JAVA means DURGA SOFT

SCJP / OCJP

Question Bank

Chapter 7 : Garbage Collections

DURGA M.Tech

(Sun certified & Realtime Expert)

Ex. IBM Employee

Trained Lakhs of Students
for last 14 years across INDIA

7. Garbage Collections

Q: 01 Given:

```
1. public class GC {
2. private Object o;
3. private void doSomethingElse(Object obj) { o = obj; }
4. public void doSomething() {
5. Object o = new Object();
6. doSomethingElse(o);
7. o = new Object();
8. doSomethingElse(null);
9. o = null;
10. }
11. }
```

When the doSomething method is called, after which line does the Object created in line 5 become
available for garbage collection?

A. Line 5
B. Line 6
C. Line 7
D. Line 8
E. Line 9
F. Line 10

Answer: D

Q: 02 Given:

```
11. public void genNumbers() {
12. ArrayList numbers = new ArrayList();
13. for (int i=0; i<10; i++) {
14. int value = i * ((int) Math.random());
15. Integer intObj = new Integer(value);
16. numbers.add(intObj);
17. }
18. System.out.println(numbers);
19. }
```

Which line of code marks the earliest point that an object referenced by intObj becomes a candidate for
garbage collection?

A. Line 16
B. Line 17
C. Line 18
D. Line 19
E. The object is NOT a candidate for garbage collection.

Answer: D

Q: 03 Given:
11. rbo = new ReallyBigObject();
12. // more code here
13. rbo = null;
14. /* insert code here */
Which statement should be placed at line 14 to suggest that the virtual machine expend effort toward
recycling the memory used by the object rbo?
A. System.gc();
B. Runtime.gc();
C. System.freeMemory();
D. Runtime.getRuntime().growHeap();
E. Runtime.getRuntime().freeMemory();
Answer: A

Q: 04 Given:
11. class Snoochy {
12. Boochy booch;
13. public Snoochy() { booch = new Boochy(this); }
14. }
15.
16. class Boochy {
17. Snoochy snooch;
18. public Boochy(Snoochy s) { snooch = s; }
19. }
And the statements:
21. public static void main(String[] args) {
22. Snoochy snoog = new Snoochy();
23. snoog = null;
24. // more code here
25. }
Which statement is true about the objects referenced by snoog, snooch, and booch immediately after line 23 executes?

A. None of these objects are eligible for garbage collection.
B. Only the object referenced by booch is eligible for garbage collection.
C. Only the object referenced by snoog is eligible for garbage collection.
D. Only the object referenced by snooch is eligible for garbage collection.
E. The objects referenced by snooch and booch are eligible for garbage collection.
Answer: E

Question: 05
Which two are true? (Choose two.)
A. A finalizer may NOT be invoked explicitly.
B. The finalize method declared in class Object takes no action.
C. super.finalize() is called implicitly by any overriding finalize method.
D. The finalize method for a given object will be called no more than
once by the garbage collector.
E. The order in which finalize will be called on two objects is based on

the order in which the two objects became finalizable.
Answer: BD
Question: 06
Which statement is true?
A. A class's finalize() method CANNOT be invoked explicitly.
B. super.finalize() is called implicitly by any overriding finalize() method.
C. The finalize() method for a given object is called no more than once by the garbage collector.
D. The order in which finalize() is called on two objects is based on the order in which the two objects became finalizable.
Answer: C

Question: 07
Given:
3. interface Animal { void makeNoise(); }
4. class Horse implements Animal {
5. Long weight = 1200L;
6. public void makeNoise() { System.out.println("whinny"); }
7. }
8. public class Icelandic extends Horse {
9. public void makeNoise() { System.out.println("vinny"); }
10. public static void main(String[] args) {
11. Icelandic i1 = new Icelandic();
12. Icelandic i2 = new Icelandic();
12. Icelandic i3 = new Icelandic();
13. i3 = i1; i1 = i2; i2 = null; i3 = i1;
14. }
15. }
When line 14 is reached, how many objects are eligible for the garbage collector?
A. 0
B. 1
C. 2
D. 3
E. 4
F. 6
Answer: E

Question: 07
Given:
5. public class Tahiti {

```
6. Tahiti t;
7. public static void main(String[] args) {
8. Tahiti t = new Tahiti();
9. Tahiti t2 = t.go(t);
10. t2 = null;
11. // more code here
12. }
13. Tahiti go(Tahiti t) {
14. Tahiti t1 = new Tahiti(); Tahiti t2 = new Tahiti();
15. t1.t = t2; t2.t = t1; t.t = t2;
16. return t1;
17. }
18. }
```

When line 11 is reached, how many objects are eligible for garbage collection?

A. 0
B. 1
C. 2
D. 3
E. Compilation fails.

Answer: A