

1 Which of the following options are true for StringBuffer class?(choose 3)

- Answer: ☒ a. StringBuffer implements CharSequence interface
- ☒ b. StringBuffer is extended from String class
- ☐ c. 'capacity' property indicates the maximum number of characters that a StringBuffer can have
- ☒ d. StringBuffer is threadsafe
- ☐ e. Buffer space in StringBuffer can be shared

2 Consider the following program:

```
class UserDefinedException extends Error { }

public class TestIt {
    public static void main(String args[]) {
        try {
            try {
                throw new Error();
            }
            catch(UserDefinedException u1) {
                throw u1;
            }
            catch(Exception e1) {
                System.out.println("This is the required output");
            }
            finally {
                throw new UserDefinedException();
            }
        }
        catch(UserDefinedException u2) {
            System.out.println("This is not the output");
        }
    }
}
```

```
}  
catch(Error e2) {  
System.out.println("This is the output");  
}  
}  
}
```

What will be the output for the above program?

- Answer: ☒ a. Compile-time error
- ☐ b. This is the required output
- ☐ c. This is the output
- ☐ d. Runtime Error
- ☐ e. This is not the output

3

Consider the following code:

```
import java.util.*;  
  
public class Code10 {  
{  
final Vector v;  
v=new Vector();  
}  
  
public Code10() { }  
  
public void codeMethod() {  
System.out.println(v.isEmpty());  
}  
  
public static void main(String args[]) {  
new Code10().codeMethod();  
}
```

```
}
```

Which of the following will be the output for the above code?

- Answer: ☐ a. Prints: false
- ☐ b. Runtime error: NullPointerException
- ☐ c. Compilation error: v is not initialised inside the constructor
- ☐ d. Prints: true
- ☒ e. Compilation error: cannot find the symbol

4

Which of the following options is true about multiple inheritance?

- Answer: ☐ a. Inheriting from a class which is already in an inheritance hierarchy
- ☐ b. Inheriting from two super classes
- ☒ c. Inheriting from more than one super class
- ☐ d. Inheriting from a single class

5

Which of the following modifiers cannot be used with the abstract modifier in a method declaration?(Choose 3)

- Answer: ☒ a. final
- ☐ b. protected
- ☐ c. public
- ☒ d. synchronized

☒ e. private

6 Consider the following partial code:

```
interface A { public int getValue(); }
```

```
class B implements A {  
    public int getValue() { return 1; }  
}
```

```
class C extends B {  
    // insert code here  
}
```

Which of the following code fragments, when inserted individually at the commented line (// insert code here), makes use of polymorphism? (Choose 3)

- Answer: ☒ a. public void add(B b) { b.getValue(); }
- ☒ b. public void add(A a) { a.getValue(); }
- ☐ c. public void add(C c1, C c2) { c1.getValue(); }
- ☐ d. public void add(C c) { c.getValue(); }
- ☒ e. public void add(A a, B b) { a.getValue(); }

7 Consider the following code snippet:

```
import java.util.*;  
  
public class TestCol4 {  
    public static void main(String[] args) {  
        Set h = new HashSet();  
        h.add("One");  
        h.add("Two");  
    }  
}
```

```
h.add("Three");
h.add("Four");
h.add("One");
h.add("Four");

List l = new ArrayList();

l.add("One");
l.add("Two");
l.add("Three");

h.retainAll(l);

System.out.println("Size:" + l.size() + h.size());
}
}
```

What will be the output of the above code snippet?

- Answer: ☐ a. Size: 66
- ☐ b. Compilation error
- ☐ c. Size: 36
- ☐ d. Size: 63
- ☒ e. Size: 33

8

Which of the following are correct regarding hashCode?(Choose 2)

- Answer: ☒ a. it is a 32 bit numeric digest key
- ☐ b. the numeric key is unique
- ☐ c. hashCode() value cannot be a zero-value

- ☒ d. It improves performance
- ☒ e. hashCode() is defined in String class

9 The purpose of Weak Reference Type object is _____.

- Answer: ☒ a. to keep objects alive only while they are in use (reachable) by clients
- ☐ b. to keep objects alive provided there is enough memory
- ☐ c. to delete objects from a container if the clients are no longer referencing them and memory is tight
- ☐ d. to allow clean up after finalization but before the space is reclaimed

10 What are the new updations to java.io.File class in JDK 1.6?(Choose 2)

- Answer: ☒ a. Methods to encrypt the file with password
- ☐ b. Methods to attach the file to an email
- ☒ c. Methods to retrieve disk usage information
- ☐ d. Methods to set or query file permissions
- ☐ e. No new methods are introduced in JDK 1.6

11 Consider the following code:

```
1. public class DagRag {  
2. public static void main(String [] args) {  
3.
```

```
4. int [][] x = new int[2][4];
5.
6. for(int y = 0; y < 2; y++) {
7. for(int z = 0; z < 4; z++) {
8. x[y][z] = z;
9. }
10. }
11.
12. dg: for(int g = 0; g < 2; g++) {
13. rg: for(int h = 0; h < 4; h++) {
14. System.out.println(x[g][h]);
15.
16. }
17. System.out.println("The end.");
18.
19. }
20.
21. }
22. }
```

Which of the following code snippet when inserted at lines 15 and 18 respectively, will make the above program to generate the below output?

```
0
1
2
3
The end.
```

- Answer: ☐ a. if(h > 3) break dg;
if(g > 0) break rg;
- ☐ b. if(h > 3) break dg;
if(g > 0) break dg;
- ☐ c. if(g==3) break rg;
if(h==0) break dg;
- ☒ d. if(h==3) break rg;
if(g==0) break dg;

Correct

Marks for this submission: 1/1.

Make comment or override grade

#	Action	Response	Time	Raw score	Penalty	Grade
2	Close	79518,79517,79516,79515:79515	13:14:29 on 5/10/09	1	0.1	1
1	Save	79518,79517,79516,79515:79515	12:15:39 on 5/10/09	1	0.1	0

12

Which of the following options give the names of data structures that can be used for elements that have ordering, but no duplicates? (Choose 2)

Answer: ☒ a. SortedSet

☒ b. TreeSet

☐ c. Set

☐ d. ArrayList

☐ e. List

13

Consider the following program:

```
public class TThread implements Runnable {  
    public void run() {  
        try {  
            Thread.sleep(100000);  
        } catch (Exception objE) {  
            System.out.println ("Exception Handler");  
        }  
        System.out.println ("Run method ends here");  
    }  
}
```



```

}

public static void main (String[] argv) {
    Thread thread = new Thread(new TThread ());
    thread.start();

    thread.interrupt();
    System.out.println ("Main method ends here");
}
}

```

What will be the output of the above program?

- Answer: ☐ a. Main method ends here
Run method ends here
Exception Handler
- ☒ b. Exception Handler
Run method ends here
Main method ends here
- ☐ c. Main method ends here
Exception Handler
Run method ends here
- ☐ d. None of the listed options
- ☐ e. Run method ends here
Exception Handler
Main method ends here

14

Consider the following code:

```

class Planet { }

class Earth extends Planet { }

public class WelcomePlanet {
    public static void welcomePlanet(Planet planet) {
        if (planet instanceof Earth) {
            System.out.println("Welcome!");
        }
    }
}

```

```
    } else if (planet instanceof Planet) {  
        System.out.println("Planet!");  
    } else {  
        System.exit(0);  
    }  
}  
  
public static void main(String args[]) {  
    WelcomePlanet wp = new WelcomePlanet();  
    Planet planet = new Earth();  
    welcomePlanet(planet);  
}  
}
```

Which of the following will be the output of the above program?

- Answer: ☐ a. Compilation fails
- ☐ b. Planet!
- ☐ c. The code runs with no output
- ☒ d. Welcome!
- ☐ e. An exception is thrown at runtime

15

Consider the following code:

```
class A { }  
class B extends A { }  
public class Code2 {  
    public void method(A a) {  
        System.out.println("A");  
    }  
    public void method(B b) {  
        System.out.println("B");  
    }  
    public static void main(String args[]) {  
        new Code2().method(new Object());  
    }  
}
```

```
}  
}
```

Which of the following will be the output for the above code?

- Answer: ☒ a. Compilation Error 'Cannot find the symbol'
- ☐ b. Prints: B
- ☐ c. Throws ClassCastException at runtime
- ☐ d. Prints: A

16

Which are all platform independent among the following? (Choose 3)

- Answer: ☐ a. Java Virtual Machine (JVM)
- ☒ b. Java Source Files
- ☐ c. Java Development Kit (JDK)
- ☒ d. Java Class Files
- ☒ e. JAR Files

17

Consider the following code snippet:

```
import java.io.*;  
  
public class IOCode2 {  
    public static void main(String args[]) throws FileNotFoundException {  
        // Insert Code here  
        System.out.println("Welcome to File Programming");  
    }  
}
```

Which of the following code snippets when substituted to the comment line (//

Insert Code here), will redirect the output generated by the System.out.println() methods, in the above code?

- Answer: ☐ a. System.setOut(new FileWriter("C:/Data"));
- ☐ b. System.redirectOutput(new PrintStream("C:/Data"));
- ☐ c. System.out.setOut(new PrintStream("C:/Data"));
- ☐ d. System.out.redirectOutput(new PrintStream("C:/Data"));
- ☒ e. System.setOut(new PrintStream("C:/Data"));

18

Given the following object hierarchy and code for the upgrade method:

```
java.lang.Object
+----mypkg.BaseWidget
|
+----TypeAWidget
```

// the following is a method in the BaseWidget class

```
1. public TypeAWidget upgrade( ){
2. TypeAWidget A = (TypeAWidget) this;
3. return A;
4. }
```

Which of the following will be the result of the below statements?

```
5. BaseWidget B = new BaseWidget();
6. TypeAWidget A = B.upgrade();
```

- Answer: ☐ a. The compiler would object to line 2.
- ☐ b. As this refers to the BaseWidget, a parent can accept its child
- ☒ c. A runtime ClassCastException would be generated in line 2.

- ☐ d. After line 6 executes, the object referred to as A will in fact be a TypeAWidget.

19

Consider the following code:

```
public class Key1 {  
    public boolean testAns( String ans, int n ) {  
        boolean rslt;  
  
        if (ans.equalsIgnoreCase("YES") & n > 5)  
            rslt = true;  
  
        return rslt;  
    }  
  
    public static void main(String args[]) {  
        System.out.println(new Key1().testAns("no", 5));  
    }  
}
```

Which of the following will be the output of the above program?

- Answer: ☒ a. Compile-time error
- ☐ b. true
- ☐ c. NO
- ☐ d. false
- ☐ e. Runtime Error

20

Consider the following partial code:

```
class Bean {  
    interface I {
```

```
void beanInterface();
}
class BeanI extends Bean implements I { }
}
```

```
public class BeanImpl {
public static void main(String args[]) {
Bean bean = new Bean();
Bean.BeanI beanI = bean. new BeanI();
beanI.beanInterface();
}
}
```

Which of the following changes made to the class Bean without changing the class BeanImpl, will make the above code to compile properly?

- Answer: ☐ a. The inner interface I should be removed and kept outside the Bean class
- ☐ b. The inner class should be removed and kept outside the Bean class
- ☒ c. Add the following method to Bean class
public void beanInterface() { }
- ☐ d. The outer class Bean should be declared as abstract
- ☐ e. The inner class BeanI should be declared as abstract

21

Consider the following code snippet:

```
import java.util.*;
class Student {
String studentName;
Student() { }
Student(String studentName) {
this.studentName = studentName;
}
```

```
public String toString() {  
    return this.studentName;  
}  
}  
  
public class TestCol7 {  
    public static void main(String args[]){  
        TreeSet students = new TreeSet();  
        students.add(new Student("Raju"));  
        students.add(new Student("Krishna"));  
        students.add(new Student("Vijay"));  
  
        System.out.println(students);  
    }  
}
```

Running the above code, throws Runtime exception.

Which of the following options will make the code run properly?

- Answer: ☐ a. The Student class should implement Cloneable interface
- ☐ b. The Student class should implement Serializable interface
- ☒ c. The Student class should implement Comparable interface.
- ☐ d. The Student class should implement Comparator interface.
- ☐ e. The Student class should implement Externalizable interface

22

Consider the following code:

```
class UT1 {  
    static byte m1() {  
        final char c = 'u0001';
```

```

        return c;
    }

    static byte m3(final char c) {return c;}

    public static void main(String[] args) {
        char c = 'u0003';
        System.out.print(""+m1()+m3(c));
    }
}

```

Which of the following gives the valid output of the above code?

- Answer: ☐ a. Run-time error
- ☐ b. Prints: 4
- ☐ c. Prints: 13
- ☐ d. None of the listed options
- ☒ e. Compile-time error

23

Consider the following code snippet:

```

public class TestString9 {
    public static void main(String st[]){
        String s1 = "java";
        String s2 = "java";
        String s3 = "JAVA";
        s2.toUpperCase();
        s3.toUpperCase();
        boolean b1 = s1==s2;
        boolean b2 = s1==s3;
        System.out.print(b1);
        System.out.print(" "+b2);
    }
}

```


What will be the output of the above code snippet?

- Answer: ☐ a. false true
- ☐ b. Runtime error
- ☐ c. false false
- ☐ d. true true
- ☒ e. true false

24

Consider the following partial code:

```
public class CreditCard {  
    private String cardID;  
    private Integer limit;  
    public String ownerName;  
  
    public void setCardInformation(String cardID, String ownerName, Integer limit) {  
        this.cardID = cardID;  
        this.ownerName = ownerName;  
        this.limit = limit;  
    }  
}
```

Which of the following statement is True regarding the above given code?

- Answer: ☐ a. The class is fully encapsulated
- ☐ b. The cardID and limit variables break polymorphism
- ☐ c. The setCardInformation method breaks encapsulation
- ☒ d. The ownerName variable breaks encapsulation
- ☐ e. The code demonstrates polymorphism

25

Consider the following Statements:

Statement A:The threads are scheduled using fixed priority scheduling.

Statement B:Thread priority can be set after it is created using the public int setPriority() method declared in the Thread class.

Which of the following statements is correct?

Answer: ☐ a. Statement A is false and Statement B is true

☒ b. Statement A is true and Statement B is false

☐ c. Both Statement A and B are true

☐ d. Both Statement A and B are false

26

Consider the following code snippet:

```
1. class Garbage { }  
2. class GC1 {  
3. public static void main(String a[]) {  
4. Garbage s = new Garbage();  
5. {  
6. s = new Garbage();  
7. }  
8. s = new Garbage();  
9. }  
10. }
```

Which of the following options gives the correct combination of lines that makes objects eligible for garbage Collection?

Answer: ☐ a. lines: 4, 6, 8

☐ b. lines: 8

☒ c. lines: 4, 6

- ☐ d. lines: 6, 8
- ☐ e. None of the object is eligible for Garbage Collection

27

Consider the following scenario:

Mr.Vijay is working for a Software Company. He needs to save and reload objects from a Java application. He needs to write a module to accomplish the same.

Which of the following options can be used to accomplish the above requirement?

Answer: ☐ a. ObjectSerializable interface

☐ b. Readable interface

☐ c. Writable interface

☐ d. Cloneable interface

☒ e. Serializable interface

28

Consider the following program:

```
1. class CheckedException extends RuntimeException { }
2. class UncheckedException extends Exception { }
3. public class Check {
4. public static void main(String args[]) {
5. generateException1();
6. generateException2();
7. }
8.
9. private static void generateException1() {
10. throw new CheckedException();
11. }
```

12.
13. private static void generateException2() {
14. throw new UncheckedException();
15. }
16. }

Which of the following is true regarding the above given program?

- Answer: ☒ a. Compilation error at line 14
- ☐ b. Compilation error at line 5
- ☐ c. No compilation error but throws RuntimeException on running the code
- ☐ d. Compilation error at line 10
- ☐ e. Compilation error at line 6

29

Consider the following code:

```
public class LabeledBreak2 {  
    public static void main(String args[]) {  
        loop:  
        for(int j=0; j<2; j++) {  
            for(int i=0; i<10; i++) {  
                if(i == 5) break loop;  
                System.out.print(i + " ");  
            }  
        }  
    }  
}
```

Which of the following will be the output for the above code?

- Answer: ☐ a. 1 2 3 4 5
- ☐ b. Indefinite Loop

- ☒ c. 0 1 2 3 4
- ☐ d. 0 1 2 3 4 0 1 2 3 4
- ☐ e. 0 1 2 3 4 5

30

Consider the following code:

```
public class UnwiseThreads implements Runnable {  
    public void run() {  
        while(true) { }  
    }  
  
    public static void main(String args[]) {  
        UnwiseThreads ut1 = new UnwiseThreads();  
        UnwiseThreads ut2 = new UnwiseThreads();  
        UnwiseThreads ut3 = new UnwiseThreads();  
        ut1.run();  
        ut2.run();  
        ut3.run();  
    }  
}
```

Which of the following is correct for the above given program?

Answer: ☐ a. Compilation error "ut2.run() is never reached"

- ☒ b. The code compiles but runs only 1 non ending, non daemon thread
- ☐ c. Runtime Error "IllegalThreadStateException"
- ☐ d. The code compiles and runs 3 non ending non daemon threads

31

Consider the following scenario:

Real Chocos Private Limited deals in manufacturing variety of chocolates.
This organization manufactures three varieties of chocolates.

1. Fruit Chocolates
2. Rum Chocolates
3. Milk Chocolates

A software system needs to be built.

Which of the following options identifies the Classes and Objects?

Answer: ☐ a. Class: Real Chocos Private Limited
Objects: Chocolate

☒ b. Class: Chocolate
Objects: Fruit Chocolates, Rum Chocolates, Milk Chocolates

☐ c. Class: Fruit Chocolates
Objects: Rum Chocolates

☐ d. Class: Choclote
Objects: Milk Chocolates

32

Which of the following options are true? (Choose 2)

Answer: ☒ a. The catch block can have another try-catch-finally block

☐ b. In a try-catch-finally structure, finally block and catch block can be placed in any order

☒ c. The finally block can have another try-catch-finally block nested inside

☐ d. On using nested try-catch blocks, only the outer most try-catch block can have the finally block

Consider the following code:

```
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 of the following implementations use the Shape class correctly? (Choose 2)

- Answer: ☐ a. public class Circle extends Shape {
 private int radius;
 public void draw();
}
- ☐ b. public class Circle implements Shape {
 private int radius;
}
- ☒ c. public class Circle extends Shape {
 private int radius;
 public void setRadius(int radius) { this.radius = radius; }
 public int getRadius() { return radius; }
 public void draw() { /* code here */ }
}
- ☐ d. public class Circle extends Shape {
 public int radius;
 private void draw() { /* code here */ }
}
- ☒ e. public abstract class Circle extends Shape {
 private int radius;
}

34

Consider the following code:

```
1. class Test {  
2. public static void main(String args[]) {  
3. double d = 12.3;  
4. Dec dec = new Dec();  
5. dec.dec(d);  
6. System.out.println(d);  
7. }  
8. }  
9. class Dec{  
10. public void dec(double d) { d = d - 2.0d; }  
11. }
```

Which of the following gives the correct value printed at line 6?

Answer: ☒ a. Prints: 12.3

☐ b. Prints: 10.3

☐ c. Prints: 0.0

☐ d. Prints: -2.0

35

Which of the following types of driver provides maximum decoupling between database and Java application?

Answer: ☐ a. Type II driver

☐ b. Type I driver

☐ c. Type III driver

☒ d. Type IV driver

36

Which of the following is the best-performing implementation of Set interface?

- Answer: ☐ a. SortedSet
- ☐ b. Hashtable
- ☐ c. LinkedHashSet
- ☐ d. TreeSet
- ☒ e. HashSet

37

Consider the following code:

```
public class Code13 {  
    public static void main(String... args) {  
        for(String s:args)  
            System.out.print(s + ", ");  
        System.out.println(args.length);  
    }  
}
```

Which of the following will be the output if the above code is attempted to compile and execute?

- Answer: ☐ a. Runtime Error: NoSuchMethodError
- ☒ b. Program compiles successfully and prints the passed arguments as comma separated values and finally prints the length of the arguments-list
- ☐ c. variable arguments cannot be used with enhanced for-loop
- ☐ d. Compilation Error: var-args cannot be used as arguments for main() method

38

An Annotation Type _____.

- Answer: ☐ a. defines the structure of an Object
- ☐ b. is a meta-tag used to pass message between the code and JVM.
- ☒ c. defines the structure of an Annotation
- ☐ d. defines the structure of an interface
- ☐ e. defines the structure of an Application

39

Consider the following program:

```
public class ThreadJoin extends Thread{
    public static void main(String[] args) {
        Thread t1 = new Thread("T1");
        Thread t2 = new Thread("T2");
        try {
            t1.join();
            t2.join();
        } catch (InterruptedException e) {
            System.out.println("Main Thread interrupted.");
        }
    }

    public void run(){
        System.out.println("Run executed");
    }
}
```

What will be the output of the above program?

- Answer: ☒ a. Program ends without printing anything
- ☐ b. Prints "Run executed" twice
- ☐ c. Compile-time error

- ☐ d. Prints "Main Thread interrupted."
- ☐ e. Run-time error

40

Consider the following program:

```
import java.io.*;

public class CrypticCatch {
    public static void main(String[] args) throws Exception {
        try {
            try {
                try {
                    throw new FileNotFoundException();
                } catch (Exception e3) {
                    throw e3;
                }
            } catch (IOException e2) {
                throw e2;
            }
        } catch (FileNotFoundException e1) {
            System.out.println("File not found exception caught");
        }
        System.out.println("Exception handled successfully");
    }
}
```

What will be the output of the above program?

- Answer: ☐ a. Compile time error. Since exceptions should be caught in reversed hierarchy order
- ☐ b. File not found exception caught
- ☐ c. Exception handled successfully
- ☒ d. File not found exception caught
Exception handled successfully

☐ e. Runtime error

41

Consider the following code snippet:

```
class Animal {  
    String name;  
    public boolean equals(Object o) {  
        Animal a = (Animal) o;  
        // Code Here  
    }  
}  
  
class TestAnimal {  
    public static void main(String args[]) {  
        Animal a = new Animal();  
        a.name = "Dog";  
        Animal b = new Animal();  
        b.name = "dog";  
  
        System.out.println(a.equals(b));  
    }  
}
```

Which of the following code snippets should be replaced for the comment line (//Code Here) in the above given code, to get the output as true?

- Answer: ☐ a. return this.name.equals(a.name);
- ☐ b. return this.name == a.name;
- ☐ c. return this.name.hashCode() == a.name.hashCode();
- ☐ d. return super.equals(a);
- ☒ e. return this.name.equalsIgnoreCase(a.name);

42

Consider the following class definition:

```
class InOut{
String s= new String("Between");
public void amethod(final int iArgs){
int iam;
class Bicycle{
public void sayHello(){
...Line 1
}
}
}
}

public void another(){
int iOther;
}
}
```

Which of the following statements would be correct to be coded at ...Line 1?
(Choose 2)

Answer: ☐ a. System.out.println(iOther);☒ b. System.out.println(iArgs);☐ c. System.out.println(iam);☒ d. System.out.println(s);

43

Which of the following is the immediate super interface of CallableStatement?

Answer: ☐ a. CallableStatement☒ b. PreparedStatement☐ c. Connection

☒ d. Statement

☐ e. ResultSet

44

Which of the following annotations are defined in java.lang.annotation package? (Choose 2)

Answer: ☐ a. @SuppressWarnings

☐ b. @Override

☐ c. @Deprecated

☒ d. @Target

☒ e. @Retention

45

Which of the following are true about ResultSet? (Choose 2)

Answer: ☐ a. All ResultSet, are Scrollable

☐ b. It is possible to delete records through ResultSet

☒ c. The ResultSet object contains null, if there are no records in the table

☒ d. Not all ResultSets are updatable

☐ e. Atleast one record should be there in the ResultSet on opening a query (or) table