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SCJP/OCJP

Question Bank

Chapter 10 : Java.lang Package



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10. Java.lang Package

```
O:01 Given:
11. public class Person {
12. private String name, comment;
13. private int age:
14. public Person(String n, int a, String c) {
15. name = n; age = a; comment = c;
16. }
17. public boolean equals(Object o) {
18. if (! (o instanceof Person)) return false;
19, Person p = (Person)o;
20. return age == p.age && name.equals(p.name);
21. }
22. }
What is the appropriate definition of the hashCode method in class Person?
A. return super.hashCode();
B. return name.hashCode() + age *7;
C. return name.hashCode() + comment.hashCode() / 2;
D. return name.hashCode() + comment.hashCode() / 2 - age * 3;
Answer: B
Q: 02 Given this method in a class:
21. public String toString() {
22. StringBuffer buffer = new StringBuffer();
23. buffer.append('<');
24. buffer.append(this.name);
25. buffer.append('>');
26. return buffer.toString();
27. }
Which statement is true?
A. This code is NOT thread-safe.
B. The programmer can replace StringBuffer with StringBuilder with no other changes.
C. This code will perform poorly. For better performance, the code should be rewritten:
return "<" + this.name + ">";
D. This code will perform well and converting the code to use StringBuilder will not enhance the
performance.
Answer: B
O: 03 Given:
11. public void testIfA() {
12. if (testIfB("True")) {
13. System.out.println("True");
14. } else {
15. System.out.println("Not true");
16. }
```

```
17. }
18. public Boolean testIfB(String str) {
19. return Boolean.valueOf(str);
20. }
What is the result when method testIfA is invoked?
A. True
B. Not true
C. An exception is thrown at runtime.
D. Compilation fails because of an error at line 12.
E. Compilation fails because of an error at line 19.
Answer: A
Q: 04 Given:
1. public class Boxer1{
2. Integer i;
3. int x:
4. public Boxer1(int y) {
5. x = i + y;
6. System.out.println(x);
7. }
8. public static void main(String[] args) {
9. new Boxer1(new Integer(4));
10. }
11. }
What is the result?
A. The value "4" is printed at the command line.
B. Compilation fails because of an error in line 5.
C. Compilation fails because of an error in line 9.
D. A NullPointerException occurs at runtime.
E. A NumberFormatException occurs at runtime.
F. An IllegalStateException occurs at runtime.
Answer: D
O: 05 Given:
1. public class TestString3 {
2. public static void main(String[] args) {
3. // insert code here
5. System.out.println(s);
6. }
Which two code fragments, inserted independently at line 3, generate the output 4247? (Choose
two.)
A. String s = "123456789";
s = (s-"123").replace(1,3,"24") - "89";
B. StringBuffer s = new StringBuffer("123456789");
s.delete(0,3).replace(1,3,"24").delete(4,6);
C. StringBuffer s = new StringBuffer("123456789");
```

```
s.substring(3,6).delete(1,3).insert(1, "24");
D. StringBuilder s = new StringBuilder("123456789");
s.substring(3,6).delete(1,2).insert(1, "24");
E. StringBuilder s = new StringBuilder("123456789");
s.delete(0,3).delete(1,3).delete(2,5).insert(1, "24");
Answer: B, E
```

Q: 06 Given:

```
11. public static void test(String str) {
12. int check = 4:
13. if (check = str.length()) {
14. System.out.print(str.charAt(check -= 1) +", ");
15. } else {
16. System.out.print(str.charAt(0) + ", ");
17. }
18. }
and the invocation:
21. test("four");
22. test("tee");
23. test("to");
What is the result?
A. r, t, t,
B. r, e, o,
C. Compilation fails.
D. An exception is thrown at runtime.
Answer: C
Q: 07 Given:
11. public class Person {
12. private String name;
13. public Person(String name) {
14. this.name = name;
15. }
16. public boolean equals(Object o) {
17. if (! o instanceof Person) return false;
18. Person p = (Person) o;
19. return p.name.equals(this.name);
20. }
```

21. }

Which statement is true?

- A. Compilation fails because the hashCode method is not overridden.
- B. A HashSet could contain multiple Person objects with the same name.
- C. All Person objects will have the same hash code because the hashCode method is not overridden.
- D. If a HashSet contains more than one Person object with name="Fred", then removing another Person, also

with name="Fred", will remove them all.

Answer: B

Q: 08 Which two statements are true about the hashCode method? (Choose two.)

A. The hashCode method for a given class can be used to test for object equality and object inequality for that

class.

- B. The hashCode method is used by the java.util.SortedSet collection class to order the elements within that set.
- C. The hashCode method for a given class can be used to test for object inequality, but NOT object equality, for

that class.

D. The only important characteristic of the values returned by a hashCode method is that the distribution of

values must follow a Gaussian distribution.

E. The hashCode method is used by the java.util.HashSet collection class to group the elements within that set

into hash buckets for swift retrieval.

Answer: C, E



Q: 09 Click the Task button.

```
Place the code into the GenericB class definition to make the class compile
successfully.
import java.util.*;
                                                                Code
public class GenericBk
                                  Place
                                                             extends Pet
    public Place foo;
                                                           T extends Pet
    public void setFoo(Place
                                     foo) {
                                                            implements Pet
     this.foo = foo;
                                                            implements Pet
    public
             Place
                     getFoo() {
                                                           Pet extends T
       return foo;
   public static void main (String[] args) {
     GenericB<Cat> bar = new GenericB<Cat>();
     bar.setFoo(new Cat());
     Cat c = bar.getFoo();
                                                          Pet
interface Pet { }
                                                                   Done
class Cat implements Pet{ }
1.<T extends Pet>
2. T
3.T
4.T
Q: 10 Given:
10. public class MyClass {
12. public Integer startingI;
13. public void methodA() {
14. Integer i = new Integer(25);
15. startingI = i;
16. methodB(i);
18. private void methodB(Integer i2) {
19. i2 = i2.intValue();
20.
21. }
If methodA is invoked, which two are true at line 20? (Choose two.)
A. i2 == startingI returns true.
```

```
B. i2 == startingI returns false.
C. i2.equals(startingI) returns true.
D. i2.equals(startingI) returns false.
Answer: B, C
Question: 11
Given:
11. public String makinStrings() {
12. String s = "Fred";
13. s = s + "47";
14. s = s.substring(2, 5);
15. s = s.toUpperCase();
16. return s.toString();
17. }
How many String objects will be created when this method is invoked?
                 B. 2
A. 1
C. 3
                  D. 4
E. 5
                  F. 6
Answer: E
O: 12 Given:
22. StringBuilder sb1 = new StringBuilder("123");
23. String s1 = "123";
24. // insert code here
25. System.out.println(sb1 + " " + s1);
Which code fragment, inserted at line 24, outputs "123abc 123abc"?
A. sb1.append("abc"); s1.append("abc");
B. sb1.append("abc"); s1.concat("abc");
C. sb1.concat("abc"); s1.append("abc");
D. sb1.concat("abc"); s1.concat("abc");
E. sb1.append("abc"); s1 = s1.concat("abc");
F. sb1.concat("abc"); s1 = s1.concat("abc");
G. sb1.append("abc"); s1 = s1 + s1.concat("abc");
H. sb1.concat("abc"); s1 = s1 + s1.concat("abc");
Answer: E
                         Continuous Job Updates for every hour
      Fresher Jobs
                                                             Bank Jobs
                                  Govt Jobs
          Walk-ins
                                Placement Papers
                                                                IT Jobs
                         Interview Experiences
               Complete Job information across India
```

Q: 13 Given:

1. public class BuildStuff {

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

```
3. Boolean test = new Boolean(true);
4. Integer x = 343;
5. Integer y = new BuildStuff().go(test, x);
6. System.out.println(y);
7. }
8. int go(Boolean b, int i) {
9. if(b) return (i/7);
10. return (i/49);
11. }
12. }
What is the result?
A. 7
B. 49
C. 343
D. Compilation fails.
E. An exception is thrown at runtime.
Answer: B
Q: 14 Given:
Given:
1. public class KungFu {
2. public static void main(String[] args) {
3. Integer x = 400;
4. Integer y = x;
5. x++;
6. StringBuilder sb1 = new StringBuilder("123");
7. StringBuilder sb2 = sb1;
8. sb1.append("5");
9. System.out.println((x==y) + "" + (sb1==sb2));
10. }
11. }
What is the result?
A. true true
B. false true
C. true false
D. false false
E. Compilation fails.
F. An exception is thrown at runtime.
Answer: B
Q: 15 Given:
Which two scenarios are NOT safe to replace a StringBuffer object with a StringBuilder
object? (Choose two.)
A. When using versions of Java technology earlier than 5.0.
B. When sharing a StringBuffer among multiple threads.
C. When using the java.io class StringBufferInputStream.
D. When you plan to reuse the StringBuffer to build more than one string.
```

Answer: A,B

