1 Which collection class allows you to grow or shrink its size and provides indexed access to its

elements, but whose methods are not synchronized?

A. java.util.HashSet

B. java.util.LinkedHashSet

C. java.util.List

D. java.util.ArrayList

E. java.util.Vector

**2** Which collection class allows you to access its elements by associating a key with an element’s

value, and provides synchronization?

A. java.util.SortedMap

B. java.util.TreeMap

C. java.util.TreeSet

D. java.util.HashMap

E. java.util.Hashtable

**3** Given the following,

12. TreeSet map = new TreeSet();

13. map.add("one");

14. map.add("two");

15. map.add("three");

16. map.add("four");

17. map.add("one");

18. Iterator it = map.iterator();

19. while (it.hasNext() ) {

20. System.out.print( it.next() + " " );

21. }

what is the result?

A. one two three four

B. four three two one

C. four one three two

D. one two three four one

E. one four three two one

F. The print order is not guaranteed.

**4 .** Which collection class allows you to associate its elements with key values, and allows you to

retrieve objects in FIFO (first-in, first-out) sequence?

A. java.util.ArrayList

B. java.util.LinkedHashMap

C. java.util.HashMap

D. java.util.TreeMap

E. java.util.LinkedHashSet

F. java.util.TreeSet

**5.** Given the following,

1. public class X {

2. public static void main(String [] args) {

3. X x = new X();

4. X x2 = m1(x);

5. X x4 = new X();

6. x2 = x4;

7. doComplexStuff();

8. }

9. static X m1(X mx) {

10. mx = new X();

11. return mx;

12. }

13. }

After line 6 runs. how many objects are eligible for garbage collection?

A. 0

B. 1

C. 2

D. 3

E. 4

6 Given the following,

1. class X2 {

2. public X2 x;

3. public static void main(String [] args) {

4. X2 x2 = new X2();

5. X2 x3 = new X2();

6. x2.x = x3;

7. x3.x = x2;

8. x2 = new X2();

9. x3 = x2;

10. doComplexStuff();

11. }

12. }

after line 9 runs, how many objects are eligible for garbage collection?

A. 0

B. 1

C. 2

D. 3

E. 4

7 Given the following,

12. void doStuff3() {

13. X x = new X();

14. X y = doStuff(x);

15. y = null;

16. x = null;

17. }

18. X doStuff(X mx) {

19. return doStuff2(mx);

20. }

at what point is the object created in line 13 eligible for garbage collection?

A. After line 15 runs

B. After line 16 runs

C. After line 17 runs

D. The object is not eligible.

E. It is not possible to know for sure.

**8.** Given the following,

public class MyOuter {

public static class MyInner {

public static void foo() { }

}

}

which statement, if placed in a class *other* than MyOuter or MyInner, instantiates an instance

of the nested class?

A. MyOuter.MyInner m = new MyOuter.MyInner();

B. MyOuter.MyInner mi = new MyInner();

C. MyOuter m = new MyOuter();

MyOuter.MyInner mi = m.new MyOuter.MyInner();

D. MyInner mi = new MyOuter.MyInner();

9 Which constructs an anonymous inner class instance?

A. Runnable r = new Runnable() { };

B. Runnable r = new Runnable(public void run() { });

C. Runnable r = new Runnable { public void run(){}};

D. Runnable r = new Runnable() {public void run{}};

E. System.out.println(new Runnable() {public void run() { }});

F. System.out.println(new Runnable(public void run() {}));

**10.** Which two are true about a method-local inner class?

A. It must be marked final.

B. It can be marked abstract.

C. It can be marked public.

D. It can be marked static.

E. It can access private members of the enclosing class.

**11** Which is true about an anonymous inner class?

A. It can extend exactly one class and implement exactly one interface.

B. It can extend exactly one class and can implement multiple interfaces.

C. It can extend exactly one class or implement exactly one interface.

D. It can implement multiple interfaces regardless of whether it also extends a class.

E. It can implement multiple interfaces if it does not extend a class.

12

class MyThread extends Thread {

2.

3. public static void main(String [] args) {

4. MyThread t = new MyThread();

5. t.run();

6. }

7.

8. public void run() {

9. for(int i=1;i<3;++i) {

10. System.out.print(i + "..");

11. }

12. }

13. }

what is the result?

A. This code will not compile due to line 4.

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

C. 1..2..

D. 1..2..3..

E. An exception is thrown at runtime.

13 Which two of the following methods are defined in class Thread?

A. start()

B. wait()

C. notify()

D. run()

E. terminate()

14 class MyThread extends Thread {

2.

3. public static void main(String [] args) {

4. MyThread t = new MyThread();

5. t.start();

6. System.out.print("one. ");

7. t.start();

8. System.out.print("two. ");

9. }

10.

11. public void run() {

12. System.out.print("Thread ");

13. }

14. }

what is the result of this code?

A. Compilation fails

B. An exception occurs at runtime.

C. Thread one. Thread two.

D. The output cannot be determined.

15 Which two are *true*?

A. A static method cannot be synchronized.

B. If a class has synchronized code, multiple threads can still access the nonsynchronized code

C. Variables can be protected from concurrent access problems by marking them with the

synchronized keyword.

D. When a thread sleeps, it releases its locks.

E. When a thread invokes wait(), it releases its locks.