.Given:
```
1. public class Test {
2.    public static void main(String[] args) {
3.       unsigned byte b=0;
4.       b--;
5.
6.    }
7. }
```
What is the value of b at line 5?
a) -1
b) 255
c) Compilation error at line 3 as there is nothing like unsigned byte in Java.
d) Compilation succeeds and throws runtime exception at line 4.

258.What is the result of compiling and executing the below code ?
```
1. public class
Test 2. {
3.    public static void main(String[]
args) 4.  {
5.       byte b=127;
6.       byte c=15;
7.       byte a = b + c;
8.    }
9. }
```
a) Throws runtime exception at line no 7 saying "out of range".
b) Compilation succeeds and a takes the value of 142.
c) Compilation error at line 5. Byte cant take value of 127.
d) Compilation error at line 7.

259. What will be the output after compiling the following statements?
```
public class TestIdentifier
{
  public static void main(String[] args)
  {
    double volatile = 21+3.775;
    System.out.println(volatile);
  }
}
```

a) 25
b) 24.775
c) 24
d) Compilation error as volatile is a keyword and cannot be used as identifier.

260. What is the result of compiling and executing the below code ?
```
1. public class
Test 2. {
3.    public static void main(String[]
args) 4.  {
5.       byte b1=198;
6.       byte b2=1;
7.    System.out.println(b1+b2); 8.
      }
9. }
```
a) Compilation error at Line 5.
b) Compilation error at Line 7.
c) Prints 199
d) Prints a number different from 199.

261.What results would print from the following code snippet:System.out.println("12345 ".valueOf(54321));
a) 12345 54321

b)54321
c) The application won't compile.
d) Runtime error

262.Given:
1. public class ValueCheck {
2. public static void main(String[] args) {
3. unsigned byte y = -1;
4. y++;
5.
6. }
7. }
What is the value of y at line 5?
a) 0
b) 2
c)Compilation error at line 3 as there is nothing like unsigned byte in Java.
d) Compilation succeeds and throws runtime exception at line 4.

263.What is the result of compiling and executing the below code ?
1. public class
ByteTest 2. {
3. public static void main(String[]
args) 4. {
5. byte x=100;
6. byte y=127;
7. byte z = x + y;
8. }
9. }
a) Throws runtime exception at line no 7 saying "out of range".
b) Compilation succeeds and a takes the value of 227.
c) Compilation error at line 6. Byte cant take value of 127.
d)Compilation error at line 7.

264. What will be the output after compiling the following statements?
```
public class TestIdentifier
{
  public static void main(String[] args)
  {
    float volatile = 53+4.289;
    System.out.println(volatile);
  }
}
```
a) 58
b) 57.289
c) 57
d) Compilation error as volatile is a keyword and cannot be used as identifier.

265. What is the result of compiling and executing the below code ?
1. public class
Test 2. {
3. public static void main(String[]
args) 4. {
5. byte y1=3;
6. byte y2=225;
7. System.out.println(y1+y2);
8. }
9. }
a) Compilation error at Line 6.
b) Compilation error at Line 7.
c) Prints 228
d) Prints a number different from 228.

266.What results would print from the following code snippet:System.out.println("ABCDE
".valueOf(98765));
a) ABCDE
98765 b)98765
c) The application won't compile.
d) Runtime error

267.Given:
1. public class TestByte
{ 2.
3. public static void main(String[] args) {
4. unsigned byte t=255;
5. t++;
6.
7. }
8. }
What is the value of t at line 6?
a) Compilation succeeds and throws runtime exception at line 5.
b)Compilation error at line 4 as there is nothing like unsigned byte in Java.
c) 256
d) 0

Topic: Primitive Types, Objects, References

268. Which range of values is valid for all integral types, where nis the number of bits?
a) 2^(n-1) to 2^(n+1)+1
b) -2^(n-1) to 2^(n-1)-1
c) -2^(n-1) to 2^(n-1)+1
d) -2^(n)-1 to 2^(n-1)-1

269. Given char c = 'A';
What is the simplest way to convert the character value in c into an int?
a) int i = Character.getNumericValue(c);
b) int i = (int) c;
c) int i = int (c);
d) int i = c;

270. Which primitive type ranges from -2^31 to (2^31)-1?
a) long
b) int
c) short
d) byte

271. The primitive type char in Java consists of
a) 8 bits
b)16 bits
c) 24 bits
d) 32 bits

272. In which of these variable declarations will the variable remain uninitialized unless explicitly initialized?
a) Declaration of an instance variable of type boolean
b) Declaration of a static variable of type double
c)Declaration of a local variable of type short
d) Declaration of a static variable of type String

273. Examine the following section of code:
int area;
int perimeter;
String name;
How many objects have been created?
a) None, there is one object reference variable, but no objects yet.
b) One, there is one object reference variable so there must be one object.

c) Three, one for each variable.
d) Two, one for each data type.

274. What is the numerical range of char?
a) -128 to 127
b) -(2 ^ 15) to (2 ^ 15) -1
c) 0 to 32767
d) 0 to 65535

275. If i is an int and s is a short, how do you assign i to s?
a) i = s;
b) i = (int) s;
c) s = (short) i;
d) s = i;

276. Which one of the following primitive type conversion is permitted implicitly without using casting?
a) long to int
b) double to long
c) float to double
d) double to float

277. In which of the following answers does the number of bits increase from fewest (on the left) to most (on the right)?
a) byte long short int
b) int byte short long
c)byte short int long
d) short byte long int

278. Which of the following is a valid declaration of boolean?
a) boolean b2 = no;
b) boolean b3 = yes;
c)boolean b4 = false;
d) boolean b5 = Boolean.false();

279. Which primitive type ranges from -2^15 to (2^15)-1?
a) char
b) int
c)short
d) byte

280. Given :
int a = 4;
byte b = 0;
Which line assigns the value of a to b?
a) b = a;
b)b = (byte) a;
c) b = byte a;
d)b = byte(a);

281. Which of the following primitive data type is an integer type?
a) boolean
b) byte
c) float
d) double

282. Given the following code within a method, which statement is true?
int a,b;
b=5;
a) Local variable a is not declared.
b) Local variable b is not declared.
c) Local variable a is declared but not initialized.
d) Local variable b is declared but not initialized.

283.Given:
int index =
2;
boolean[] test = new boolean[3];
boolean foo = test [index];
What is the result?
a) foo has the value of 0.
b) foo has the value of null.
c) foo has the value of true.
d) foo has the value of false.

284. Given the following:
```
1 public class Test {
2    public static void add( Integer i)
3    {
4       int val =
i.intValue(); 5       val
+=3;
6       i = new Integer(val);
7    }
8
9    public static void main (String[]
args) 10 {
11      Integer i = new Integer(0);
12      add(i);
13      System.out.println(i.intValue());
14 }
15 }
```
What will be the output?
a) Compilation error
b) Run time error at Line no. 4
c) 3
d) 0

285. What will be the result of attempting to compile and run the following program?
```
public class Integers {
   public static void main(String[] args) {
      System.out.println(0x10 + 10 +
      010);
   }
}
```
a) The program will not compile. The compiler will complain about the expression 0x10 + 10 + 010
b) When run, the program will print 30
c) When run, the program will print 34
d) When run, the program will print 101010

286.
```
public class Test
{
   static void operate( StringBuffer x, StringBuffer y)
   {
      x.append(y);
      y = x;
   }
   public static void main(String[] args)
   {
      StringBuffer x = new
      StringBuffer("Sun"); StringBuffer y =
      new StringBuffer("Java"); operate(x,y);
      System.out.println(x + "," + y);
   }
}
```
What is the result?
a)The code compiles and prints "Sun,Java".
b) The code compiles and prints "Sun,Sun".
The code compiles and prints "Java,Java".
b) The code compiles and prints "SunJava,java".
c)The code compiles and prints "SunJava,SunJava".
d)None of the above

287. public class Test1
```
{
   private float f1 = 1.0f;
 float getFloat(){ return f1;}
   public static void main(String[] args)
   {
      String foo = "ABCDE";
      foo.substring(3);
      foo.concat("XYZ");
      System.out.println(foo);
   }
}
```
What will be the output?
a) Compilation error in the line where "substring" is invoked
b) ABXYZ
c) ABCX
YZ
d)ABCD
E

288. What will be the result of attempting to compile and run the following class?
```
public class Assignment {
   public static void main(String[] args)
      { int a, b, c;
      b = 10;
      a = b = c = 20;
      System.out.println(a);
   }
}
```
a) The code will fail to compile, since the compiler will recognize that the variable c in the assignment statement a = b = c = 20; has not been initialized.
b) The code will fail to compile because the assignment statement a = b = c = 20; is illegal.
c) The code will compile correctly and will display 10 when run.
d) The code will compile correctly and will display 20 when run.

289.
Given:
int index = 2;
Boolean[] test = new Boolean[3];
Boolean foo = test [index];
What is the result?
a) foo has the value of true.
b) foo has the value of false.
c)foo has the value of null.
d) foo has the value of 0.

Topic: String Concepts

290. What function does the trim() method of the String class perform?
a) It returns a string where the leading white space of the original string has been removed.
b) It returns a string where the trailing white space of the original string has been removed.
c) It returns a string where both the leading and trailing white space of the original string has been removed.
d) It returns a string where all the white space of the original string has been removed.

291. Which one of the following operators cannot be used in conjunction with a String object?
a) +
b) -
c) +=
d) .

292. Which method is not defined in the StringBuffer class?
a) trim()
b) length()
c) append(String)
d) reverse()

293. Which method is not defined in the String class?
a) reverse()
b) length()
c) concat(String)
d)hashCode()

294. Which statement concerning the charAt() method of the String class is true?
a) The index of the first character is 1.
b) The charAt() method returns a Character object.
c) The expression "abcdef".charAt(3) is illegal.
d) expression "abcdef".charAt(3) evaluates to the character 'd'.

295. Which one of the statements is true?
a) StringBuffer is thread safe whereas StringBuilder is not thread safe
b) StringBuffer is not thread safe whereas StringBuilder is thread safe
c) Both String and StringBuilder are immutable
d) Both StringBuffer and StringBuilder are immutable

296.Which one of the expressions will evaluate to true if preceded by the following code?
String a = "hello";
String b = new
String(a); String c = a;
char[] d = { 'h', 'e', 'l', 'l', 'o' };
a) (a == "Hello")
b) (a == b)
c) a.equals(b)
d) a.equals(d)

297. Which one of the expressions will evaluate to true if preceded by the following code?
String str1 = "unread";
String str2 = new
String(str1); String str3 =
str1;
char[] str4 = { 'u', 'n', 'r', 'e', 'a', 'd' };
a) (str1 == "Unread")
b) (str1 == str2)
c) str1.equals(str2)
d) str1.equals(str4)

298. Which expression will extract the substring "kap" from a string defined by String str = "kakapo"?
a) str.substring(2, 2)
b) str.substring(2, 3)
c) str.substring(2, 4)
d) str.substring(2, 5)

299. Which one of the following statements is true?
a) String class cannot be subclassed.
b) Subclasses of the String class can be mutable.
c) All objects have a public method named clone().
d) The expression ((new StringBuffer()) instanceof String) is always true.

300. Given the code snippet:
String str = new String("Hello");
Which of the below mentioned is an invalid call ?

a) str.replace('H','h');
b) str.substring(2);
c) str.append("World");
d) str.trim();

301. Given the following,

```
1. public class StringRef {
2.    public static void main(String [] args) {
3.       String s1 = "abc";
4.       String s2 = "def";
5.       String s3 = s2;
6.       s2 = "ghi";
7.       System.out.println(s1 + s2 + s3);
8.    }
9. }
```

What is the result?
a) abcdefghi
b) abcdefdef
c) abcghidef
d) abcghighi

302.Given the following code snippet,

```
13. String x = new String("xyz");
14. y = "abc";
15. x = x + y;
```

How many String objects have been created? Assume the code given above is a portion of the code present in a method.
a) 2
b) 3
c) 4
d) 5

303.Given the following:

```
public class TestSubstring {
   public static void main(String[] args)
      { String str = "international";
      str = str.substring(6,9);
      char b = str.charAt(2);
      str = str + b;
      System.out.println(str);
   }


}
```

What is the result? Assume the code given above is a portion of the code present in a method.
a) atia
b)atii
c) atioa
d) atiot

304.What will be the result of attempting to compile and run the following code?

```
public class StringMethods {
   public static void main(String[] args)
      {String str = new String("eenny");
      str.concat(" meeny");
      StringBuffer strBuf = new StringBuffer(" miny");
      strBuf.append(" mo");
      System.out.println(str + strBuf);
   }
}
```

a) The program will print "eenny meeny miny" when run.
b) The program will print "eenny meeny miny mo" when run.
c) The program will print "meeny miny mo" when run.
d) The program will print "eenny miny mo" when run.

305. What will be the result of attempting to compile and run the following code?

```
public class RefEq {
   public static void main(String[] args)
      { String s = "ab" + "12";
      String t = "ab" + 12;
      String u = new String("ab12");
      System.out.println((s==t) + " " +
      (s==u));
}

}
```

a) The program will print true true when run.
b) The program will print false false when run.
c) The program will print false true when run.
d) The program will print true false when run.

306. Given the following code snippet,

```
      String x = "xyz";
      x.toUpperCase();
      String y = x.replace('Y',
      'y'); y = y + "abc";
      System.out.println(y);
```

What is the result? Assume the code given above is a portion of the code present in a method.
a) abcXyZ
b) abcxy
z
c)xyzabc
d) XyZabc

307. Given the following:

```
public class TestStringBuffer {
   public static void main(String[] args) {
      StringBuffer strBuff = new StringBuffer("java
      platform"); strBuff.deleteCharAt(4);
      System.out.println(strBuff);
   }
}
```

What is the output ?
a) jav
b)java
c) platform
d) javaplatform

308. What will be the result of attempting to compile and run the following program?

```
public class MyClass {
   public static void main(String[] args)
      {String s = "hello";
      StringBuffer sb = new
      StringBuffer(s); sb.reverse();
      if (s == sb) System.out.println("a");
      if (s.equals(sb)) System.out.println("b");
      if (sb.equals(s)) System.out.println("c");
   }
}
```

a) The program will throw a ClassCastException when run.
b) The code will fail to compile since the expression (s == sb) is illegal.
c) The code will fail to compile since the expression (s.equals(sb)) is illegal.
d) The program will print c when run.

309. What will be the result of attempting to compile and run the following program?

```
public class MyClass {
   public static void main(String[] args) {
      StringBuffer sb = new StringBuffer("have a nice day");
```

```
    sb.setLength(6);
    System.out.println(sb);
  }
}
```
a) The code will fail to compile since there is no method named setLength in the StringBuffer class.
b) The program will throw a StringIndexOutOfBoundsException when run.
c) The program will print "have a" when run.
d) The program will print "ce day" when run.

310. What will the following program print when run?
```
public class Search {
  public static void main(String[] args)
    { String s = "Contentment!";
    int middle = s.length()/2;
    String nt = s.substring(middle-1, middle+1);
    System.out.println(s.lastIndexOf(nt, middle));
  }
}
```
a) 2
b) 4
c) 5
d) 7

311. What will be the result of attempting to compile and run the following code?
```
class MyClass {
  public static void main(String[] args)
    { String str1 = "str1";
    String str2 =
    "str2"; String str3
    = "str3";
    str1.concat(str2);
    System.out.println(str3.concat(str1));
  }
}
```
a) The program will print str3str1 when run.
b) The program will print str3str1str2 when run.
c) The program will print str3 when run.
d) The program will print str3str2 when run.

312. Which one of the following is not legal?
a) System.out.println("st".concat("ep"));
b) System.out.println("st" + "ep");
c) System.out.println('s' + 't' + 'e' + 'p');
d) System.out.println("st" + new String('e' + 'p'));

313. What will be written to the standard output when the following program is run?
```
import static java.lang.System.out;
public class TestOutput {
  public static void main(String[] args)
    { String space = " ";
    String composite = space + "windows" + space +
  space; composite.concat("server");
    String trimmed = composite.trim();
    out.println(trimmed.length());
  }
}
```
a) 7
b) 9
c) 13
d) 15

314. Which expression will evaluate to true?
a) "Hello there".toLowerCase().equals("hello there")
b) "HELLO THERE".equals("hello there")
c) ("hello".concat("there")).equals("hello there")
d) "Hello There".compareTo("hello there") == 0

315. Given the following code snippet,
```
4. String d = "bookkeeper";
5. d.substring(1,7);
6. d = "w" + d;
7. d.append("woo");
8. System.out.println(d);
```
What is the result? Assume, the code given above is a portion of the code present in a method.
a) wookkeewoo
b) wbookkeewoo
c) Compilation fails.
d) An exception is thrown at runtime.

316. What will be the result of attempting to compile and run the following code?
```
public class TestStringOperation {
  public static void main(String[] args)
  {
    String str1 = new
    String("java"); str1.concat("
    world");
    StringBuffer strBuf1 = new StringBuffer("
    magazine"); strBuf1.append(" article");
    System.out.println(str1 + strBuf1);

}
```
a) The program will print "java magazine article" when run.
b) The program will print "world magazine article" when run.
c) The program will print "java world magazine" when run.
d) The program will print "java world magazine article" when run.

Topic: Package, Import, Jar Concepts

317. Which is true about the import statement in Java?
a) When .* is used in an import statement, all the classes in that package and the sub-packages will be imported.
b) The import statements must appear before any package statement is declared.
c) The import statement must be the first statement after any package declaration in a file.
d) The import statement is mandatory when using classes of other packages since there is no other way to use a class.

318. The JAR files are packaged using the following format
a) TAR
b) ZIP
c) ARJ
d) CAB

319. In order to run a jar file, say "app.jar" using the command "java -jar app.jar", what condition should be satisfied?
a) app.jar should be given executable permission
b) The manifest file of the jar should specify the class whose main method should be executed.
c) "-jar" is an invalid option for java command and an error will be displayed.
d) There should be a class "app.class" with the same name as the jar file for the command to work.

320. Which one of the following is not a valid header in the manifest of jar file?
a) Specification-Title
b) Application-Version
c) Implementation-Vendor
d) Name

321.A special file which is present inside the JAR that contain information about the files packaged in a JAR file is known as
a) Metafest
b) Metadata
c) Manifest
d) Manidata

322. You decide that you wish to add your application's class to a group of classes that are stored in the location /examples/basics. Complete the code to do this
a) package examples.basics;
b) import examples.basics;
c) import package examples.basics;
d) package examples/basics;

323. We want the code in Test.java to access the example.basics.Utilities class which is stored within the example.jar file in the directory /jars. How would you compile your code?
a) javac -classpath /jars/example.jar Test.java
b) javac -classpath /jars/example Test.java
c) javac -classpath /jars/ Test.java
d) javac -classpath /jars Test.java

324. Suppose you are creating a class named Button that you want to include in a group of related classes called controls. Identify the correct code that includes the class in that group.
a) package controls;
b) public class Button
c) package Button;
d) import controls;

325. Which is true about the package statement in Java?
a) It can appear anywhere in the file as long as the syntax is correct.
b) It should appear after all the import statements but before the class declaration.
c) There can be more than one package statement.
d) It should be the first non-comment line in the Java source file.

326. Following is a file format which enables to bundle multiple files into a single file
a) JPG
b) PNG
c) TIF
d) JAR

327. Which is the manifest header that is used to specify the application's entry point in a JAR file?
a) Class-Path
b) Entry-Class
c) Start-Class
d) Main-Class

328. Suppose a class named App1 is located in the samples.messages package. You have compiled the class. How do you execute the class?
a) java App1
b) java samples.messages.App1
c) javac samples.messages.App1
d) java samples.messages.App1.class

329. Why is the main() method special in a Java program?
a) It is where the Java interpreter starts whole program running.
b) Only the main() method may create objects.
c) Every class must have a main() method.
d) main() method must be the only static method in a program.

330. Given the following code:
```
public class Test {
   public static void main(String[] args)
   {
     System.out.println(args[0]);
   }
}
```
If the above code is compiled and run as follows
java Test Hello 1 2 3
What would be the output ?
a) java
b) Test
c) Hello
d) Hello 1 2 3

Topic: Command Line, System Properties

331. Given the below mentioned code and the command-line invocation as,

```
java CommandArgsThree 1 2 3
      public class CommandArgsThree {
      public static void main(String [] args)
      { String [][] argCopy = new
      String[2][2]; int x;
      argCopy[0] = args;
      x = argCopy[0].length;
      for (int y = 0; y < x;
      y++) {
      System.out.print(" " + argCopy[0][y]);
      }
      }
      }
```
What is the result?
a) 0 0
b) 1 2
c) 0 0 0
d) 1 2 3

332. Given the below mentioned code and the command-line invocation as,
java CommandArgsTwo 1 2 3
```
1. public class CommandArgsTwo {
2.    public static void main(String [] argh) {
3.       String [] args;
4.       int x;
5.       x = argh.length;
6.       for (int y = 1; y <= x; y++) {
7.          System.out.print(" " +
argh[y]); 8.          }
9.    }
10. }
```
What is the result?
a) 0 1 2
b) 1 2 3
c) 0 0 0
d) An exception is thrown at runtime

333. Given the following code:
```
public class Test {
   public static void main(String[] args)
   {
      System.out.println(args.length);
   }
}
```
If the above code is compiled and run as follows
java Test Hello 1 2 3

What would be the output ?
a) 6
b) 5
c) 4

334. Given A.java contains
class A {public static void main(String... args) {}}
// 1 and B.java contains
class B {protected static void main(String[] args) {}} // 2
What is the result of attempting to compile each of the two class declarations and invoke each main method from the command line?
a) Compile-time error at line 1.
b) Compile-time error at line 2.
c) An attempt to run A from the command line fails.
d) An attempt to run B from the command line fails.

335. Given the below mentioned code and the command-line invocation as,
java CommandArgs 1 2 3 4

```
1. public class CommandArgs {
2.    public static void main(String [] args) {
3.       String s1 = args[1];
4.       String s2 = args[2];
5.       String s3 = args[3];
6.       String s4 = args[4];
7.    System.out.print(" args[2] = " + s2);
8.    }
9. }
```

What is the result?
a) args[2] = 2
b) args[2] = 3
c) args[2] = 1
d) An exception is thrown at runtime

336. Given the following code:

```
public class Foo {
   public static void main(String[] args)
   {
      System.out.println(args[1]);
   }
}
```

If the above code is compiled and run as follows
java Foo Apples 9 8 7
What would be the output ?
a) java
b) Foo
c) Apples
d) 9

337. Given the below mentioned code and the command-line invocation as,
java CommandArgsFour 9 6 3

```
public class CommandArgsFour {
   public static void main(String [] argh)
      { String [] args;
      int a;
      a = argh.length;
      for (int b= 1; b < a; b++) {
         System.out.print(" " + argh[b]);
      }
   }
}
```

What is the result?
a) null null
b) 9 6
c) 6 3
d) An exception is thrown at runtime

338. Given the below mentioned code and the command-line invocation as,
java CommandArgsFive 9 8 7 6

```
public class CommandArgsFive {
   public static void main(String [] args)
      { Integer i1 = new Integer(args[1]);
      Integer i2 = new Integer(args[2]);
      Integer i3 = new Integer(args[3]);
      Integer i4 = new Integer(args[4]);
      System.out.print(" args[3] = " + i3);
   }
}
```

What is the result?
a) args[3] = 8
b) args[3] = 7
c) args[3] = null
d) An exception is thrown at runtime

Topic: WiproStyle

339. When does 'Avoid magic numbers' rule in WiproStyle throw a violation?
a) Integer variable is declared
b) A numeric literal that is not defined as a constant is detected
c) When the integer variable is made global
d) No such rule in WiproStyle

340. Which of the following are advantages of using WiproStyle for code review?
a) Reduces code review effort
b) Code is generated automatically
c) Code can be reverse engineered
d) All the above

341. Which of the following can be used to automate code review in Java?
a) Junit
b) Jprofiler
c)WiproStyle
d) None of the above

342. Which of the following is correct with respect to severity level information in Static Analyzers?
a) Severity levels information helps to fix only the violations with critical severity
b) Severity levels information helps to ignore the violations with minor severity
c) Severity levels information helps in better prioritization of violations
d) All of the above

343. What is WiproStyle?
a) WiproStyle is a unit testing tool
b)WiproStyle is a static analysis tool
c) WiproStyle is a structural analysis tool
d) WiproStyle is a testing tool

344. Which of the following refers to the analysis of computer software that is performed without actually executing programs?
a) runtime analysis
b) static analysis
c) profiling
d) none of the above

345. What are coding standards?

a) Standards to avoid code construct having high probability of resulting in an error.
b) Standards to be followed during System testing.
c) Stdards used for defining designing guidelines for the system.
d) Standards that cannot be followed during the CUT phase

346. Which of the WiproStyle rule is violated in below snippet of code,

```
public class Sample{
   public int method1() {
      int a =10; int b=20;
      int c = a*b;
      return c;
   }
}
```

a) Minimize the number of lines by joining multiple shorter lines
b) Avoid return statements
c) Declare all variables in a single line
d) Avoid multiple variable declaration in single line

347. Which of the following is a benefit of using static analyzer?
a) Non-Compliance to coding guidelines can be detected automatically.
b) Unit testing can be performed
c) Code coverage can be measured
d) can reverse engineer the code

348. Which is the earliest phase in which Wiprostyle can be used?
a) System testing
b) Design
c) Requirements
d) Coding

349. Which of the WiproStyle error category is violated in below snippet of code,

```
class Foo{
   public void testA () {
      System.out.println("Entering test");//VIOLATION
   }
}
```

a) Maintainability
b) Security
c) Reliability
d) Efficiency

350. Which of the WiproStyle error category is violated if we use tab character in our source code?
a) Maintainability
b) Efficiency
c) Reliability
d) Portability

351. Which of the following rules does WiproStyle handle?
a) Rules to detect code coverage
b) Formatting ,naming conventions, java doc
c) Rules to detect failed test cases
d) None of the above

352. Which of the software code quality attribute can be improved by following consistent formatting standard?
a) Security
b) Maintainability
c) Efficiency
d) Formatting related standards do not improve any code quality attributes

353. Which of the following violations is thrown by WiproStyle in below code section?

```
public class SrrayListExample
  { int method(int a, int b) {
    int i = a +
     b; return i;
        }
}
```

a) Use arraylist instead of vector
b) Class should define a constructor
c) Avoid instantiating string objects
d) Unused import

354. Which of the following violations is thrown by WiproStyle in below code section?

```
public  class  Foo
{    public    void
bar() { int x = 2;
   switch  (x)
     { case 2:
      int j = 8;
 }
}
}
```

a) Avoid Nested Blocks
b) Use arraylist instead of vector
c) Missing Switch Default
d) Multiple variable declaration on the same line

355. Which of the following violations is thrown by WiproStyle in below code section?

```
class A{
int x, y,
z;
String firstName, LastName;
int myAge, mySize, numShoes =
28; int a = 4, b = 5, c = 6;
}
```

a) Avoid Nested Blocks
b) Multiple variable declaration on the same line
c) Empty Block
d) Missing Switch Default

356. Which of the following violations is thrown by WiproStyle in below code section?

```
public class SampleViolation{

 protected void finalize () throws Throwable { // VIOLATION
 }
}
```

a) Empty Block
b) Avoid Nested Blocks
c) Use SuperFinalize()
d) Missing Switch Default

357. Which of the following options should be used to correct the violation on line 9?

```
1.class Foo {
2. void bar()
{3.try
4.{
5. compressThumbnailToDisk(metadata, image);
6.}
7.catch (IOException e)
8.{
9.   e.printStackTrace();          //Violation
```

10. throw new ResourceError(e.getMessage());
11.}
a) System.out.println()
b) java doc
c) System.print.err
d) logger

358. Which of the following violations is thrown by WiproStyle in below code section?
public class SampleViolation {
public int publicVariable; // VIOLATION
protected int protectedVariable; //
VIOLATION int packageVariable; //
VIOLATION
}
a) Trailing Array Comma
b) Visibility Modifier
c) SuperFinalize
d) Missing Switch Default

359. Which of the following violations is thrown by WiproStyle for below code section?
import java.*;
import java.util.*;
import
java.io.IOException; public
void Helllo{
}
a) Use only Star (Demand) Imports
b) Trailing Array Comma
c) Avoid Star (Demand) Imports
d) Avoid multiple import statements

360. Which of the following violations is thrown by WiproStyle in below code section?
public interface Foo {
public void method (); //
VIOLATION abstract int getSize ();
// VIOLATION static int SIZE =
100; // VIOLATION
}
a) Redundant Modifier
b) Trailing Array Comma
c) Avoid Star (Demand) Imports
d) SuperFinalize

361. "Explicitly invalidate Session when user logs off" . This rule address
a) Java secure coding
b) Concurrency and Timing problems
c) Data handling problems
d) Logical
problems
websession

362. Which of the following violations will be thrown on the given code snippet.
class Foo { boolean bar(String a, String b) { return a == b; }}
a) Do not instantiate a StringBuffer with a char
b) Use equals() to compare object references
c) Avoid chaining assignment operators
d) Always initialize static fields

363. What violation is expected to be thrown by wiprostyle on the below code ?
public class Test {
int method (int a, int b) {
int i = a + b; return i; // Violation
}
a) Simple Statements - line with more than a single statement
b) Avoid chaining assignment operators
c) Trailing Array Comma
d) Avoid assignments in operands

364. public int convert(String s)
{int i, i2;
i = Integer.valueOf(s).intValue(); // Violation
i2 = Integer.valueOf(i).intValue(); // Violation
return i2;
}
What is the cause of the violation in the above code , that wiprostyle may throw.
a) Do not add empty strings
b) Consider replacing this Vector with the newer java.util.List
c) Unneccessary Wrapper Object creation
d) Avoid instantiating String objects; this is usually unnecessary

365. public class Foo
{public void bar() {
try {
// do something
} catch (Throwable th) { //violation
th.printStackTrace();
}
}
}
a) Avoid using exceptions as flow control
b) Avoid catching NullPointerException; consider removing the cause of the NPE
c)Avoid throwing raw exception types
d) A catch statement should never catch throwable since it includes errors

366. public class InvokeWait {
public void method () throws InterruptedException {
wait (); // VIOLATION
} What is the cause of the above violation.
a) Avoid using exceptions as flow control
b) Avoid throwing raw exception types
c) Do not implement 'SingleThreadModel' interface
d) Call wait() inside while or do-while

367. public class Test {
public static void main() { // VIOLATION
}
public void test() {
}
public void test1() {
}
}
What may be the possible coding standard violation in the above snippet
a) Placement of Constants
b) Avoid Multple overloaded methods
c) Place Main method as last method
d) Use Chain Constructors

368. public class Test {
int AGE; // Violation
public void method1()
{int AGE;
}
String NA_ME11; // Violation
} What is the java coding standard violation expected in the code snippet above?
a) Reduntant Modifiers
b) Declare fields with uppercase character names as 'final'
c) Avoid unused private fields

Always initialize static fields

```
369.public class MI {
      public String[] getNames() {
         String[] names =
         {"ashik","hema"}; if(names.length
         != 0) {
            return names;
         } else {
           return null;//Violation
         }
      }
     }
```

How can the above highlighted coding standard violation be fixed?
a) Return Zero length array instead of null
b) Avoid return statements
c) Do not add empty strings
d) Avoid instantiating String objects; this is usually unnecessary

```
370. public abstract class Sample {
        //VIOLATION public abstract
        StringBuffer getText();
      public abstract int getStartPosition();
      public abstract int getEndPosition();
      public abstract int getStartLine();
      public abstract int getEndLine();
     }
```

What may be the violation thrown by a static analyzer at the highlighted line.
a) If a class Extends / Implements other class then it should have a Naming Convention as defined by the user
b) anonymous classes used as interface implementors
c) Redeclare non-functional class as interface
d) Avoid multiple Class or Interface

371. "The ability of a software product to keep operating over time without failures that renders the system unusable" is called (as per ISO 9126)
a) Portability
b) Maintainability
c) Reliability
d) Efficiency

372. "The aptitude of the source code to undergo repair and evolution". Is called (as per ISO 9126)
a) Efficiency
b) Reliability
c) portability
d) Maintainability

373. Examination of code intended to find and fix mistakes overlooked in the initial development phase.
a) Profiling
b) unit testing
c) defect tracking
d) code review

374. What is the ideal time for starting the usage of static analyzers
a) as soon as the coding starts.
b) once all the coding is over
c) along with system testing
d) after unit testing

375. What is the recommended procedure for usage of static analyzers if you have legacy code ? (existing code base)
a) Static analyzer should be run on the legacy code as well
b) No need to run static analyzer on Legacy code base.
c) static analyzer usage is not reccomended in this scenario
d) Static analyzers are supposed to be run on the newly developed LOCs by you.

376.The capability of the software product to avoid unexpected effects from modifications of the software. (ISO 9126) is termed as
a) adaptability
b) portability
c) testability
d) stability

```
377.  public class Foo
{void bar(int a) {
switch (a) {
  case 1:
    // do something
    break;
  mylabel: // Violation
    break;
  default:
    break;
 }
}
}
```

What may be the cause of the above violation?
a) The default label should be the last label in a switch statement
b) A non-case label was present in a switch statement
c) Case with no break
d) Non-static initializers are confusing

```
378.  public class Foo
{public void bar() {
 int x = 2;
 x = x;       //Violation
}
}
```

What is the java coding standard violation that may be thrown on the above code at the highlighted line?
a) Possible unsafe assignment to a non-final static field in a constructor
b) Unused Local Variable
c) Consider simply returning the value vs storing it in local variable "{0}"
d) Avoid idempotent operations (like assigning a variable to itself)

```
379.  public class Foo
       {void bad() {
       List foo = getList();
   if (foo.size() == 0) {//Violation
    // blah
    }
     }
```

How the above violation be fixed regarding collection?
a) Perhaps "{0}" could be replaced by a local variable
b)Position literals first in String comparisons
c) Substitute calls to size() == 0 (or size() != 0) with calls to isEmpty()
d) Avoid instantiating String objects; this is usually unnecessary

380. The capability of the software product to protect information and data so that unauthorized persons or systems cannot read or modify them and authorized persons or systems are not denied access to them is termed as
a) Security
b) Efficiency
c) Stability
d) Usability Compliance

```
381.  class Foo {
boolean bar(String x) {
```

return x.equals("2"); // Violation
}
}
What is the cause of above violation?
a) Unneccessary Wrapper Object creation
b) Position literals first in String comparisons
c) Avoid instantiating String objects; this is usually unnecessary
d) Do not instantiate a StringBuffer with a char

382. public class Foo
{Object bar;
// bar is data or an action or both?
void bar() { //Violation
}
}
Reason for the violation at the highlighted line in the code snippet may be due to
a) The field name indicates a constant but its modifiers do not
b) It is somewhat confusing to have a field name matching the declaring class name
c) It is somewhat confusing to have a field name with the same name as a method
d) Non-static initializers are confusing

383. public class Foo extends Bar
{int foo; //Violation
}
Reason for the violation at the highlighted line in the code snippet may be due to
a) It is somewhat confusing to have a field name matching the declaring class name
b) It is somewhat confusing to have a field name with the same name as a method
c) The field name indicates a constant but its modifiers do not
d)Non-static initializers are confusing

384. The Phase in which code review tools / static analyzers are supposed to be used for best results
a) CUT phase
b) System Testing
c) Design
d) Integration Testing

385. public class SampleViolation
{ public copyArray (int[]
array) {
int k =0;
int length = array.length;
int[] copy = new int [length];
for(int i = 1; i < length;i++)
{
copy[i] = array[i]; // VIOLATION
}
while(k < length){
copy[k] = array[k++]; // VIOLATION
}
}
}
What is the reccomended procedure to fix the above violations thrown on coping two arrays
a) Instead of copying data between two arrays, use System.arraycopy method which is efficient.
b) Do not add empty arrays
c) Trailing Array Comma
d) Avoid arraylength in loops

386.A form of static analysis based on the definition and usage of variables
a) Profiling
b) Data Flow Analysis
c) peer review
d) coverage analysis

387. class Foo { void bar(Object x) { if (x != null && x instanceof Bar)// Violation.
What may be the cause of the violation?
a) Reduntant Modifiers
b) Avoid chaining assignment operators
c) No need to check for null before an instanceof
d) Avoid assignments in operands

Topic: WUT

388. Systematically done unit testing can replace system testing. Check the correctness
a) Yes, unit testing can replace system testing in all cases
b) Yes, unit testing can replace sys testing only if it is tool based
c) Yes, unit testing can replace sys testing only if it is JUnit based testing
d) No, unit testing can NOT replace system testing

389. Select the correct statement related to unit testing
a) Systematically done unit testing can replace system testing
d) If code reviews & code inspections are done thoroughly unit testing is NOT required
b) Both Unit testing and System testing are required as they compliment each other
c) In any case either system testing or unit testing is required; but NOT the both

390. Unit testing is required even if code reviews & code inspections are done thoroughly. Check the correctness
a) Above statement is correct only in case of large applications
b) Above statement is correct only in case of small applications
c) Above statement is correct in case of all applications
d) Above statement is NOT correct in case of all applications

391. What is unit testing?
a) Testing each unit of code in an isolation
b) Testing code linewise
c) Testing individual class of code in an isolation
d) None of the above

392. What is the purpose of Data Driven Test (DDT) testing feature?
a) editing of tests to change values in tool generated test cases
b) generation of more number of test so that method can be tested with all possible values
c) Customization of test classes. It allows users to add any number of test classes
d) Parameterization of tests with user defined test data

393. What is the basic intention of performing unit testing?
a) to avoid system testing
b) to avoid system functionality testing
c) to detect problems early in the development stage
d) to avoid regression testing

394. Which of the following is given highest priority while fixing unit testing problems ?
a) Assertion failures
b) Exceptions
c) Timeout errors

d) No prioritization is required

395. What is Code coverage analysis?
a) Process of finding areas of a program NOT exercised by a set of test cases
b) Process of finding failed test cases
c) Process of finding areas of programs throwing errors
d) Process of finding areas of program NOT exercised because of exceptions

396. Which of the below statements is correct regarding Unit testing?
a) Unit tests can be thrown away once the code is tested
b) Unit testing is NOT required if system testing is done with effectiveness
c) Unit testing and System testing compliment each other
d) Unit testing is required only in projects using Agile development process

397. What is considered as fundamental unit of coverage?
a) Type coverage
b) Block coverage
c) Package coverage
d) Test coverage

398. How does calculating and tracking of metrics help?
a) Helps in reducing static analysis effort
b) Helps to identify some of the symptoms of poor design
c) Helps to avoid unit testing
d) None of the above

399. Examine the code coverage for below code.

```
public void testAdd1() throws Throwable {
  int actual1 = Arithmetic.add(338,18);
  assertEquals(356, actual1);
  int actual2 = Arithmetic.add(36, 39);
  assertEquals(75, actual2);
  int actual3 = Arithmetic.add(100, 8);
  assertEquals(108, actual3);
  }
```

a) Full Coverage
b) Partial coverage
c) Not Covered
d) None of the above

400. Which of the following statement is correct with respect to private method in Unit Testing ?
a) Private methods can't be tested during unit testing
b) When a method is declared as "private", it can only be accessed within the same class. So there is no way to test a "private" method of a target class from any test class. So we can write a test case inside target class
c) When a method is declared as "private", it can only be accessed within the same class. So there is no way to test a "private" method of a target class from any test class. You have to perform unit testing manually. Or you have to change your method from "private" to "protected".
d) None of the above

401. Which of the following statement is correct with respect to protected method ?
a) Protected methods can not be tested during unit testing
b) When a method is declared as "protected", it can only be accessed within the same package where the class is defined.In order to test a "protected" method of a target class, you need to define your test class in the same package as the target class.
c) When a method is declared as "protected", it can only be accessed within the same package where the class is defined we can write a test case inside target class.
d) None of the above

402. What are the benefits of Unit Testing?
a) The modular approach during Unit testing eliminates the dependency on other modules during testing.
b) We can test parts of a project with out waiting for the other parts to be available.
c) Designers can identify and fix problem immediately, as the modules are best known to them. This helps in fixing multiple problems simultaneously
d) All of the above

403. Which of the following statement is wrong about unit testing
a) Integration Test is a replacement of Unit testing which will Catch all the Bugs Anyway.
b) Cost of fixing a defect identified during the early stages is less compared to that during later stage.
c) We can test parts of a project with out waiting for the other parts to be available
d) Designers can identify and fix problem immediately, as the modules are best known to them. This helps in fixing multiple problems simultaneously

404. What is meant by Code Coverage in Unit Testing ?
a) A code coverage tool simply keeps track of which parts of your code get executed and which parts do not.
b) A code coverage tool simply keeps track of pass and failure scenario of test cases.
c) A code coverage tool simply keeps track of which parts of your code has private and protected method.
d) None of the above

405. How a Unit testing framework will be helpful for Unit Testing
a) It helps to skip unit testing and do functional testing directly so as to reduce effort
b)It helps to simplify the process of unit testing by reusable set of libraries or classes that have been developed for a wide variety of languages
c) which helps to test values with boundary conditions
d) None of the above

406. What is Data Driven Testing in Unit Testing ?
a) It is a test approach to test private method in the class
b) It is single test to verify many different test cases by driving the test with input and expected values from an external data source
c) It is a test approach to test protected method in the class
d) It is a test approach to test values with boundary conditions

407. Which of the below statements are true about Data Driven Testing in Unit Test?
1) all input data and expected results for your automated tests are kept in one place, which makes it easier to maintain test cases
2)you can also execute expressions specified in cells of the processed storage (for example, your storage can contain the value of 5+5)
3)After first failure test case remaining test cases will not be executed
a) Both 1 & 2
b) Both 1 & 3
c) Both 2 & 3
d) All three statements

408. How to write a test case for the method add in the below class Sample.

a) public class Sample { private int addInteger(int i, int j){ int sum; sum=i+j; return sum; } }
b) Private methods can't be tested during unit testing
Test case can be written inside target class itself
c) Unit testing needs to be done either manually or test case can be written by changing access modifier "private" to "protected"
d) None of the above

409.protected int addInteger(int i, int j){ int sum; sum=i+j; return sum; }
How a test case can be written for this method?
a) Protected methods can not be tested during unit testing
b) Test case can be written by defining the test class in the same package as the target class.
c) Since protected methods can't be accessed outside the package unit testing needs to be done either manually or test case can be written by changing access modifier "protected" to "public"
d) None of the above

410.public static int Divide (int i1, int i2) { return i1/i2;
} How a test case can be written for this method ?
a) public void testDivide1() throws Throwable { int actual1 = Arithmetic.Divide(1, -2147483648); assertEquals(1, actual1); int actual2 = Arithmetic.Divide(-2147483648, 1); assertEquals(1, actual2); }
b) Test case can't be written since it is static method
c) Test case can't be written since it is public method
d) None of the above

411.How a test case can be written for this method ?
public static boolean startsWith(String str,String match){
for (int i= 0; i < match.length(); ++i) {
if(str.charAt(i)!=
match.charAt(i)) return false;
}
return true;
}
a) public void testStartsWith1() throws Throwable { boolean actual1 = Arithmetic.startsWith("853956.85395645", "d R0"); assertEquals(false, actual1); boolean actual2 = Arithmetic.startsWith("853956.85395645", (String) null); assertEquals(true, actual2); }

b) public void testStartsWith1() throws Throwable { boolean actual1 = Arithmetic.startsWith("853956.85395645", "d R0"); assertNotNull(false, actual1); boolean actual2 = Arithmetic.startsWith("853956.85395645", (String) null); assertNotNull(true, actual2); }

c)Test case can't be written since it is static method
d) Test case can't be written since it is public method

412.public class Student { public void setAge(int age)
{ this.Age = age;
}}
How the case can be written for the above bean class method?
a) No need to write a test case for bean class methods
b) public void testSetAge1() throws Throwable { Student student = new Student(); student.setAge(0); student.setAge(1); student.setAge(-1); student.setAge(2147483647); student.setAge(-2147483648); }
c) Bean class methods can not be tested during unit testing
d) None of the above

413.public class TestDb {
public String readABC(Connection c,String table_name)
throws SQLException{
Statement stm=c.createStatement();
ResultSet rs=stm.executeQuery("select a from"+table_name);
int a=0;
a=rs.getInt("a");
String result;
result =" result "+ a ;
return result;
}
}
How test case can be written for the above method?
a) Test case can't be written since it has Connection object as a parameter
b) Object mocking can be used to write test cases
c) Data Driven Testing can be used to write test cases
d) None of the above

414. public class ConstructorExample {
public static long getFileLength (String path)
throws IOException {
RandomAccessFile file = new RandomAccessFile (path, "rw"); return file.length ();
}
}
How a test case can be written for this method ?
a) Test case can't be written for this method
b) Stubs can be used to write test cases
c) Data Driven Testing can be used to write test cases
d) None of the above

415. public static List getScores(String team_name) throws SQLException {
_loggedCalls.add("getScores: " + team_name);
prepare();
List list_scores = new ArrayList();
Statement stmt = _connection.createStatement();
ResultSet rs = stmt
.executeQuery("SELECT * FROM SCORES
WHERE TEAM_NAME="'
+ team_name + "'");
while (rs.next()) {
int score = rs.getInt("SCORE");
list_scores.add(new Integer(score));
}
return list_scores;
}
How a test case can be written for this method ?
a) Test case can't be written for this method
b) Stubs can be used to write test cases
c) Data Driven Testing can be used to write test cases
d) None of the above

416. public static void addsample()
{ int i,j,k; k=i+j;}
How test case can be written for the above method?
a) Test case is not required as there is no functionality in this method affected by external calls
b) Stubs can be used to write test cases
c) Data Driven Testing can be used to write test cases
d) None of the above

417. Which of the following is a framework for Java Unit testing ?
1 JUnit 2 GUnit 3 NUnit 4 Unit++

418. Please identify Java Unit testing tools
1) JDeveloper 2) JTest 3) WiproUT 4)JUnit

2,3,4
1,2,4
All 1,2,3 &4
Only 4

419.
public static int Divide (int i1, int i2) { return i1/i2; }
Please examine the below test case for the above method.
public void testDivide1() throws Throwable {
int actual1 =
Arithmetic.Divide(16,8);
assertEquals(2, actual1);
int actual2 = Arithmetic.Divide(18,
1); assertEquals(1, actual2); }
a) Given test case won't be executed since test case can't be written for static method
b) First assert statement will be passed and second assert will be failed
c) Both assert statement will be passed
d)Test case is not required for this method

420. Ideally, at what stage in the SDLC cycle Unit Testing tool is applicable?
1 CUT phase 2 Testing phase 3 Design phase 4 UAT phase

421. Ideally, Unit Testing tool is supposed to be used by

1 only Project Managers 2 All Developers 3 only Test Engineers 4 only Quality Analyst

422. Select the correct statement related to Unit Testing tool
It is a system functionality and regression testing tool
It is a system level control flow testing tool
It is a unit level black-box and white-box testing tool
It is a system level black-box and white-box testing tool

423. What is Function coverage in Unit Testing ?
Checks whether each function (or subroutine) in the program has been called
Checks whether each function (or subroutine) in the program has been returning values
Checks whether each function (or subroutine) in the program has been returned correct data type value
Checks whether each function (or subroutine) in the program returns null value

424. What is Statement coverage in Unit Testing?
Has each node in the program been executed
Checks whether each function (or subroutine) in the program has been called
checks whether the requirements of each branch of each control structure has been met as well as not met
checks whether each boolean sub-expression has evaluated both to true and false

425. What is Decision coverage in Unit Testing?
checks whether the requirements of each branch of each control structure has been met as well as not met
Has each node in the program been executed
Checks whether each function (or subroutine) in the program has been called
checks whether each boolean sub-expression has evaluated both to true and false

426. What is Condition coverage in Unit Testing?
checks whether each boolean sub-expression has evaluated both to true and false
Checks whether each function (or subroutine) in the program has been called
Has each node in the program been executed
checks whether the requirements of each branch of each control structure has been met as well as not met

427. What is the default unit testing framework available in Java Eclipse IDE ?
1NUnit 2 C++Unit 3 JUnit 4 Cactus

428. public static int add (int i1, int i2)
{return i1 + i2;
}
What would be the output for below test suite if add() has the above functionality ?
public void testAdd1() throws Throwable {
int actual1 = Arithmetic.add(1,8);
assertEquals(9, actual1);
int actual2 = Arithmetic.add(1, 8);
assertEquals(9, actual2);
int actual3 = Arithmetic.add(0, 8);
assertEquals(8, actual3);
}
All assert statements will be passed
The given assertEquals() syntax is wrong
Test case will be failed in second assert statement
Parameters given to assertEquals() are wrong

429. How to write best test case for below method by "re-usability test logic" ?
public String getStudentName(Student student){
return student.getName();
}
Test case can't be written since it has user defined object
It can be tested using Object Repository and Data Driven Testing
Test case can be written with normal assertEquals()
TestCase can be written with assertNull()

430. How to ensure condition coverage for below method ?
public static divide (int a, int b){
if(b<=0)
-------- some statement----------
else()
--------some statement----------
}
It should be tested with <= 0 values for a and any values for b.
It should be tested with <= 0 values for b and any values for a.
It should be tested with any values only for b.
It can be tested with any values for a and b.

431.assertTrue(boolean)
asserts that a given condition is true
asserts that a given condition is null
asserts that a given condition is false
asserts that an object is null

432.assertNull(Object)
asserts that an object is null
asserts that a given condition is true
asserts that two objects references the same object
Asserts that a condition is false

433.assertSame(Object, Object)
asserts that two objects references the same object

asserts that an object is null
asserts that a given condition is true Asserts that a
condition is false

434.assertFalse(boolean condition)
Asserts that a condition is false
asserts that two objects references the same object asserts that an object is null
asserts that a given condition is true

MS1 Set-1

1. class TestFooBar{

Public static Foo f=new Foo();

Public static Foo f2;

Public static Bar b=new Bar();

Class Bar extends Foo{

Void react(){Syso("Bar");}

}

Class Foo{

Void reach(){Syso("Foo");}

}

Ans: Foo Bar Foo Bar

---

2. which Statement is true?

Ans: It is a possible for a subclass to define a method with the same name and parameters as a method defines by the superclass

---

3. Which statement is true about interfaces?

Ans:The keyword extends is used to specify that an interface inherits from another interface

---

4. which of the following is correct?
128->1 gives

Ans:64

---

5. Which statement id true about catch{} blocks?

Ans:The catch{} block for a child exception class must PRECEDE that of a parent exception class

---

6. identify the correct signatures of the main method of a java applications

Ans:public static void main(String args[])

---

7. Which one of the following statement is false?

Ans:All the members of the super clss are inherted by subclass

---

8. assertEquals() of Junit 4.x doesn't use autoboxing

Ans:TRUE

---

9. The@override annotations can be used with

Ans: method declarations

---

10. The @test annotations is used to indicate

Ans: That the corresponding function should get execute before each test method

---

11. public interface Constants{
static final int

SEASON_SUMMER=1; Final int

SEASON_SPRING=2;

Static int SEASON_AUTUM=3;

Public static const int SEASON_WINTER=4;

}

Ans : Compilation error occurs at line 5

---

12. public class Myclass extends
MySuperclass{ public static void main(String
args[]){

Myclass object = new Myclass();

Class MySuperclass{

Message msg=new Message();

}
class Message{
String text="Hello World";

}

Ans: S.O.P(msg.text); or S.O.P(super.msg.text);

```
class A{ Public int foo;
}
Public class B extends A{ Private int bar;
Public void setBar(int b){ bar = b;
}
}
```

Ans:Class B is tightly encapsulated

```
class A{ A(){}
void display(){
```

Syso(“display of A called”);
}

}
class B{ b(){}
Void display(){
Syso(“display of B called”);
}
}

Public class C extends A,B{
public static void main(String
args[]){ C c=new C();

c.display();

}

}

Ans:Compilation error is generated

---

public class test{
Public static void main(String args[]){ Syso(6^4);
}
}
Ans:2

Which statement is true?
Ans:A method declaring that it throws a certain exception class may throw instances of any sybclass of that exception class

---

17_____is used for reading objects from files
Ans:ObjectInputStream

After declaration:
Char[] c = new char[100];
What is value of c[50]?
Ans:’\u0000’

How many methods do you implement if a class implements Serializable interface?
Ans:0

Which of the following are valid Wrapper classes in java?
Ans:All of the above

All the Junit methods should be marked with annotation
Ans:@Test

---

public class Myapplications{ Private int value=5;
Public static void main (String args[]){
4. MyApplication ma1=new Myapplication(); 5.Syso(“value=”+value);

}}
Ans: Compilation error at line 5

---

interface l1{ void draw();
}
class C implemetts l1{ Xxxxxxxxxxxxxxxx
}
which of the following is inserted at xxxxxxxxxx is a legal definantion and implementation?
Ans: public void draw() {}

---

output of program
Public class Demo{
public static void main(String args[]){ Int[] myArray={1,2,3,4,5};
For(int counter:myArray){ Syso{"counter++);
}}
Ans:12345

---

which of the following is a legal declaration of a two dimensional array of integers?
Ans:int [][]a=new int[][5];

---

which statement is true about interfaces?
Ans:interface allow multiple implementation inheritance

---

import java.io*;
Class Test{
Public static void main(String args[])throws IOException{ InputStreamReader isr=new InputStremReader(System.in); BufferedReader br = BufferedReader(isr);
String s = br.readLine();}}
Ans: Compiles fine and reads one line of input from the keyboard on exexcution

---

will it fail or pass @Test9timeout=100) Public void infinity()
{
while(true);
}
Ans:Fail

Which of the following statement is false?
Ans: A subclass must overrise all the methods of the superclass

---

How would you declare and initiliaze the array to declare an array of fruits?
Ans:String [] arrayOfFruits = {"apple","mango","orange"};

MS1 Set-2

1.WHAT will be the output: public class
Demo
{
public static void main(String args[])
{for(int counter=1; counter<20; counter++)
{
if(counter>10)

```
{
break;
}else
{
System.outprint(counter);
}
}
}
}
```

Ans:-**12345678910**

2. Which of the following is an illegal declaration of

array A:-**Dog mydogs[7];**

3. what will be the result of attempting to compile and run of following program

Public class polymorphism{

Aref1=newC();

Bref2=(B)ref1;

System.out.println(ref2.f());

}

}

A:-**the program run with out error and print 1 when run**

4. which statement is true;

A:-**if both a subclass and its superclass don't have any declared constructs the implicit default constructor of sub class will call super()**

When run .

5. output of following programming

Int variable 1=0;

Int variable 2=3;

If(variable1=10)>variable2)

{ A:-**10**

6. @override is an example of

A:-**marker annotation**

7.code below

Class full{

First getinstance

(){ Returnthis,

}

Voidprint()

s.o.p(“fruit”);

}

PUBLIC class apple extends
fruit{ apple getinstance(){

Voidprint()

s.o.p(“apple”);

}Returnthis;}

What is the output:

A:-**apple**

8.if we want to test a java method ,that it executes within the given amount of time,we have to use

A**:-@Test(timeout=1000)**

9.which declaration prevents creating a subclass of a top level class

A:-**final public class javacg{}**

10. which of these array declaration statements is not legal?

A:-**int i[4]={1,2,3,4}**

11:what is the value of x after this code run?

Int x=3;

Int y=2;

X

+=(y+x*2)

A:-**11**

12.the @test annotation is used to indicate

A**:-test method**

13:-which one of the below statements are true

A:-**the computer always create the default no-argsconstructor for every class**

14. which statements is true about interface

A:-**interface allow multiple implementation inheritance**

15. given(

)

Classfruit

{

private string name ;

Public fruit(string name)(this name =name)

Public string getname)({return name}

}

Which of the following statement is true

A:-**the code will compile if public fruit (){this("apple");}is added to fruit class**

16. which declaration in the below code represent a valid declaration with in the interface

Public interface testinterface{

Long value=98d;

Long amount=67t;

Long calculate(long input);

Static integer get value();

}

A:-**declaration at line 4**

17. superclass of all classes representing a output stream of bytes is

A**:-output stream**

18. which statement is true about catch{}block?

A:-**the catch{}block for a child exception classs must PRECEDE that of a parent exception class**

19 .what would be the result of attempting to compile and run the following program?

```
Public class array test{
public static void main(string
[]args){ int size =25;

Long[]array=newlong[size]

; For(long j=0;j<size;j++){
}}
```

A:-**the program will compile and run without error and will printnull twenty five times**

19. @suppresswarnings is an example for master annotation

A:-**true**

20. what is method signature?

A:-**the signature of a method is the name of the method ,its parameter list,and its return type**

21. which of the following are the optional parameters of junit@testannotation

A:-**both expected and timeout**

22. the following code snippet is an example for

```
@twizzle

Public void toggle()

{

}

public@interfacetwizzle

}
```

A:- **markerAnnotation**

23. what will be the result of attempting to compile and run the following class:

```
Public class passing {
public static voud main(String [] args)

{
int a=0;int b=9;

Int []bArr=new

int[1]=bArr[0]=b; Inc

1(a);inc2(bArr);

Sop("a="+a+"b="+b+"bArr(0)="+bArr([0]);}
```

A:-**this code will compile and will print "a=0 b=9 bArr[0]=10"when run**

24. which of the following is a legal declaration of a two dimensional array of integers:
A:-**int[][]a=new int[][5]**

25. given
Interface il{

Int process();

}
class c implements
il{ INT PROCESS(){
sop("process of c invoked");

Return 1;}
void
display(){

sop("display of c invoked");

}

A:-**compilation error at line 5**

26. on occurrence of the which of the following is it possible for a program to recover

A:-**exceptions**

27. given

Abstract class shape{
public abstract void draw();

}
public class circle extends shape(

Public void draw(){}
}
which of the following is correct?

A:-**Shape s=new**
Circle() s.draw();

MS1-SET-3

1. class S{

public s v main(string args[])

{

Object o1=2.3;

S.o.p(o1.floatValue()+1)

;

}

}

What is output of given program…

Compilation error

2. can object of child type be assigned to a variableof the parent type?

Card crd;

Birthday bd=new

Birthday(“Lucinda”,42); Crd=bd;

Yes an object can be assigned to a reference variable of parent type

3.given the code below:

Interface Myinterface{

Void dosomething();

}

Class MyClass implements Myinterface{

//xx

}

Public void dosomething();

4. in junit is it possible to ignore a test method from testing?

True

5. which statement is true?

The parameter list of an overriding method must be a subset of the parameter list

6. what type of parameter must the following method be called with

Int mymethod(double ar[])

{

……

}

A reference to an array that contains elements of type double

7. Junit is

An open source testing frame work

8. What will be the result of attempting to compileand run the following program?

Public class polymorphism{

```
Public ststic void main()
{
A    ref=    new
C();              B
ref2=(B)   ref1;
s.o.p(ref2.f());
}
}
```

The program will compile with out error and print 2 when run

9.which statement is true?

It is possible to subclass to identify the method with the same name and para meters as a method

10. Can an abstract class define both abstract methods and non abstract methods?

Yes the child class inherits both

11.why is the main methos special in java program?

It is where the execution of a java program starts

12.

```
public class demo{
Public static v
main(){ For(int
i=1;i<=5;i++)
{
For(int
j=0;j<I;j++)
s.o.p(“*”);
}
s.o.p(““);
}
```

*****

******

****

****

****

13. you want to create a table look like

12 -9 8

7 14

-32 -1 0

Double [][] table={{12,-9,8},{7,14},{-32,-1,0}}

14. what is a method signature?

The signature of method is the name of the method,its parameter list and its return type

15. Here is the abstract method defined by the parent:

Public abstract int sumup(int[] arr());

Non abstract child?

Public int sumUp(int[] arr()){……}

16.how would you declare and intia;ize the arrayto declare an array of fruits?

String[] arrayOfFruits={"apple","mango","orange"};

17.class YY{

Void m1(integer

i1){

s.o.p(i1.intvalue());}

} **3**

18. @surpresswarning is an example for Marker Annotation

True

19. Given the following

Double[][] things={{1.2,9.0},{9.2,0.5,0.0},{7.3,7.9,1.2,3.9}};

What is the value of string,.length?

3

20. which is true about the package statement in java?

It should be the first non comment linein the java source file

21. _____is used to read object from files?

Objectinputstream

22. say that class rodent has a child class rat and another child class mouse class mouse has a child class pocket mouse.Examine the following Rodent rod:

Pkt=rat

23. Annotation is the feature added in_____package of java?

Java.lang.annotation

24. assertEquals of Junit4 X doesn't use autoboxing

True

25. **the program will compile with out error and print 1 when**

run 26.what is a CLASSPATH?

An environment variable which is used by java compilerand JVM to look for thedependent javaclass files
27. Given the following

Public

classMyProgram{ Try{

s.o.p("Hello World");

}

Finally{

s.o.p("Finally executing");

}

}

Hello World finally

executing 28.what is the value

of -32%6?

-2

29. The @Override annotation can be used with?

Method declarations

30.static impot java.lang .import.*;

static impot java.lang .import.integer;

public class test Static Import{

public.s.void.main(){

out.println(toHexString(42));

}}**what is**
output?

Compilation
error

MS2

SET1

1) Author writes a book is published by Publisher. How many table needs to be created

Ans:-**3**

2) Given:

```
Public class Demo extends
Thread{ Private int value;
Demo(){
Value=27
;
}
Public void run(){
Synchronized (value){
Value++;
System.out.println(value);
}
}
Public static void main(String
args[]){ Demo t3=new Demo();
T3.start();
}
}
```

What will be the result of compiling and executing the above code?

Ans:-**Compile-time error in the line containing synchronized**

Keyword.

3) Which of the following is used to execute stored procedures from a JDBC program?

Ans:- **Callable Statement**

4) A vector is created and three strings called String1,Strinng2 and String3 are added to it. The method removeElement("String2")is called. Which of the following Vector methods will retrieve the "String3" string?

Ans:-**get(1)**

5) Which of the following is false?

Ans:- **PreparedStatement is less efficient than Statement(D).**

6)

Which of the following statement is used to turn off auto-commit mode of a connection?

Ans:- **con.setAutoCommit=false;**

7)

Which respect to the program given below, which of the following is correct?

```
Import java.io.*;

Class test{

Public static void main(string args[]){

InputStreamReader isr=new InputStreamReader(System.in);

BufferReader br=new BufferReader(isr);

String s=br.readLnie();

}

}
```

Ans:-**Might throw a runtime exception**

8) InputStream and OutputStream are

Ans:-**interface**

9) An application view known as TRANS_HIST_V is no longer needed. Which SQL statement should you use to remove the view?

Ans:-**DROP trans_hist_v;**

10) Which of the following successfully create an instance of the vector class and add an element?

Ans**:- Vector v=new Vector();**

v.insertElement(86);

11) how many methods do you implement if a class implements Serializable interface?

Ans:- **0**

12) Term Tuple in RDBMS

indicates Ans:- **a Row in a table**

13) Which of this class is used byte STrema for writing data into

file? Ans:- **FileOutputStream**

14) Which interface needs to be implemented in order to make an object serialized?

Ans:- **Serializable**

15) Which among following have elements in insertion order?

Ans:- **LinkedHashMap**

16) readObject() method belongs to which class?
Ans:- **ObjectInputStream**

17) Which one of the following statement is true?

Ans:- Thread.start() method is used to move a thread from a new state to the runnable state.

18) Which is the difference between HashMap and LinkedHashMap?

Ans:- **Elements of a HashMap are unordered whereas elements of a LinkedHashMap are ordered**

19) Drop Table statements removes

Ans:- **removes the columns, rows and structure definition of the table**

20) what will be the result of compiling and running the following code?

```
Public class TestThread {
Public static void main(String
args[]){ Thread1 thread1=new
Threas1(); Thread2 thread2=new
Thread2(); Thread1.start();
Thread2.start();
System.out.println("In main");}
}
```

Ans:- **The code will complete and print the following messages in any random order In Thread1**

In

Thread2

In main

21) In Relation Model parent child relationship is

Ans: **One to many**

22) Calling getMetaData() on a ResultSet Obkect return a_____Object

Ans:- **ResultSetMetaData**

23) Which one of the statement is true with respect to map?

Ans:- **Both the keys and values must be objects.**

24) Which one of these events will cause a thread to die?

Ans:- **When the execution of the run() methods ends.**

25) Which one statement below is true concerning the following code?

ANs:- **There will be a compiler error, because the class MyRunnable does, not implement Runnable correctly.**

26) import java.util.io.*;

```
Public class TestSortedMAp{
public static void main(String
args[]){ Onject o= new
```

LinkedHashMap();

System.out.println((o instanceofMap)+”,”);

System.out.println(o.instanceofSortedMap);

}
}

What is the result of attempting to compile and run the program ?

Ans:-**True,false**

27) Which of the following is a valid syntax for executing a stored procedure with one out of parameter of type integer?

Ans:- **CallableStatement cstmt =con.prepareCall(“{call procedure1(?)”})**

Cstmt.registerOutParameter(1,Types.INTEG

ER); Cstmt.execute();

28) Which method of the ResultSet is used to determine whether a value retrieved is null or not?

Ans:- **wasNull**()

29) _____is a collection of logically related data at one place

Ans:- **Database**

30) Which one of the following method does not accept a timeout?

Ans:- **start**

MS2 SET-2

1)what will be the result of compiling code?

Public class mythread extends thread{

Public void run(){

s.o.p(“in the run method of the thread”);

}

Public static void main(String[]

arguments){ MyThread m= new

MyThread();

}

}

Ans)The code will give compilation error saying that mythread should implement Runnable interface in order to override the run method

2)which of the following is false?

Ans)It is possible for a thread to move directly from blocked state to running

state 3) All candidate keys are primary keys?

Ans)false

4)state which of the following is true?

Ans)the correct way to start the thread is to override the run()

method 5)which command is used to drop a view called "v1"?

Ans) Drop view v1

6) what will be the result of compiling code?

```
Public class mythread implements runnable{
Public void run(){
s.o.p("in the run method of the thread");
}
Public static void main(String[]
arguments){ MyThread m= new
MyThread();
m.start();
}
}
```

Ans)the code will give compilation error

7) what will be the result of compiling code?

```
 class MyRunnable extends object implements runnable{
Public void run(String message){
s.o.p("in the run method"+message);
}
}Public class TestThread{
Public static void main(String[]
arguments){ MyRunnable m= new
MyRunnable(); Thread mt=new thread(mr);
Mt.start();
}
}
```

Ans)There will be a compile error because the class MyRunnable does not implement Runnable coreectly

8)Authour writes a book and book is published by publisher how many tables needs to be created?

Ans)3

9)when the following piece of code is executed

Resultset rs=stmt.executeQuery("select * from emp")

Rs.next();

The result set will be pointing to

Ans)the first row of resultset

10)*contains no duplicate elements

*can contain atmost one null value

*elements are not key/value pairs

*Accessing an element can be almost as fast as performing a similar operation on an array Which of these classes provides the specified features?

Ans)Hashset

11) term degree in rdbms indicates

Ans)no of attributes

12) which method should a non abstract class implementing runnable interface implement?

Ans)run

13) which of the following is correct with respect to the program given below

```
Import java.io.*;
Class test{
Public static void main(string args[]) throws IOexception{
InputStreamReader isr=new InputStreamReader(system.in);
BufferedReader br=new BufferedReader (isr);
String s=br.readLine();
}
}
```

Ans)compiles fine and reads one line of input from the keyboard on execution 14)which of this class is used by character streams for reading data from buffer? **Ans)BufferedReader**

15) which of this method is used to read a string from the nput stream?

Ans)String readLine()

16) which of the following is a type I driver?

Ans)jdbc-odbc bridge driver

17) which of the following statement about set is true?

Ans)set allows null values but only single occurences

18) An application view known as trans_hist_v is no longer needed .which sql statement shouls you use to remove the view?

Ans)DROP VIEW trans_hist_v

19) which of this method is used with bufferedreader object to read a single character?

Ans)int read() throws IOException

20) which interface needs to be implemented in order to make an object serialized?

Ans)serializable

21)import java.util.*;

Class

testLinkedHashMap{

Public static void main(String[]

args){ Oject1 m=new

linkedhashmap(); S.o.p((m

instanceofcollection)+”,”); S.o.p((m

instanceofmap)+”,”); S.o.p(m

instanceofList);

}}

What is the result of the code?

Ans)false,true,false

22) which among the following allow duplicate elements?

Ans)ArrayList

23) which of the following statement is used to turn off auto commit mode of a connection?

Ans)con.setAutoCommit(false);

24) which of this class contains method print()?

Ans)PrintStream

25) which one of the statement is true with respect to map?

Ans)Both the keys and values must be objects

26) calling getMetaData() on a resultset object return a object

Ans)ResultsetMataData

27) is a collection of logically related data at one place

Ans)Database

28) what is the output of the following code?

```
PreaparedStatement pstmt=con.prepareStatement("select * from emp");

Resultset rs=pstmt.executequery();

While(rs.next()){

s.o.p(rs.getString(1));

}

s.o.p(rs.getString(2));
```

Ans)it retrives all the data from the emp table and print all the values of the first coloumn of the table and last value in the second column of the table

29) which of the following package contains jdbc api

Ans)java.sql

30) what will happen when the code is executed?

```
Import java.util.*;

Public class test3{

Public static void main(string

args[]){ Map s=new HashMap();

s.put("1","one");

s.put("3","three");

s.put("2","two");

}

}
```

Ans)cannot predict the order

MS3-

SET 3

1) Which of the following statement is false about callable statements?

A. we can use setXXX(paramindex,value) method to supply values for the IN parameters of the procedure

B. once the stored procedure is executed, we can use the getXXX(paramindex) method to retrieve values of the OUT parameters.

C. Callablestatement is executed using the executeCall() method

D. CallableStatement can be closed by using the close() methode

ANS) C

2) Which interface needs to be implemented in order to make an object serialized?
ANS) Serializable

3) Which method should a non-abstract class implementing Runnable interface implement ?

ANS) run

4) How many methods do you implement if a class implements Serializable interface ?

ANS) 0

5) what will be the result of compiling and running the following code ?

```
Public class TestThread
{
        Public static void main(String argv[])
        {
          Thread1 thread1=new Thread1();
          Thread2 thread2=new thread2();
          thread1.start();
          thread2.start();
          System.out.print(“in main”);
          }
}
Class Thread1 extends Thread
{
Public void run()
{
System.out.println(“in Thread1”);
}
}
Class Thread2 extends Thread
{
Public void run()
{
System.out.println(“in Thread2”);
}
```

}

ANS) The code will compile correctly and print the following messages in the order given as

In main

In

Thread1

In

Thread2

6) If deptno+locationid is a composite key in dept table then which of the following is correct

ANS) deptid+loactionid can be a candidate Key

7) which of the following statement is false ?

ANS) It is possible for thread to move directly from the blocked state to running state

8) import static java.lang.System.out;

Import java.utill.collection;

Import java.util.linkedHashMap;

Import java.util.linkedHashSet;

Import java.util.vector;

Public class collectionsFour {

Public static void main (String args[]) {

Object lhs = new linkedHashSet();

Object lhm =new LinkedHashMap();

Object ll = new LinkedList();

Out format("%b,%b,%b",lhs instanceof collection,lhm instanceof collection,ll instanceof Collection);

}

}

What is the result of the attempting to compile and run the program ?

ANS) true,falce,true

9) A vector created and three string1,string2 and string3 are added to it . the method removeElement("String2") is called. Which of the following vector methods will retrieve the "String3" string ?

ANS) get(1)

10) In relational model parent child relationship is

ANS) one to many

11) which of the following is a Type I driver ?

ANS) JDBC-ODBC Bridge Driver

12) public class TestRunnable implements Runnable {

Public static void main (String args[]) throws Exception

{ Thread t1 = new Thread(new TestRunnable());

T1.start();

System.out.print("Start");

T1.join();

System.out.print("End");

}

Public void run() {

for (int i=0 ; i<3; i++)

{ System.out.print(i);

}

}

}

What can be one of the possible output?

ANS) The code executes and prints "Start012End".

13) InputStream and OutputStream are _____

ANS) abstract classes

14) Drop table statements removes

ANS) removes the columns , rows and structure definition of the table

15) All candidates keys are primary keys

ANS) false

16) when a thread object is created and start method is invoked on that, which is the initial state it will go into ?

ANS) Runnable state

17) Is the following command right? UPDATE EMP SET ENAME= "JACK" WHERE EMPNO=7788;

ANS) true

18) which of the following statement is used to turn off auto-commit mode of a connection? ('con' is the connection object)

ANS) con.setAutoCommit(false);

19) what is the difference between HashMap and LinkedHashMap?

ANS) Elements of a HashMap are unordered whereas elements of a LinkedHashMap are ordered.

20) *contains no duplicate elements.

*can contain at most one null value.

*Elements are not key/value pairs.

*Accessing an element can be almost as fast as performing a similar operation on an array.

Which of these classes provides the specified features?

ANS) HashSet

21) all primary keys should be candidate keys

ANS) true

22) Superclass of all classes representing an input stream of bytes is _____

ANS) InputStream

23) _____is used for reading objects which are already serialized

ANS) ObjectinputStream

24) what does the following code do ?

PrepareStatement pstmt=c on.prepareStatement("select * from emp");

ResultSet rs=pstmt.executeQuery();

While(rs.next()){

System.out.println(rs.getString(1));

}

While(rs.next()){

System.out.println(rs.getString(2));

}

ANS) it retrieves all the data from the emp table. It will print all the values of the first column of the table and then all the values in the second column of the table

25) Given:

Public class Demo extends

Thread{ Private static int

value=37;

Public void run(){

Value++;

System.out.print(value);

}

Public static void main(String

args[]){ Value++;

Demo t10=new Demo();

T10.start();

}

}

What is the result of compiling and executing the above code?

ANS) Prints39

26) which among the following allow duplicate elements ?
ANS) ArrayList

27) with respect to the program given below, which of the following is correct?

Import java.io*;

Class Test{

Public static void main(String args[]){

inputStreamReader isr=new BufferedReader(isr);

BufferedReader br =new BufferedReader(isr);

String s=br.readLine();

}

}

ANS) Compiles and reads one line of input from the console

28) Which one of the following syntax is correct for creating a connection to the database?

ANS)Connection con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orcl","scott","tiger");

29) Which class in the collection framework has its implementation based on Balanced tree data structure?

ANS) TreeSet

30) What type of value is returned by the executeQuery() method of Statement interface?

ANS) ResultSet

Ms2 set4

1. Which method of the ResultSet is used to determine whether a value is null or not?

wasNull()

2. public class demo implements runnable

{

Public static void main (String args[])

{

Thread t7=new Thread(new Demo());

T7.start();

The code executes and prints "vehicle7654bus".

3. which one of the statement is not true about the collection interface?

All methods defined in set interface are also defined in collection interface

4.A_____efficiently provides access for storage,retrieval and updation of data in an organized manner.

Database Management System.

5. which of this class is used by character streams for reading data from buffer?

BufferedReader.

6. the default resultset object moves only in the forward direction

True

7. which of this class contains the method for deserializing an object?

Objectinputstream

8. which implementation of the list interface provides for the fastestinsertion of a new element into the middle of the list?

Linkedlist

9. publis class MyThread extends

Thread{ Private static int i=0;

Public void

run(){ i++;

compile time error

10. if deptno+locationid is acomposit key in dept table then which of the following is correct?

Deptid+locationid can be a candidate key

11. term tuple in RDBMS indicates

A ROW in a table

12. maximum number of primary keys possible in a table

1

13. import java.util.Map;
Import java.util.linkedhashmap;

Public class mymap{

Public static void main(String

args[]){ Map m = new

LinkedHashMap();

Prints{Fruit=apple,vegetable=bringal,snacks=burger}

14. which of the following if correct with respect to the program given below

Import java.io.*;

Class test{

Public static void main(String args[])throws IOException{

Compiles fine and reads one line of input from the keyboard on execution

15. which one of these events will cause a thread to die

When the execution of the run()method ends

16….....is used for reading objects which are already serialized

ObjectInputSream

17. Siperclass of all classes representing an output stream of characters is ……..

OutputStream

18. Which of the following statement is false if we are working an a JDBC application ?

Rollback() does not realease any database locks held by the connection

19. Which command is used to drop a view called “V1”?

DROP VIEW V1;

20. Commit followed by the Rollback does not have any Effect on the transactions in the Database.

True

21. Which of the following is not a valid state of a thread?

Altered

22. Which of the following statement is false about CallableStatements?

A. We can use setXXX(paramindex,value) method to supply values for the IN parameters of the procedure

B. once the stored procedure is executed ,we can use the getXXX(paramindex) method to retrieve values of the OUT parameters

C

23. Which of the following will successfully create an insurance of the Vector class and add an element?

Vector v=new

Vector(100);

V.addElement(“86”);

24. Given

Public class Demo extends Thread

{ Private int value;

Demo(){

Value=27

;

}

What will be the result of compiling and executing the above code?

Compile-time error in the line containing synchronized keyword

25. Which among the following have elements in insertion order?

LinkedHashMap

26. Which of the following can be used to find out about the types and properties of the columns in the ResultSet object?

ResultSetMetaData

27. Which of the following method is used to close a connection to the database?('con' is the Connection object)

Con.close();

28. Which interface needs to be implemented in order to make an object serialized?

Serializable

29. Which among the following have elements in insertion order?

LinkedHashMap

30. Which of the following statement is false?

It is possible for a thread to move directly from the blocked state to running state.

Ms3

SET-2

1. Using Servlets, the getParameterValues() method returns a

String array

2. Which of the following is a JSP directive?

include

3. Which of the following is not a valid HTML heading?

All of the above are valid

4. To send any html output from the servlet, the following method of the HttpResponse object is called

setContentType("text/html)

5. Which of the following statements is INCORRECT about Servlets?

Servelts are executed by web browser

6. Which attribute of <form> tag is used to specify where to send the form-data when a form is submitted

action

7. In HTML5, which attribute allows the user to give more than one value in a given text box?

multiple

8. The min,max and step attributes can be used with which of the following input types of HTML5?

number

9. Syntax for defining scriptlets in JSP is

<%... %>

10. In JavaScript, which of the following event handler method is called when a text field in a web page is changed by the user?

onChange()

11. Which CSS property is used to change the font of text in a paragraph to "Arial"?

P{font-family:Arial:}

12. Which of the following is a valid JSP declaration?

<%! Int x=10: %>

13. In order to respond to HTTP requests(requests coming from a web client through a web server to the Servlet Container) a servlet should extend

HttpServlet

14. In Javascript the variables are declared using _____keyword

var

15. In which deployment descriptor is the <servlet-mapping> and <servlet> elements defined

Web.xml

16. Which of the following is not a data type in JavaScript?

Float

17. external style sheets should be stored with the extension

css

18. Which of the statement is FALSE about Servlets?

Int() gets invoked for every request

19. To add a cookie to the user's machine, the following method of the HttpResponse object is used:

addCookie()

20. To place an image in a particular position on the web page which CSS property is used?

Background-position

21. Which of the following are legal variable names in JavaScript?

$name

22. Your web application named "FWorks" uses SpecialMath.class. This is an unbundled class and is not contained in any jar file. Where will you keep this class file?

FWorks/WEB-INF/classes

23. When both internal and external style sheets are defined which of the following is true?

Internal stylesheet over rules all other styles given

24. What is the output of the following code?

<script language=”javascript”>

Function showAlert()

{

a=5,b=6;

sum=a+b;

alert(sum);

}

</script>

Ans:11

25. You can reference an entry in an array using:

Myarray[0]

26. Which of the following is not an attribute of <jsp:setProperty>?

id

27. The values entered/selected in the HTML form elements is passed on to the servlet through

HttpServletRequest

28. Which package does GenericServlet belong to?

Javax.servlet

29. If a text in html needs to be both bold and underlined which of the following format should we choose?

<u>Hi</u>

30. Assuming that lion.jpg cannot be found, what will be displayed when the following code is loaded in the browser?

The text ‘Lion’

SET-3

1. Which of the following is a JSP directive?

include

2. The_____property specifies the size of the background image. When you use this property, the background image grows in size, as you keep appending Text

Background-size

3. In CSS a sector contains_____declarations

One or more

4. Http is a_____

Stateless Protocol

5. In Javascript the variables are declared using_____keyword:

var

6. In CSS to repeat the background image horizontally which property is used

Background-repeat: repeat-x

7._____method allows the servlet to receive the value for the given input field passed by the client in the HTML form

getParameter("fieldname");

9. What command skips the rest of a case statement?

continue

10. In JavaScript a case sensitive language?

Yes

11. Name the implicit object of javax.servlet.http.HttpServletRequest in JSP

request

12. Which of the statement is FALSE about servlets?

Int() gets invoked for every request

13. The three life cycle methods of a Servlet are called/invoked in this order.

Init(),service(),destroy()

14. Which of the following are valid input types in HTML5?

All the above

15. Which of the following is not a valid HTML heading?

All of the above are valid

16. The alert method belongs to which object

window

17. ServiceContext object is used to access

Browser information

18. In HTML5, which attribute allows the user to give more than one value in a given text box?

multiple

19. Identify the selector(CSS Syntax part) from the CSS statement.

H1 {color:red}

H1

20. Which package does GenericServlet belong to?

Javax.servlet

21. Which of the following is not supported by Javascript?

All of the above are supported

22. The state information for a client is stored in:

The HttpSession object

23. Which of the following tag is used in HTML to create a drop down list?

select

24. To add a cookie to the user's machine, the following method of the HttpResponse object is used:

addCookie()

25. Which of the following is legal JSP syntax to print the value of i?

<%int i=1;%><%=i%>

26. Which of the following statements is INCORRECT about servlets?

Servers are executed by web browser

27. Which attribute of the <frame> tag is used to indicate that the frame cannot be resized?

noresize

28. In which directory of a web application are the server side class files kept?

WEB-INF\classes

29. You can reference an entry in an array using:

Myarray[0]

30. Which of the following is a valid JSP declaration?

<%! field or method declaration %>

SET-4

1. The canvas element in HTML5 is used to_____

To draw graphics

2. HTML5 is

HTML+CSS3+javascript APIs

3. Which of the following are true HTML attributes?

Attributes provide additional information about an element
Attributes are always specified in the start tag
Attributes come in the name/value pairs like: name="value"
All of the above

4. Using CSS, How do you make each word in a text start with capital letter?

Text-transform captalize

5. In Javascript the variables are declared using_____keyword

var

6. The values entered/selected in the HTML form elements is passed on the servlet through

HttpServeletRequest

7. What is the output of the following program?

```
<script language =”javascript” type =”text/javascript”>
Var name1=”Neil”;
Var name2=”Sriram”;
Function greet(who)
{
Document.write(who+”<br>”);
}
</script>
<script language=”javascript” type =”text/javascript”>
Greet(name1);
Greet(name2);
</script>
```

Neil
Sriram

1. Given an HttpServeltRequest request and HttpServletResponse response,which option sets a cookie “username” with the value “joe” in a servlet?

Response.addcookie(new cookie(‘username’,’joe’));

2. What will be the output of the following code?

```
<script language= ”javascript”>
X=4+”4”;
document.write(x);
</script>
```

44

3. CSS declarations are_____pairs separated by semi colon

Property value pair

4. Your JSP Bean “People” has a private member “friend” with proper setters and getter method.

Select the correct getProperty syntax o obtain “friend” value.

<jsp:getproperty name="friend" property="people"/>

5. Which of the following statements is NOT true about Servlets?

Servelets start a new process for each request is wrong

6. Name the implicit object of the javax.servlet http.HttpServletRequest in JSP

request

7. To define the space between the element’s border and content, which of the following CSS property is used?

Padding-right:15px;

8. The state information for a client is stored in.

Httpsession object

9. Assuming that lion.jpg cannot be found, what will be displayed when the following code is loaded in the browser?

The text ‘Lion’

10. Which of the following event is triggered when an element in an HTML Form looses focus?

Onblur

11. 18.JSP Declarations have the form

<%!%>

19. In JavaScript which of the following event handler method is called when the mouse pointer moves off an item in the web page?

OnmouseOut()

20. The three life cycle methods of a Servlet are called invoked in this order.

Init(),service(),destroy()

21. Which of the following page directive attribute can appear multiple times in a jsp file?

import

22. Using Servlet, the getParameterValues() method returns a

String array

23. ServletContext object is used to access

Browser information

24. Is Java Script a case sensitive language?

Yes

25. In order to respond to HTTP requests(requests coming from a web client through a web server to the Servlet Container), a servlet should extend

HttpServlet

26. Which attribute of the <frame> tag is used to indicate that the fame cannot be resized?

noresize

27. If I have to create a checkbox in HTML which of the following needs to be done?

<input type="Checkbox" name="Vehicle" value="bike" />

28. Identify the selector (CSS Syntax part) from the given CSS statement.

H1{color.red;}

H1

29. _____interface provides declarations for servlet life cycle methods

Servlet

30. Http is a _____

Stateless protocol

SET-5

1. Assuming that lion.jpg cannot be found, what will be displayed when the following code is loaded in the browser?

The text 'Lion'

2. When both internal and external style sheets are defined which of the following is true?

3. Which of these is not a comparison operator?

=

4. HTML5 is

HTML+CSS3+javascript APIs

5. Which of the following is the root tag in HTML?

<html>

6. Which of the following are true regarding naming variables in JavaScript?

All of the above

7. Which method of the HttpServletRequest object is used,If there is a chance of retrieving multiple values for any given input parameters?

Getparametervalues

8. ServletsContext object is used to access

Browser information

9. Which package does GenricServlet belong to?

Javax.servlet.generic

10. Which attribute of <form> tag is used to specify where to send the form data when a form is submitted

action

11. In order to respond to HTTP requests(requests coming from a web client through a web server to Servlet Container),a servlet should extend

HttpServlet

12. Which of the following is one of the argument to doGet() method HttpServlet?

HttpServletRequest

13. What will be the output of the following code if the user enters a value 12 on recieving the

prompt dialog box?

```
<script type =’text/javascript’>
{
A=prompt(‘Enter a number’);
alert(a+12);
}
</script>
```

It displays an alert box with value 1212

14. Which of the following is a valid variable name in Javascript?

All of the above

15. Is JavaScript a case sensitive language?

Yes

16. In CSS to repeat the background image horizontally which property is used

Background-repeat:repeat-x

17. Identify the selector (CSS Syntax part) from the given CSS statement.

H1{color.red}

H1

18. Using Servlets, the getParameterValues()method returns a

String

19. Which of the following is NOT true about scriplets?

Scriplets are executed at Initailization time is not true

20. Which of the following is used to insert java values directly into the output of a JSP page?

Expressions

21. How do you write ”Wipro Technologies” in a pop up box?

Alert(“Wipro Technologies”)

22. Which of the following statements may be used to set the color property of an object called fruit?

<jsp:setProperty name=”fruit” property=”color” value=”white”/>

23. ServletConfig is used in the init method of the servlet to get

Configuration information from web.xml

24. WHATWG is an abbrivation of

Web Hypertext Application Technologies Working Group

25. Service method of a servlet is called

For every client request

26. Http is a_____

Stateless protocol

27. Which of the following statements is INCORRECT about the Servlets?

Servelts are executed by web browser

28. Give the valid property to set the text color to blue

Color: blue

29. In HTML target =_blank specifes that a-------

When clicking a link it will open a new window

30. Which of the following is a valid scriplet?

<%out.println(“Hello World”);%>

SET 7

1. The values entered/selected n the HTML form elements is passed on the servlet throught

2. what command skips the rest of a case statement?

continue

3. what does XHTML stands for?

Extensible hyper text markup language

4. to define the space between the elements border and content,which of the following CSS property is used?

Margin:2,5px;

5. You need to send large amount of binary data from the browser to a servlet to be processed.What HTTP method would you use?

POST

6. What does it mean when tags or attributes are said to be deprecated?

become outdated

7. Which of the following statements is incorrect abut servlets?

8. Name the implicit object of javax.servlet.http.HttpSErvletREquest in JSP

REQUEST

9. In which deployment descriptor is the <servlet-mapping> and <servlet> elements defined

WEB.XML

10. In a Servlet ,destroy method is called

Once only in the life cycle of the servlet

11. Which of the following statement is true?

12. what of the output of the following code?

```
<script>
X=((45%2)==0?”Hi”:Bye);
Alert(x);
</script>
```

BYE

13. the three life cycle methods of a Servlet are called/invoked in this order

Init(),service(),destroy()

14. Which loop type always runs the enclosed code atleast once?

Do while

15.the **BORDER RADIUS** property is used to add rounded comers to HTML elements.

16.The control Statements on a do while loop is tested

After each time through the loop

17.how do you write “Wipro TEchnologies” in a pop up box?

ALTER(“WIPRO TECHNOLOGIES”)

18.Identify the selector (CSS Syntax part) from the given CSS statement

H1{colour:red;}

H1

19.Which of the following is the correct way to find or instantiate a JavaBEAn?

20.IN the below JavaSCript code.

Var a=”K”;

Var b=’12’;

a=b;

variable ‘a’ now contains?

NUMBER

21.What is the name of the deployment descriptor file of a web application?

WEB.XML

22.Using Servlets, the getParameterValues() method returns a

STRING ARRAY

23.Which of the following is the correct url format,when the browser passes the information to a servlet called hello ,using GET method?

http://www.test.com/hello?key1 = value1&key2 = value2

24.HTML5 is

25.CSS declaration are **PROPERTY VALUE PAIR** pairs separated by semi colon.

26.Which protocol would you use to access a file on the world wide web through a secure connection?

HTTPS

27.JSP Declarations have the form

<%! %>

28. the canvas element in the HTML% is used to

TO DRAW GRAPHICS

29. Which of the following is legal JSP syntax to print the value of i?

<%INT I = 1;%><%=I%>

30. In HTML target = blank specifies that a?

when clicking a link,it will open in a new window

SET8

1) Which of the following is not an attribute of <jsp.setproperty>?

id

2) given an Httpservicerequest request and httpservletresponse response,which option sets a " username" with the value "joe" in a servlet?

response.addCookie(new Cookie("username", "joe"));

3) which of the following page directive attribute can appear multiple times in a jsp file?

import

4) using css,how do you make each word in a text start with a capital letter?

Text-transform capitalize

5) identify the selectors from the given H1

H1

6) which of the following are valid input types in html

All the above

7) in HTML5,the input tags placeholder attribute contents are----------

Displayed inside th field on the webpage

8) the doget() method of the httpservlet

Takes the httpservletrequest and httpservletresponse

9) which of these is not a comparison operator?

=

10) which of the following is legal jsp syntx to print the value i?

11) o/p of the following

<script type="text/javascript">

```
Var x=new array(1,2,3,4,5)

for(i in x)

{
document.write(x[i]);

}

</script>
```

12345

12) what is the name of deployment descriptor file of a web application?

Web.xmi

13) in javascript, which of the following event handler method is called when a user clicks on item in web page?

Onclock()

14) which event captures in keypress?

onkeydown

15) assuming that lion.jpg cannot be found,what will be displayed when the following code is loaded in the browser?

The text ‘Lion’

16) in a servlet, destroy method is called

Once at the end of the life cycle of a servlet.

17) which of the following are table related tags?

<th>

18) to add a cookie to the user’s machine, the following method of the httpresponse object is used

Addcookie()

19) what is the correct place in an html, document , from where you can refer to an external style sheet?

In the head section

20) using servlets , the getParameterValues() method returns a

String array

21) which attribute of<form> tag is used the form data when a form is submitted

action

22) in which deployment descriptor is the <servlet-mapping> and <servlet> elements defined

web.xml

23) http is a_____

statelessprotocol

24) name the implicit object of javax.servlet.http.httpservletrequest in jsp

request

25) which of the following attribute of the table tag is used to specify the space between cells?

cellspacing

26) to place an image in particular position on the web page which css property is used?

Backgraound position

27) which of the following statements is incorrect about services?

servelets are excecuted by web browser

28) what is is returned when a confirm box is cancelled in javascript?

false

29) which package does genericservlet belong to?

Java.servlet

30) in javascript,which of the following event handler method is called a text field in a web page is changed by the user?

Onchange()

SET9

1)Beween which set of tags does most of the content of your web page need to be placed

<body><\body>

2) The values entered/selected in the HTML form elements is passed on to the serviet through

HTTPservletrequest

3) syntax for defining scriptlets in jsp is

<%-------%>

4) In CSS to repeat the background image horizontally which property is used

Background.repeat:repeat-x

5) which protocol would you use to access a file on the world wide web through a secure connection?

HTTP

6) what is the output of the following alert(sum)

<script language="javascript">

Function showAlert(){

```
a=5; b=6;
sum=a+b;
alert(sum);
}
</script>
```

Ans: 11

7)To add a cookie to the users machine the following method of the httipResponse object is used

Addcookie()

8) The min,max and step attributes can be used with which of the following input types of HTML5?

number

9) which method of the servlet will be called when a servlet is undeployed/removed in a server?

destroy

10) To place a image in a particular position on the web page which css property is used?

Background-position

11)keyword is used to declare variables in javascript

var

12)which of the following is used to insert java values directly into the output of a Jsp page?

Expressions

13)sevletcontext object is used to access?

browserinformation

14)the state information for a client is stored in

The http session object

15)WHATWG is an abbrivation of?

Web hyper text

16) which CSS property is used to change the text color of an element?

color

17) HTTP is a?

Stateless protocol

18) which method of the HTTPsevletRequest object is used. If there is a chance of retrieving multiple values for any given input parmeter?

Getparametervalues

19) In java script ,which of the following event handler method is called when the mouse pointer moves over an item in the webpage?

Onmouseover()

20) which of the following is legal JSP syntax to print the value of i?

<%inti=i.%><%=ii%>

21) identify the selectors(CSS syntax part) from the given CSS statement.H1{color.red;}

H1

22) The src attribute of an <IMG> tag indicates------

The path of the location of the image

23) the set timeout(functionname,time) is a method belonging to which of the following expect?

window

24) JAVAScript a case sensitive language?

yes

25) In JavaScript, which of the following event handler method is called when an item on the web page gains focus?

Onfocus()

26) Name the implicit object of java.servlet.http.httpservletRequest in Jsp?

request

27) In order to respond to HTTP requests , a servlet should extend?

HTTPSERVLET

28) service method of a servlet is called?

For Every client Request

29) what is the tag to be used if we have to create an input element for text, with the value .this is my form element?

TYPE=TEXT

30) In a servlet, destroy method is called? ONLY once in the life cycle of the servlet

once at the end of the life cycle of a servlet