**Java MCQ’s**

**COLLECTION- LIST, SET, MAP**

**Question 1:**

**Find the output of the following:**

**package.**com.hexaware.threads;

**import** java.util.\*;

**class** Hashtable {

**public** **static** **void** main(String args[]) {

            Hashtable obj = **new** Hashtable();

            obj.put("A", **new** Integer(3));

            obj.put("B", **new** Integer(2));

            obj.put("C", **new** Integer(8));

            obj.remove(**new** String("c"));

            System.*out*.print(obj);

        }

    }

 a)8,3

 b)3,2

c)2,8

 d)3,2,8

**Question 2:**

 Which statement should be included in the below program to display the elements at index 3?

public class arrayList {

                            public static void main(String[] a){

                    ArrayList<String> al = new ArrayList<String>();

                    al.add("JAVA");

                    al.add("C++");

                    al.add("PERL");

                    al.add("PHP");

                    System.*out*.println(al);

                    al.add(2,"PLAY");

                    System.*out*.println(al);

            }

1)    system.out.println (“Element at Index 3:”+al.get(1));

2)    system.out.println (a1.get(3));

**3)**    **system.out.println (“Element at Index 3:”+al.get(3));**

4)    None of these

**Question 3:**

public class Ques\_1 {

            public static void main(String[] args) {

HashMap<Integer,String> h=new HashMap<Integer,String>();

h.put(80, "pgs");

h.put( 34, null);

h.put(null, null);

h.put(null, "sd");

System.out.println(h);

            }

}

a. {null=sd, 34=null, 80=pgs}

b. {null=sd, 34=null, null=null, 80=pgs}

c. compilation error

d. no output

**Question 4:**

public class Ques\_1 {

            public static void main(String[] args) {

                        TreeMap<Integer,String> h=new TreeMap<Integer,String>();

h.put(80, "pgs");

h.put( 34, "null");

h.put(null, null);

h.put(null, "sd");

System.out.println(h);

            }

}

a. {null=sd, 34=null, 80=pgs}

b. {null=sd, 34=null, null=null, 80=pgs}

c. compilation error

d. no output

**Question 5:**

public class collection {

public static void main(String[] args) {

                        HashSet <Integer> h = new HashSet <Integer> ();

                        h.add(14);

                        h.add(59);

                        Iterator<Integer> r =h.iterator();

                        while(r.hasNext()) {

                                    System.out.println(r.next());

                        } } }

a)    59,14

b)    Error

c)    14,59

d)    59,14

1. What will this code print?

**int** arr[] = **new** **int** [5];

System.out.print(arr);

a)0  
b)value stored in arr[0].  
c) 00000  
d) Class name@ hashcode in hexadecimal form

1. What is the error in the following class definitions?

abstract class xy  
{  
abstract sum (int x, int y) { }  
}

1. Class header is not defined properly.  
   (b) Constructor is not defined.  
   (c) Method is not defined properly  
   (d) Method is defined properly  
   (e) No error.
2. Consider the following code and choose the correct option:  
   class X {

int x;

X(int x){

x=2;

}}  
class Y extends X{

Y(){}

void displayX(){  
System.out.print(x);}  
public static void main(String args[]){  
 new Y().displayX();}}

Compiles and display 2

Compiles and runs without any output

Compiles and display 0

Compilation error

1. Consider the following code and choose the correct option:  
   class Test{ private void display(){  
   System.out.println("Display()");}  
   private static void show() { display();  
   System.out.println("show()");}  
   public static void main(String arg[]){  
   show();}}

Compiles and prints show()

Compiles and prints Display() show()

Compiles but throws runtime exception

Compilation error

1. Consider the following code and choose the correct option:  
   class A{ A(){

System.out.print("From A");}}  
class B extends A{

B(int z){

z=2;}  
public static void main(String args[]){  
 new B(3);}}

Compilation error

Comiples and prints From A

Compiles but throws runtime exception

Compiles and display 3

1. class One{  
   int var1;  
   One (int x){  
   var1 = x;  
   }}  
   class Derived extends One{  
   int var2;  
   void display(){  
   System.out.println("var 1="+var1+"var2="+var2);  
   }}  
   class Main{  
   public static void main(String[] args){  
   Derived obj = new Derived();  
   obj.display();  
   }}  
   consider the code above & select the proper output from the options.

0 , 0

compiles successfully but runtime error

compile error

none of these

1. Consider the following code and choose the correct option:  
   package aj; class A{ protected int j; }  
   package bj; class B extends A  
   { public static void main(String ar[]){   
   System.out.print(new A().j=23);}}

code compiles fine and will display 23

code compiles but will not display output

j can not be initialized

compliation error

1. class Order{  
   Order(){  
   System.out.println("Cat");  
   }  
   public static void main(String... Args){  
   Order obj = new Order();  
   System.out.println("Ant");  
   }  
   static{  
   System.out.println("Dog");  
   }  
   {  
   System.out.println("Man");  
   }}  
   consider the code above & select the proper output from the options.

compile error

Man Dog Cat Ant

Dog Man Cat Ant

Cat Ant Dog Man

1. public class MyAr {  
    public static void main(String argv[]) {  
    MyAr m = new MyAr();  
    m.amethod();  
    }  
    public void amethod() {  
    final int i1;  
    System.out.println(i1);  
    }  
   }  
   What is the Output of the Program?

Unresolved compilation problem: The local variable i1 may not have been initialized

Compilation and output of null

None of the given options

1. class MyClass1  
    {  
    private int area(int side)  
    {  
    return(side \* side);  
    }  
    public static void main(String args[ ])  
    {  
    MyClass1 MC = new MyClass1( );  
    int area = MC.area(50);  
    System.out.println(area);  
    }  
    }  
    What would be the output?

Compilation error

Runtime Exception

2500

50

1. Given:  
    public class Yikes {  
     
    public static void go(Long n) {System.out.print("Long ");}  
    public static void go(Short n) {System.out.print("Short ");}  
    public static void go(int n) {System.out.print("int ");}  
    public static void main(String [] args) {  
    short y = 6;  
    long z = 7;  
    go(y);  
    go(z);  
    }  
    }  
   What is the result?

int Long

Short Long

Compilation fails.

An exception is thrown at runtime.

1. abstract class MineBase {  
    abstract void amethod();  
    static int i;  
   }  
   public class Mine extends MineBase {  
    public static void main(String argv[]){  
    int[] ar=new int[5];  
    for(i=0;i < ar.length;i++)  
    System.out.println(ar[i]);  
    }  
   }

A Sequence of 5 zero's will be printed like 0 0 0 0 0

A Sequence of 5 one's will be printed like 1 1 1 1 1

IndexOutOfBoundes Error

Compilation Error occurs and to avoid them we need to declare Mine class as abstract

1. Suppose class B is sub class of class A:  
   A) If class A doesn't have any constructor, then class B also must not have any constructor  
   B) If class A has parameterized constructor, then class B can have default as well as parameterized constructor  
   C) If class A has parameterized constructor then call to class A constructor should be made explicitly by constructor of class B

Only B and C is TRUE

Only A is TRUE

All are FALSE

Only A and C is TRUE

1. What will be printed out if you attempt to compile and run the following code ?   
   public class AA {  
    public static void main(String[] args) {  
    int i = 9;  
    switch (i) {  
    default:  
    System.out.println("default");  
    case 0:  
    System.out.println("zero");  
    break;  
    case 1:  
    System.out.println("one");  
    case 2:  
    System.out.println("two");  
    }  
    }  
   }

default zero one two

default zero

Compilation Error

default

1. Given the following code what will be output?   
   public class Pass{  
    static int j=20;  
    public static void main(String argv[]){  
    int i=10;  
    Pass p = new Pass();  
    p.amethod(i);  
    System.out.println(i);  
    System.out.println(j);  
    }  
     
    public void amethod(int x){  
    x=x\*2;  
    j=j\*2;  
    }  
   }

Error: amethod parameter does not match variable

10 and 40

10, and 20

20 and 40

1. Order{  
   Order(){  
   System.out.println("Cat");  
   }  
   public static void main(String... Args){  
   System.out.println("Ant");  
   }  
   static{  
   System.out.println("Dog");  
   }  
   {  
   System.out.println("Man");  
   }}  
   consider the code above & select the proper output from the options.

Dog Ant

Dog Man Cat Ant

Man Dog Ant

Dog Man Ant

1. public class c123 {  
    private c123() {  
    System.out.println("Hellow");  
    }  
    public static void main(String args[]) {  
    c123 o1 = new c123();  
    c213 o2 = new c213();  
    }  
   }  
   class c213 {  
    private c213() {  
    System.out.println("Hello123");  
    }  
   }  
     
   What is the output?

Hellow

It is not possible to declare a constructor as private

Compilation Error

Runs without any output

1. What will happen if a main() method of a "testing" class tries to access a private instance variable of an object using dot notation?

The compiler will automatically change the private variable to a public variable

The compiler will find the error and will not make a .class file

The program will compile and run successfully

The program will compile successfully, but the .class file will not run correctly

1. public class MyClass {  
    static void print(String s, int i) {  
    System.out.println("String: " + s + ", int: " + i);  
    }  
     
    static void print(int i, String s) {  
    System.out.println("int: " + i + ", String: " + s);  
    }  
     
    public static void main(String[] args) {  
    print("String first", 11);  
    print(99, "Int first");  
    }  
   }What would be the output?

String: String first, int: 11 int: 99, String: Int first

int: 27, String: Int first String: String first, int: 27

Compilation Error

Runtime Exception

1. Consider the following code and choose the correct option:  
   class A{ int z; A(int x){z=x;} }  
   class B extends A{   
   public static void main(String arg){  
   new B();}}

Compilation error

Compiles but throws run time exception

Compiles and displays nothing

None of the listed options

A) No argument constructor is provided to all Java classes by default  
B) No argument constructor is provided to the class only when no constructor is defined.  
C) Constructor can have another class object as an argument  
D) Access specifiers are not applicable to Constructor

Only A is TRUE

All are TRUE

B and C is TRUE

All are FALSE

1. Consider the following code and choose the best option:  
   class Super{ int x; Super(){x=2;}}  
   class Sub extends Super { void displayX(){  
   System.out.print(x);}  
   public static void main(String args[]){  
    new Sub().displayX();}}

Compilation error

Compiles and display 0

Compiles and display 2

Compiles and runs without any output

1. All data members in an interface are by default

abstract and final

public and abstract

public ,static and final

default and abstract

1. Consider the following code and choose the correct option:  
   public static void before() {  
   Set set = new TreeSet();  
   set.add("2");  
   set.add(3);  
   set.add("1");  
   Iterator it = set.iterator();  
   while (it.hasNext())  
   System.out.print(it.next() + " ");  
   }

The before() method will print 1 2

The before() method will print 1 2 3

The before() method will throw an exception at runtime

The before() method will not compile

1. Consider the following code and choose the correct option:  
   class Test{  
    public static void parse(String str) {  
    try { int num = Integer.parseInt(str);  
    } catch (NumberFormatException nfe) {  
    num = 0; } finally { System.out.println(num);  
    } } public static void main(String[] args) {  
    parse("one"); }

Compilation fails

ParseException thrown at runtime

NumberFormatException thrown at runtime

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("One");  
   int y = 2 / 0;  
   System.out.println("Two");  
   }   
   catch(RuntimeException ex){  
   System.out.println("Catch");  
   }   
   finally{  
   System.out.println("Finally");  
   }  
   } }

One Two Catch Finally

One Catch

One Catch Finally

One Two Catch

1. Given:  
    static void test() {  
    try {  
    String x = null;  
    System.out.print(x.toString() + " ");  
    }  
    finally { System.out.print("finally "); }  
    }  
    public static void main(String[] args) {  
    try { test(); }  
    catch (Exception ex) { System.out.print("exception "); }  
    }  
   What is the result?

Compilation fails.

finally exception

finally

null

1. Which of the following is a checked exception?

Arithmetic Exception

IOException

NullPointerException

ArrayIndexOutOfBoundsException

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("Try Block");  
   }   
   finally{  
   System.out.println("Finally Block");  
   }  
   } }

Try Block Finally Block

Try Block

Finally Block Try Block

Finally Block

1. What will be the output of the program?   
     
   public class RTExcept   
   {  
    public static void throwit ()   
    {  
    System.out.print("throwit ");  
    throw new RuntimeException();  
    }  
    public static void main(String [] args)   
    {  
    try   
    {  
    System.out.print("hello ");  
    throwit();  
    }  
    catch (Exception re )   
    {  
    System.out.print("caught ");  
    }  
    finally   
    {  
    System.out.print("finally ");  
    }  
    System.out.println("after ");  
    }  
   }

hello throwit caught

Compilation fails

hello throwit RuntimeException caught after

hello throwit caught finally after

1. Consider the following code and choose the correct option:  
   class Test{  
    static void display(){  
    throw new RuntimeException();  
    }  
    public static void main(String args[]){  
    try{display();  
    }catch(Exception e){ }  
    catch(RuntimeException re){}  
    finally{System.out.println("exit");}}}

exit

Compiles and no output

Compilation fails

Compiles but exception at runtime

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("Java is portable");  
   } } }

Java is portable

We cannot have a try block block without a catch / finally block

Nothing is diaplayed

We cannot have a try block without a catch block

1. Carefully read the question and answer accordingly.  
   Which of the following are true about protected access specifier?

If one class is having protected method then the method is available for subclass which is present in another package

A class can be declared as protected.

All members of abstract class are by default protected

Protected is default access modifier of a child class

1. Carefully read the question and answer accordingly.  
   Which of the following are true about constructors?

Constructors can be overloaded

Constructors can be overridden.

Constructor is a special type of method which may have return type.

Constructors should be called explicitly like methods

1. Carefully read the question and answer accordingly.  
   class InterfaceDemo  
   {  
    public static void main(String [] args)  
    {  
    DigiCam cam1=new DigiCam();  
    cam1.doCharge();  
    }//main  
   }  
   interface USB  
   {  
    int readData();  
    boolean writeData(String input);  
    void doCharge();  
   }  
   class DigiCam implements USB  
   {  
    public int readData(){ return 0;}  
    public boolean writeData(String input){ return false; }  
    void doCharge(){ return;}  
   }  
   Which of the following is correct with respect to given code?

Code will not compile due to weaker access privilege.

Code will Compile without any Error

Code will compile but wont print any message

Runtime Exception

1. Carefully read the question and answer accordingly.  
   public abstract class Shape   
   {  
    private int x;  
    private int y;  
    public abstract void draw();  
    public void setAnchor(int x, int y)   
    {  
    this.x = x;  
    this.y = y;  
    }  
    }  
   Which two classes use the Shape class correctly?   
   1.public class Circle implements Shape {  
   private int radius;  
   }  
   2.public abstract class Circle extends Shape {  
   private int radius;  
   }  
   3.public class Circle extends Shape {  
   private int radius;  
   public void draw();  
   }  
   4.public class Circle extends Shape {  
   private int radius;  
   public void draw() {/\* code here \*/}  
   }

1&2

1&3

2&3

3&4

2&4

1. Carefully read the question and answer accordingly.  
   Which of the following is not the Java keyword?

extends

implements

throwed

Integer

Boolean

1. Carefully read the question and answer accordingly.  
   \_\_\_\_\_\_\_\_\_\_\_\_\_ Operator is used to create an object.

class

new

print

main

Object

1. Carefully read the question and answer accordingly.  
   What will be the output for following code?  
   public class collection1{  
   public static void main(String[]args){  
   Collection c=new ArrayList();  
   c.add(10);  
   c.add("abc");  
   Collection l=new HashSet();  
   l.add(20);  
   l.add("abc");  
   l.add(30);  
   c.addAll(l);  
   c.removeAll(l);  
   System.out.println( c );  
   }  
   }

[10,abc]

[10]

Compilation error

[abc]

1. Carefully read the question and answer accordingly.  
   Consider the following code:  
   01 import java.util.Set;  
   02 import java.util.TreeSet;  
   03  
   04 class TestSet {   
   05 public static void main(String[] args) {  
   06 Set set = new TreeSet<String>();   
   07 set.add("Green World");   
   08 set.add(1);  
   09 set.add("Green Peace");   
   10 System.out.println(set);   
   11 }  
   12 }  
   Which of the following option gives the output for the above code?

Prints the output [Green World, 1, Green Peace] at line no 9

Compilation error at line no 8

Throws Runtime Exception

Prints the output [Green World, Green Peace] at line no 9

1. Carefully read the question and answer accordingly.  
   Which of the following are true statements?

The Iterator interface declares only three methods: hasNext, next and remove.

The ListIterator interface extends both the List and Iterator interfaces

The ListIterator interface provides the ability to determine its position in the List.

The ListIterator interface provides forward and backward iteration capabilities.

1. Carefully read the question and answer accordingly.  
   What is the data type of m in the following code?  
   import java.util.\*;  
   public class set1  
   {  
    public static void main(String [] args)  
    {  
    Set s=new HashSet();  
    s.add(20);  
    s.add("abc");  
    for( \_\_\_\_\_ m:s)  
    System.out.println(m);  
    }  
   }

int

String

Object

set1

1. Carefully read the question and answer accordingly.  
   What will be the output for following code?  
   public class Exe3   
   {  
    public static void main(String[]args)  
    {  
    try  
    {  
    int i=10;  
    int j=i/0;  
    return;  
    }catch(Exception e)  
    {  
    System.out.println("welcome");  
    }  
    System.out.println("error");  
    }  
   }  
   1.welcome  
   2.error  
   3.compilation error

1&2

1&2&3

1&3

2

2&3

1. Carefully read the question and answer accordingly.  
   select true or false . Statement : Throwable is the super class of all exceptional type classes.

TRUE

FALSE

Carefully read the question and answer accordingly.  
You need to store elements in a collection that guarantees that no duplicates are stored and all elements can be accessed in natural order. Which interface provides that capability?

java.util.Map

java.util.Set

java.util.List

java.util.Collection

1. **enum** Season {

WINTER, SPRING, SUMMER, FALL

};

System.out.println(Season.WINTER);

a) 0  
b) 1  
c) 2  
d) 3

class Test

{

static int a;

static

{

a = 4;

System.out.println ("inside static blockn");

System.out.println ("a = " + a);

}

Test()

{

System.out.println ("ninside constructorn");

a = 10;

}

public static void func()

{

a = a + 1;

System.out.println ("a = " + a);

}

public static void main(String[] args)

{

Test obj = new Test();

obj.func();

}

}

inside static block

a = 4

inside constructor

a = 11

compile time error

runtime error

inside static block

a = 4

inside constructor

a = 5

inside static block

a = 10

inside constructor

a = 11

1. What will this code print?

**int** arr[] = **new** **int** [5];

System.out.print(arr);

a)0  
b)value stored in arr[0].  
c) 00000  
d) Class name@ hashcode in hexadecimal form

1. What is the error in the following class definitions?

abstract class xy  
{  
abstract sum (int x, int y) { }  
}

1. Class header is not defined properly.  
   (b) Constructor is not defined.  
   (c) Method is not defined properly  
   (d) Method is defined properly  
   (e) No error.
2. Consider the following code and choose the correct option:  
   class X { int x; X(int x){x=2;}}  
   class Y extends X{ Y(){} void displayX(){  
   System.out.print(x);}  
   public static void main(String args[]){  
    new Y().displayX();}}

Compiles and display 2

Compiles and runs without any output

Compiles and display 0

Compilation error

1. Consider the following code and choose the correct option:  
   class Test{ private void display(){  
   System.out.println("Display()");}  
   private static void show() { display();  
   System.out.println("show()");}  
   public static void main(String arg[]){  
   show();}}

Compiles and prints show()

Compiles and prints Display() show()

Compiles but throws runtime exception

Compilation error

1. Consider the following code and choose the correct option:  
   class A{ A(){System.out.print("From A");}}  
   class B extends A{ B(int z){z=2;}  
   public static void main(String args[]){  
    new B(3);}}

Compilation error

Comiples and prints From A

Compiles but throws runtime exception

Compiles and display 3

1. class One{  
   int var1;  
   One (int x){  
   var1 = x;  
   }}  
   class Derived extends One{  
   int var2;  
   void display(){  
   System.out.println("var 1="+var1+"var2="+var2);  
   }}  
   class Main{  
   public static void main(String[] args){  
   Derived obj = new Derived();  
   obj.display();  
   }}  
   consider the code above & select the proper output from the options.

0 , 0

compiles successfully but runtime error

compile error

none of these

1. Consider the following code and choose the correct option:  
   package aj; class A{ protected int j; }  
   package bj; class B extends A  
   { public static void main(String ar[]){   
   System.out.print(new A().j=23);}}

code compiles fine and will display 23

code compiles but will not display output

j can not be initialized

compliation error

1. class Order{  
   Order(){  
   System.out.println("Cat");  
   }  
   public static void main(String... Args){  
   Order obj = new Order();  
   System.out.println("Ant");  
   }  
   static{  
   System.out.println("Dog");  
   }  
   {  
   System.out.println("Man");  
   }}  
   consider the code above & select the proper output from the options.

compile error

Man Dog Cat Ant

Dog Man Cat Ant

Cat Ant Dog Man

1. public class MyAr {  
    public static void main(String argv[]) {  
    MyAr m = new MyAr();  
    m.amethod();  
    }  
    public void amethod() {  
    final int i1;  
    System.out.println(i1);  
    }  
   }  
   What is the Output of the Program?

Unresolved compilation problem: The local variable i1 may not have been initialized

Compilation and output of null

None of the given options

1. class MyClass1  
    {  
    private int area(int side)  
    {  
    return(side \* side);  
    }  
    public static void main(String args[ ])  
    {  
    MyClass1 MC = new MyClass1( );  
    int area = MC.area(50);  
    System.out.println(area);  
    }  
    }  
    What would be the output?

Compilation error

Runtime Exception

2500

50

1. Given:  
    public class Yikes {  
     
    public static void go(Long n) {System.out.print("Long ");}  
    public static void go(Short n) {System.out.print("Short ");}  
    public static void go(int n) {System.out.print("int ");}  
    public static void main(String [] args) {  
    short y = 6;  
    long z = 7;  
    go(y);  
    go(z);  
    }  
    }  
   What is the result?

int Long

Short Long

Compilation fails.

An exception is thrown at runtime.

1. abstract class MineBase {  
    abstract void amethod();  
    static int i;  
   }  
   public class Mine extends MineBase {  
    public static void main(String argv[]){  
    int[] ar=new int[5];  
    for(i=0;i < ar.length;i++)  
    System.out.println(ar[i]);  
    }  
   }

A Sequence of 5 zero's will be printed like 0 0 0 0 0

A Sequence of 5 one's will be printed like 1 1 1 1 1

IndexOutOfBoundes Error

Compilation Error occurs and to avoid them we need to declare Mine class as abstract

1. Suppose class B is sub class of class A:  
   A) If class A doesn't have any constructor, then class B also must not have any constructor  
   B) If class A has parameterized constructor, then class B can have default as well as parameterized constructor  
   C) If class A has parameterized constructor then call to class A constructor should be made explicitly by constructor of class B

Only B and C is TRUE

Only A is TRUE

All are FALSE

Only A and C is TRUE

1. What will be printed out if you attempt to compile and run the following code ?   
   public class AA {  
    public static void main(String[] args) {  
    int i = 9;  
    switch (i) {  
    default:  
    System.out.println("default");  
    case 0:  
    System.out.println("zero");  
    break;  
    case 1:  
    System.out.println("one");  
    case 2:  
    System.out.println("two");  
    }  
    }  
   }

default zero one two

default zero

Compilation Error

default

1. Given the following code what will be output?   
   public class Pass{  
    static int j=20;  
    public static void main(String argv[]){  
    int i=10;  
    Pass p = new Pass();  
    p.amethod(i);  
    System.out.println(i);  
    System.out.println(j);  
    }  
     
    public void amethod(int x){  
    x=x\*2;  
    j=j\*2;  
    }  
   }

Error: amethod parameter does not match variable

10 and 40

10, and 20

20 and 40

1. Order{  
   Order(){  
   System.out.println("Cat");  
   }  
   public static void main(String... Args){  
   System.out.println("Ant");  
   }  
   static{  
   System.out.println("Dog");  
   }  
   {  
   System.out.println("Man");  
   }}  
   consider the code above & select the proper output from the options.

Dog Ant

Dog Man Cat Ant

Man Dog Ant

Dog Man Ant

1. public class c123 {  
    private c123() {  
    System.out.println("Hellow");  
    }  
    public static void main(String args[]) {  
    c123 o1 = new c123();  
    c213 o2 = new c213();  
    }  
   }  
   class c213 {  
    private c213() {  
    System.out.println("Hello123");  
    }  
   }  
     
   What is the output?

Hellow

It is not possible to declare a constructor as private

Compilation Error

Runs without any output

1. What will happen if a main() method of a "testing" class tries to access a private instance variable of an object using dot notation?

The compiler will automatically change the private variable to a public variable

The compiler will find the error and will not make a .class file

The program will compile and run successfully

The program will compile successfully, but the .class file will not run correctly

1. public class MyClass {  
    static void print(String s, int i) {  
    System.out.println("String: " + s + ", int: " + i);  
    }  
     
    static void print(int i, String s) {  
    System.out.println("int: " + i + ", String: " + s);  
    }  
     
    public static void main(String[] args) {  
    print("String first", 11);  
    print(99, "Int first");  
    }  
   }What would be the output?

String: String first, int: 11 int: 99, String: Int first

int: 27, String: Int first String: String first, int: 27

Compilation Error

Runtime Exception

1. Consider the following code and choose the correct option:  
   class A{ int z; A(int x){z=x;} }  
   class B extends A{   
   public static void main(String arg){  
   new B();}}

Compilation error

Compiles but throws run time exception

Compiles and displays nothing

None of the listed options

A) No argument constructor is provided to all Java classes by default  
B) No argument constructor is provided to the class only when no constructor is defined.  
C) Constructor can have another class object as an argument  
D) Access specifiers are not applicable to Constructor

Only A is TRUE

All are TRUE

B and C is TRUE

All are FALSE

1. Consider the following code and choose the best option:  
   class Super{ int x; Super(){x=2;}}  
   class Sub extends Super { void displayX(){  
   System.out.print(x);}  
   public static void main(String args[]){  
    new Sub().displayX();}}

Compilation error

Compiles and display 0

Compiles and display 2

Compiles and runs without any output

1. All data members in an interface are by default

abstract and final

public and abstract

public ,static and final

default and abstract

1. Consider the following code and choose the correct option:  
   public static void before() {  
   Set set = new TreeSet();  
   set.add("2");  
   set.add(3);  
   set.add("1");  
   Iterator it = set.iterator();  
   while (it.hasNext())  
   System.out.print(it.next() + " ");  
   }

The before() method will print 1 2

The before() method will print 1 2 3

The before() method will throw an exception at runtime

The before() method will not compile

1. Consider the following code and choose the correct option:  
   class Test{  
    public static void parse(String str) {  
    try { int num = Integer.parseInt(str);  
    } catch (NumberFormatException nfe) {  
    num = 0; } finally { System.out.println(num);  
    } } public static void main(String[] args) {  
    parse("one"); }

Compilation fails

ParseException thrown at runtime

NumberFormatException thrown at runtime

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("One");  
   int y = 2 / 0;  
   System.out.println("Two");  
   }   
   catch(RuntimeException ex){  
   System.out.println("Catch");  
   }   
   finally{  
   System.out.println("Finally");  
   }  
   } }

One Two Catch Finally

One Catch

One Catch Finally

One Two Catch

1. Given:  
    static void test() {  
    try {  
    String x = null;  
    System.out.print(x.toString() + " ");  
    }  
    finally { System.out.print("finally "); }  
    }  
    public static void main(String[] args) {  
    try { test(); }  
    catch (Exception ex) { System.out.print("exception "); }  
    }  
   What is the result?

Compilation fails.

finally exception

finally

null

1. Which of the following is a checked exception?

Arithmetic Exception

IOException

NullPointerException

ArrayIndexOutOfBoundsException

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("Try Block");  
   }   
   finally{  
   System.out.println("Finally Block");  
   }  
   } }

Try Block Finally Block

Try Block

Finally Block Try Block

Finally Block

1. What will be the output of the program?   
     
   public class RTExcept   
   {  
    public static void throwit ()   
    {  
    System.out.print("throwit ");  
    throw new RuntimeException();  
    }  
    public static void main(String [] args)   
    {  
    try   
    {  
    System.out.print("hello ");  
    throwit();  
    }  
    catch (Exception re )   
    {  
    System.out.print("caught ");  
    }  
    finally   
    {  
    System.out.print("finally ");  
    }  
    System.out.println("after ");  
    }  
   }

hello throwit caught

Compilation fails

hello throwit RuntimeException caught after

hello throwit caught finally after

1. Consider the following code and choose the correct option:  
   class Test{  
    static void display(){  
    throw new RuntimeException();  
    }  
    public static void main(String args[]){  
    try{display();  
    }catch(Exception e){ }  
    catch(RuntimeException re){}  
    finally{System.out.println("exit");}}}

exit

Compiles and no output

Compilation fails

Compiles but exception at runtime

1. class Trial{  
   public static void main(String[] args){  
   try{  
   System.out.println("Java is portable");  
   } } }

Java is portable

We cannot have a try block block without a catch / finally block

Nothing is diaplayed

We cannot have a try block without a catch block

1. Carefully read the question and answer accordingly.  
   Which of the following are true about protected access specifier?

If one class is having protected method then the method is available for subclass which is present in another package

A class can be declared as protected.

All members of abstract class are by default protected

Protected is default access modifier of a child class

1. Carefully read the question and answer accordingly.  
   Which of the following are true about constructors?

Constructors can be overloaded

Constructors can be overridden.

Constructor is a special type of method which may have return type.

Constructors should be called explicitly like methods

1. Carefully read the question and answer accordingly.  
   class InterfaceDemo  
   {  
    public static void main(String [] args)  
    {  
    DigiCam cam1=new DigiCam();  
    cam1.doCharge();  
    }//main  
   }  
   interface USB  
   {  
    int readData();  
    boolean writeData(String input);  
    void doCharge();  
   }  
   class DigiCam implements USB  
   {  
    public int readData(){ return 0;}  
    public boolean writeData(String input){ return false; }  
    void doCharge(){ return;}  
   }  
   Which of the following is correct with respect to given code?

Code will not compile due to weaker access privilege.

Code will Compile without any Error

Code will compile but wont print any message

Runtime Exception

1. Carefully read the question and answer accordingly.  
   public abstract class Shape   
   {  
    private int x;  
    private int y;  
    public abstract void draw();  
    public void setAnchor(int x, int y)   
    {  
    this.x = x;  
    this.y = y;  
    }  
    }  
   Which two classes use the Shape class correctly?   
   1.public class Circle implements Shape {  
   private int radius;  
   }  
   2.public abstract class Circle extends Shape {  
   private int radius;  
   }  
   3.public class Circle extends Shape {  
   private int radius;  
   public void draw();  
   }  
   4.public class Circle extends Shape {  
   private int radius;  
   public void draw() {/\* code here \*/}  
   }

1&2

1&3

2&3

3&4

2&4

1. Carefully read the question and answer accordingly.  
   Which of the following is not the Java keyword?

extends

implements

throwed

Integer

Boolean

1. Carefully read the question and answer accordingly.  
   \_\_\_\_\_\_\_\_\_\_\_\_\_ Operator is used to create an object.

class

new

print

main

Object

1. Carefully read the question and answer accordingly.  
   What will be the output for following code?  
   public class collection1{  
   public static void main(String[]args){  
   Collection c=new ArrayList();  
   c.add(10);  
   c.add("abc");  
   Collection l=new HashSet();  
   l.add(20);  
   l.add("abc");  
   l.add(30);  
   c.addAll(l);  
   c.removeAll(l);  
   System.out.println( c );  
   }  
   }

[10,abc]

[10]

Compilation error

[abc]

1. Carefully read the question and answer accordingly.  
   Consider the following code:  
   01 import java.util.Set;  
   02 import java.util.TreeSet;  
   03  
   04 class TestSet {   
   05 public static void main(String[] args) {  
   06 Set set = new TreeSet<String>();   
   07 set.add("Green World");   
   08 set.add(1);  
   09 set.add("Green Peace");   
   10 System.out.println(set);   
   11 }  
   12 }  
   Which of the following option gives the output for the above code?

Prints the output [Green World, 1, Green Peace] at line no 9

Compilation error at line no 8

Throws Runtime Exception

Prints the output [Green World, Green Peace] at line no 9

1. Carefully read the question and answer accordingly.  
   Which of the following are true statements?

The Iterator interface declares only three methods: hasNext, next and remove.

The ListIterator interface extends both the List and Iterator interfaces

The ListIterator interface provides the ability to determine its position in the List.

The ListIterator interface provides forward and backward iteration capabilities.

1. Carefully read the question and answer accordingly.  
   What is the data type of m in the following code?  
   import java.util.\*;  
   public class set1  
   {  
    public static void main(String [] args)  
    {  
    Set s=new HashSet();  
    s.add(20);  
    s.add("abc");  
    for( \_\_\_\_\_ m:s)  
    System.out.println(m);  
    }  
   }

int

String

Object

set1

1. Carefully read the question and answer accordingly.  
   What will be the output for following code?  
   public class Exe3   
   {  
    public static void main(String[]args)  
    {  
    try  
    {  
    int i=10;  
    int j=i/0;  
    return;  
    }catch(Exception e)  
    {  
    System.out.println("welcome");  
    }  
    System.out.println("error");  
    }  
   }  
   1.welcome  
   2.error  
   3.compilation error

1&2

1&2&3

1&3

2

2&3

1. Carefully read the question and answer accordingly.  
   select true or false . Statement : Throwable is the super class of all exceptional type classes.

TRUE

FALSE

Carefully read the question and answer accordingly.  
You need to store elements in a collection that guarantees that no duplicates are stored and all elements can be accessed in natural order. Which interface provides that capability?

java.util.Map

java.util.Set

java.util.List

java.util.Collection

1. **enum** Season {

WINTER, SPRING, SUMMER, FALL

};

System.out.println(Season.WINTER);

a) 0  
b) 1  
c) 2  
d) 3

class Test

{

static int a;

static

{

a = 4;

System.out.println ("inside static blockn");

System.out.println ("a = " + a);

}

Test()

{

System.out.println ("ninside constructorn");

a = 10;

}

public static void func()

{

a = a + 1;

System.out.println ("a = " + a);

}

public static void main(String[] args)

{

Test obj = new Test();

obj.func();

}

}

inside static block

a = 4

inside constructor

a = 11

compile time error

runtime error

inside static block

a = 4

inside constructor

a = 5

inside static block

a = 10

inside constructor

a = 11

Q 1 - Which of the following aspects of a project can be managed using Maven?

[A - Builds](javascript:void(0);)

[B - Documentation](javascript:void(0);)

[C - Reporting](javascript:void(0);)

D - All of the above.

Answer : D

Explanation

All of the above aspects of a project can be managed using Maven.

Q 2 - Which of the following configuration element is present in POM.xml?

[A - project dependencies](javascript:void(0);)

[B - plugins](javascript:void(0);)

[C - goals](javascript:void(0);)

D - All of the above.

Answer : D

Explanation

All of the above configuration elements are present in POM.xml.

Q 3 - Which of the following phase in maven life cycle tests the compiled source code using a suitable unit testing framework?

[A - validate](javascript:void(0);)

[B - compile](javascript:void(0);)

C - test

[D - package](javascript:void(0);)

Answer : C

Explanation

test phase tests the compiled source code using a suitable unit testing framework. These tests should not require the code be packaged or deployed.

Q 4 - Using which of the following way, you can activate a Maven Build Profile?

[A - OS Settings (for example, Windows family).](javascript:void(0);)

[B - Present/missing files.](javascript:void(0);)

C - Both of the above.

[D - None of the above.](javascript:void(0);)

Answer : C

Explanation

Using both of the above ways, you can activate a Maven Build Profile.

Q 5 - Which of the following command can be used to create a new project based on an archtype?

[A - mvn archetype:archetype](javascript:void(0);)

B - mvn archetype:generate

[C - mvn generate:archetype](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Answer : B

Explanation

mvn archetype:generate command can be used to create a new project based on an archtype.

Q 6 - Which of the following scope indicates that dependency is to be provided by JDK or web-Server/Container at runtime?

[A - compile](javascript:void(0);)

B - provided

[C - runtime](javascript:void(0);)

[D - test](javascript:void(0);)

Answer : B

Explanation

provided − This scope indicates that dependency is to be provided by JDK or web-Server/Container at runtime.

Q 7 - Apache Maven is a software project management and comprehension tool.

A - true

[B - false](javascript:void(0);)

Answer : A

Explanation

Apache Maven is a software project management and comprehension tool.

Q 8 - Which of the following phase in maven life cycle generates any source code to be included in compilation phase?

A - generate-sources

[B - generate-resources](javascript:void(0);)

[C - generate-test-sources](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Answer : A

Explanation

generate-sources generates any source code to be included in compilation phase.

Q 9 - Which of the following phase in maven life cycle performs actions required before integration tests are executed. For example, setting up the required environment?

[A - process-resources](javascript:void(0);)

B - pre-integration-test

[C - prepare-package](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Answer : B

Explanation

pre-integration-test performs actions required before integration tests are executed. For example, setting up the required environment.

Q 10 - When Maven starts looking for dependency libraries, it first searches dependency in local repository.

A - true

[B - false](javascript:void(0);)

Answer : A

Explanation

When Maven starts looking for dependency libraries, it first searches dependency in local repository.

Q 1 - Which of the following is true about Maven?

[A - Maven is a project management and comprehension tool.](javascript:void(0);)

[B - Maven provides developers a complete build lifecycle framework.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 2 - Which of the following is true about Maven?

[A - Development team can automate the project's build infrastructure in almost no time using Maven.](javascript:void(0);)

[B - Maven uses a standard directory layout and a default build lifecycle.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 3 - Which of the following is true about Maven Conventions?

[A - Maven uses Convention over Configuration which means developers are not required to create build process themselves.](javascript:void(0);)

[B - Developers using maven do not have to mention each and every configuration details.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 4 - Which of the following aspects of a project can be managed using Maven?

[A - Builds](javascript:void(0);)

[B - Documentation](javascript:void(0);)

[C - Reporting](javascript:void(0);)

[D - All of the above.](javascript:void(0);)

Q 5 - Which of the following aspects of a project can be managed using Maven?

[A - Dependencies](javascript:void(0);)

[B - SCMs](javascript:void(0);)

[C - Releases](javascript:void(0);)

[D - All of the above.](javascript:void(0);)

Q 6 - Which of the following aspects of a project can be managed using Maven?

[A - Distribution](javascript:void(0);)

[B - mailing list](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 7 - Which of the following command can tell the version of maven?

[A - mvn --version](javascript:void(0);)

[B - maven -version](javascript:void(0);)

[C - mvn version](javascript:void(0);)

[D - maven --version](javascript:void(0);)

Q 8 - What POM stands for?

[A - Project Object Mode](javascript:void(0);)

[B - Project Object Model](javascript:void(0);)

[C - Project Objective Mode](javascript:void(0);)

[D - Project Objective Model](javascript:void(0);)

Q 9 - What of the following is true about POM?

[A - It is fundamental Unit of Work in Maven.](javascript:void(0);)

[B - It is an XML file.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 10 - What of the following is true about POM?

[A - It always resides in the base directory of the project as pom.xml.](javascript:void(0);)

[B - It contains information about the project and various configuration details used by Maven to build the project(s).](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 11 - Which of the following configuration element is present in POM.xml?

[A - project dependencies](javascript:void(0);)

[B - plugins](javascript:void(0);)

[C - goals](javascript:void(0);)

[D - All of the above.](javascript:void(0);)

Q 12 - Which of the following configuration element is present in POM.xml?

[A - build profiles](javascript:void(0);)

[B - project version](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 13 - Which of the following configuration element is present in POM.xml?

[A - developers](javascript:void(0);)

[B - mailing list](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 14 - Which of the following is true about maven artifact?

[A - A maven artifact is a file, usually a JAR that gets deployed to a Maven repository.](javascript:void(0);)

[B - A Maven build produces one or more artifacts, such as a compiled JAR and a 'sources' JAR.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 15 - Which of the following is true about maven artifact?

[A - Each artifact has a group ID, an artifact ID (just a name), and a version string.](javascript:void(0);)

[B - The group ID,artifact ID and version together uniquely identify the artifact.](javascript:void(0);)

[C - A project's dependencies are specified as artifacts.](javascript:void(0);)

[D - All of the above.](javascript:void(0);)

Q 16 - Which of the following is true about Maven Build Lifecycle?

[A - A Build Lifecycle is a well defined sequence of phases which define the order in which the goals are to be executed.](javascript:void(0);)

[B - A phase represents a stage in life cycle.](javascript:void(0);)

[C - Both of the above.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 17 - Which of the following is true about 'clean' Maven life cycle?

[A - It cleans up artifacts created by prior builds.](javascript:void(0);)

[B - This is used to build the application.](javascript:void(0);)

[C - This generates site documentation for the project.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 18 - Which of the following is true about 'build' Maven life cycle?

[A - It cleans up artifacts created by prior builds.](javascript:void(0);)

[B - This is used to build the application.](javascript:void(0);)

[C - This generates site documentation for the project.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 19 - Which of the following is true about 'site' Maven life cycle?

[A - It cleans up artifacts created by prior builds.](javascript:void(0);)

[B - This is used to build the application.](javascript:void(0);)

[C - This generates site documentation for the project.](javascript:void(0);)

[D - None of the above.](javascript:void(0);)

Q 20 - Which of the following command removes the target directory with all the build data before starting the build process?

[A - mvn clean](javascript:void(0);)

[B - mvn build](javascript:void(0);)

[C - mvn compile](javascript:void(0);)

[D - mvn site](javascript:void(0);)

Q 21 - Which of the following command quickly builds Maven site?

[A - mvn clean](javascript:void(0);)

[B - mvn build](javascript:void(0);)

[C - mvn compile](javascript:void(0);)

[D - mvn site](javascript:void(0);)

Q 22 - Which of the following phase in maven life cycle validates that the project is correct and all necessary information is available?

[A - validate](javascript:void(0);)

[B - compile](javascript:void(0);)

[C - test](javascript:void(0);)

[D - package](javascript:void(0);)

Q 23 - Which of the following phase in maven life cycle compiles the source code of the project?

[A - validate](javascript:void(0);)

[B - compile](javascript:void(0);)

[C - test](javascript:void(0);)

[D - package](javascript:void(0);)

Q 24 - Which of the following phase in maven life cycle tests the compiled source code using a suitable unit testing framework?

[A - validate](javascript:void(0);)

[B - compile](javascript:void(0);)

[C - test](javascript:void(0);)

[D - package](javascript:void(0);)

Q 25 - Which of the following phase in maven life cycle takes the compiled code and package it in its distributable format, such as a JAR?

[A - validate](javascript:void(0);)

[B - compile](javascript:void(0);)

[C - test](javascript:void(0);)

[D - package](javascript:void(0);)

Q 1 - Which of the following depicts best practice, Understandability for resource representation in REST?

A - Both Server and Client should be able to understand and utilize the representation format of the resource.

B - Format should be able to represent a resource completely. For example, a resource can contain another resource. Format should be able to represent simple as well as complex structures of resources.

C - A resource can have a linkage to another resource, a format should be able to handles such situations.

D - None of the above.

Understandability: Both Server and Client should be able to understand and utilize the representation format of the resource.

Q 2 - Which of the following component of HTTP request contains message content or Resource representation?

A - Request Body

B - URI

C - HTTP Version

D - Request Header

1.1.1   Answer : A

1.1.2       Explanation

Request Body − Message content or Resource representation.

Q 3 - Which of the following is a best practice to create a standard URI for a web service?

A - Use Plural Noun.

B - Avoid using spaces.

C - Use lowercase letters

D - All of the above.

1.1.3   Answer : D

1.1.4       Explanation

All of the above options are correct.

Q 4 - Which of the following HTTP method should be used to create/update resource using RESTful web service?

A - GET

B - DELETE

C - POST

D - OPTIONS

Q 5 - Which of the following directive of Cache Control Header of HTTP response provides indication to server to revalidate resource if max-age has passed?

A - must-revalidate

B - Private

C - no-cache/no-store

D - max-age

1.1.5   Answer : A

1.1.6       Explanation

must-revalidate directive provides indication to server to revalidate resource if max-age has passed.

Q 6 - Which of the following HTTP Status code means BAD REQUEST, states that invalid input is provided e.g. validation error, missing data?

A - 400

B - 401

C - 404

D - 409

Q 7 - Which of the following HTTP Status code means INTERNAL SERVER ERROR, states that server has thrown some exception while executing the method?

A - 500

B - 401

C - 404

D - 409

1.1.7   Answer : A

1.1.8       Explanation

HTTP Status Code 500 means INTERNAL SERVER ERROR, states that server has thrown some exception while executing the method.

Q 8 - Which of the following annotation of JAX RS API binds the parameter passed to method to a HTTP header?

A - @PathParam

B - @QueryParam

C - @MatrixParam

D - @HeaderParam

Q 9 - A RESTful web service usually defines a URI, Uniform Resource Identifier a service, provides resource representation such as JSON and set of HTTP Methods.

A - false

B - true

Q 10 - POST opearations should be idempotent.

A - true

Annotation added as an input parameter to the handler meth

         **A.** PathVariable

         **B.** Path

         **C.** PathLocale

         **D.** None of the mentioned

 Explain features of XML-RPC?

         **A.** RPCs are performed using simple XML language

         **B.** XML encoded Requests are sent via HTTP POST

         **C.** XML Response is embedded in HTTP response

         **D.** All of the above

RestTemplate class method which performs an HTTP HEAD operation.

         **A.** headForHeaders(String, Object…)

         **B.** getForObject(String, Class, Object…)

         **C.** postForLocation(String, Object, Object…)

         **D.** postForObject(String, Object, Class, Object…)

**Which of the following component of HTTP response contains metadata for the HTTP Response message as key-value pairs?**

         A. Status/Response Code

         **B. HTTP Version**wrong

         C. Response Header  
correct

         D. Response Body

**2. XML tag which represents information related to a REST service’s request.**

         A. Result

         **B. Title**wrong

         C. None of the mentioned

         D. All of the mentionedcorrect

**3. General-purpose class that allows a response to be rendered using a marshaller.**

         **A. MarshallingView**

**correct**

         B. Marshalling

         C. View

         D. All of the mentioned

**4. Which of the following directive of Cache Control Header of HTTP response indicates that resource is not cachable?**

         A. Public

         **B. Private**wrong

         C. no-cache/no-store  
correct

         D. max-age

**5. Publishing an application’s data as a REST service requires.**

         A. @RequestMapping

         B. @PathVariable

         **C. All of the mentioned**correct

         D. None of the mentioned

**6. RESTful web services ?**

         A. Defines its own security.

         B. Inherits security measures from the underlying transport.correct

         **C. Both of the above**wrong

         D. None of the above

**7. What is/are the advantages of RESTful Web Services.?**

         A. Language and Platform independent

         B. REST can use SOAP

         C. Permits different data format

         **D. All of the above**correct

**8. To configure Jaxb2Marshaller marshaller we require.**

         A. ClassesToBeBound

         B. ContextPath

         **C. All of the mentioned**correct

         D. None of the mentioned

**9. Which of the following annotation of JAX RS API states the HTTP Response generated by web service?**

         A. @DELETE

         B. @HEAD

         **C. @Produces**correct

         D. @Consumes

**10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the java API for RESTful web services.?**

         A. JAX-RS

correct

         B. JAX-WS

         **C. Both of the above**wrong

         D. None of the above

. Notation for defining REST endpoints.  
a) { }  
b) \*  
c) All of the mentioned  
d) None of the above