**1) What is the output of the below Java program with two classes?**

**//Testing1.java**

**public class Example**

**{**

**}**

**public class Testing1**

**{**

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

**{**

**System.out.println("Hello Boss.!");**

**}**

**}**

A) Hello Boss.!

B) No Output

C) Compiler error

D) None of the above

Answer [=]

**C**

**Explanation:**

**There can not be more than one public class declared inside a single java file.**

**2) What is the output of the below Java program?**

**//bingo.java file**

**public class Hello**

**{**

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

**{**

**System.out.println("BINGO");**

**}**

**}**

A) bingo

B) BINGO

C) Compiler error

D) None

Answer [=]

**C**

**Explanation:**

**The class name and the java file name should be the same. So, change either file name or class name to match.**

**3) State TRUE or FALSE. A Java class provides encapsulation.**

A) TRUE

B) FALSE

C) -

D) -

Answer [=]

**A**

**4) What is the output of the below java class?**

**class Fox**

**{**

**int legs = 2;**

**}**

**class Testing2**

**{**

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

**{**

**Fox t1 = new Fox();**

**System.out.println("T1 before: " + t1.legs);**

**t1.legs = 4;**

**System.out.println("T1 After: " + t1.legs);**

**}**

**}**

A)

T1 before: 4

T1 After: 4

B)

T1 before: 2

T1 After: 2

C)

T1 before: 2

T1 After: 4

D) Compiler error

Answer [=]

**C**

**Explanation:**

**There can be any number of classes in a single .java file.**

**5) The value of one primitive variable is assigned to another primitive variable by \_\_\_ in Java.**

A) Pass by value

B) Pass by reference

C) -

D) -

Answer [=]

**A**

**6) A primitive variable is passed from one method to another method by \_\_\_ in Java.**

A) Pass by value

B) Pass by reference

C) -

D) -

Answer [=]

**A**

**7) An object or primitive value that is passed from one method to another method is called \_\_\_ in Java. (Argument / Parameter)**

A) Argument

B) Parameter

C) -

D) -

Answer [=]

**B**

**8) What is the output of the below Java program that passes an object to another method?**

**class Food**

**{**

**int items;**

**int show()**

**{return items;}**

**}**

**class Testing9**

**{**

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

**{**

**Food f = new Food();**

**f.items = 5;**

**System.out.println("Items Before = " + f.show());**

**change(f);**

**System.out.println("Items After = " + f.show());**

**}**

**static void change(Food foo)**

**{ foo.items = 10; }**

**}**

A)

Items Before = 10

Items After = 10

B)

Items Before = 5

Items After = 5

C)

Items Before = 5

Items After = 10

D)

Items Before = 10

Items After = 5

Answer [=]

**C**

**9) What is the output of the below Java program that passes primitive values?**

**class Testing10**

**{**

**int rats = 5;**

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

**{**

**Testing10 t1 = new Testing10();**

**System.out.println("Rats Before = " + t1.rats);**

**modify(t1.rats);**

**System.out.println("Rats After = " + t1.rats);**

**}**

**static void modify(int r)**

**{ r = 20; }**

**}**

A)

Rats Before = 5

Rats After = 5

B)

Rats Before = 20

Rats After = 20

C)

Rats Before = 5

Rats After = 20

D)

Rats Before = 20

Rats After = 5

Answer [=]

**A**

**Explanation:**

**The primitive values are passed by value only. So, changes in the method modify does not change the original value.**

**10) Java object assignment happens by \_\_\_.**

A) Pass by Value

B) Pass by Reference

C) -

D) -

Answer [=]

**B**

**Explanation:**

**Yes. That is the reason why you can change the values of variables of the object using another reference.**

**11) A Java reference is comparable to \_\_\_ in C language.**

A) Enum

B) Structure

C) Pointer

D) None

Answer [=]

**C**

**12) \_\_\_ is the superclass to all Java classes either user-defined or built-in.**

A) Class

B) Object

C) Superclass

D) Null

Answer [=]

**B**

**Explanation:**

**Yes. java.lang.Object is the superclass to all Java classes.**

**13) State TRUE of FALSE. Java objects have built-in methods to handle threads.**

A) TRUE

B) FALSE

C) -

D) -

Answer [=]

**A**

**Explanation:**

**Yes. The methods are wait(), notify() and notifyAll().**

**14) State TRUE or FALSE. Java Object's hashcode() method is mainly used with Collection objects.**

A) TRUE

B) FALSE

C) -

D) -

Answer [=]

**A**

**Explanation:**

**Java collection classes use the hashcode() method to determine the equality of two objects.**

**15) What is the output of the below Java program using toString() method?**

**class College**

**{**

**public String toString()**

**{ return "College Object"; }**

**}**

**class Testing18**

**{**

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

**{**

**College col = new College();**

**System.out.println("Printing Object=" + col);**

**}**

**}**

A) Printing Object=

B) Printing Object=null

C) Printing Object=College Object

D) Compiler error

Answer [=]

**C**

**Explanation:**

**print() and println() methods call toString() method of objects automatically.**

**16) What is the output of the below Java program?**

**class Cricket**

**{ int runs; }**

**class Testing19**

**{**

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

**{**

**Cricket c1 = new Cricket();**

**c1.runs = 250;**

**Cricket c2;**

**c2 = c1;**

**c2.runs = 300;**

**System.out.println("Runs= " + c1.runs);**

**}**

**}**

A) Runs= 0

B) Runs= 250

C) Runs= 300

D) Compiler error

Answer [=]

**C**

**Explanation:**

**The reference C2 also points to the same object pointed by reference C1.**

**17) What is the output of the below Java program?**

**class Wordpress**

**{ int posts; }**

**class Testing20**

**{**

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

**{**

**Wordpress wp1 = new Wordpress();**

**wp1.posts = 25;**

**Wordpress wp2 = wp1;**

**wp1 = null;**

**System.out.println("Posts=" + wp2.posts);**

**}**

**}**

A) Posts=25

B) Posts=0

C) Posts=null

D) Runtime exception occurs

Answer [=]

**A**

**Explanation:**

**Even if one REFERENCE to the same object is alive, it can be used to access the object. So, wp2 still works even if wp1 is set to null.**

**Q1. explain the concept of nested classes.**

**Q2. explain the concept of static data members in classes.**

**Q3.WAP to explain about final keyword.**

**Q4. Write a program.**

**a. factorial of a number using recursion.**

**b. pass by value /pass by references.**

**Q5. Define garbage collector.**

**Q6.Explain about constructors.**