1. What is the result of compiling and executing the following application?

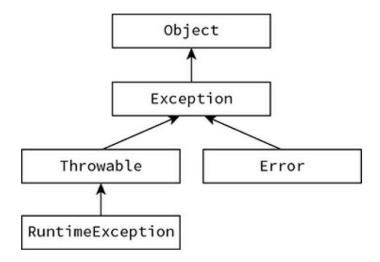
```
package mind;
public class Remember {
public static void think() throws Exception { // k1
try {
throw new Exception();
}
}
public static void main(String... ideas) throws Exception {
think();
}
}
```

- A. The code compiles and runs without printing anything.
- B. The code compiles but a stack trace is printed at runtime.
- C. The code does not compile because of line k1.
- D. The code does not compile for another reason.

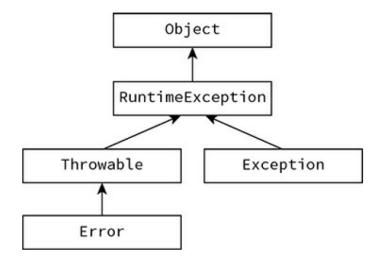
- 2. Choose the answer that lists the keywords in the order that they would be used together.
- A. catch, try, finally
- B. try, catch, finally
- C. finally, catch, try
- D. try, finally, catch

3. Which of the following diagrams of java.lang classes shows the inheritance model properly?

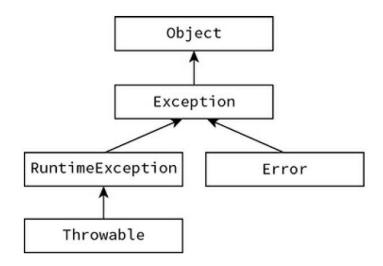
A.



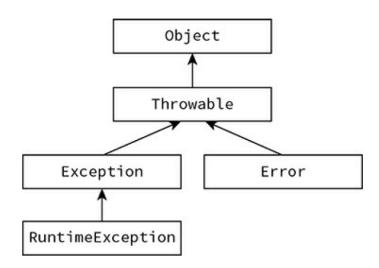
В.



C.



D.



- 4. Which of the following Throwable types is it recommended not to catch in a Java application?
- A. Error
- B. CheckedException
- C. Exception
- D. RuntimeException

```
package game;
public class Baseball {
public static void main(String... teams) {
try {
int score = 1;
System.out.print(score++);
} catch (Throwable t) {
System.out.print(score++);
} finally {
System.out.print(score++);
System.out.print(score++);
}
}
A. 123
B. 124
C. 12
```

D. None of the above

- 6. Which of the following is a checked exception?
- A. ClassCastException
- B. IOException
- C. ArrayIndexOutOfBoundsException
- $D. \ Illegal Argument Exception$

7. Fill in the blanks: The \_\_\_\_\_\_keyword is used in method declarations, while the \_\_\_\_\_keyword is used to throw an exception to the surrounding process.

A. throws, throw

B. catch, throw

C. throw, throws

D. throws, catch

8. If a try statement has catch blocks for both Exception and IOException, then which of

the following statements is correct?

- A. The catch block for Exception must appear before the catch block for IOException.
- B. The catch block for IOException must appear before the catch block for Exception.
- C. The catch blocks for these two exception types can be declared in any order.
- D. A try statement cannot be declared with these two catch block types because they are incompatible.

```
package game;
public class Football {
public static void main(String officials[]) {
  try {
    System.out.print('A');
  throw new RuntimeException("Out of bounds!");
  } catch (ArrayIndexOutOfBoundsException aioobe) {
    System.out.print('B');
  throw t;
  } finally {
    System.out.print('C');
  }
}
```

- A. ABC
- B. ABC, followed by a stack trace for a RuntimeException
- C. AC, followed by a stack trace for a RuntimeException
- D. None of the above

10. What is the result of compiling and running the following application?

```
package castles;
public class Fortress {
public void openDrawbridge() throws Exception { // p1
try {
throw new Exception("Circle");
} catch (Exception e) {
System.out.print("Opening!");
} finally {
System.out.print("Walls"); // p2
}
}
public static void main(String[] moat) {
new Fortress().openDrawbridge(); // p3
}
```

- A. The code does not compile because of line p1.
- B. The code does not compile because of line p2.
- C. The code does not compile because of line p3.
- D. The code compiles, but a stack trace is printed at runtime.

- 11. Which of the following exception types must be handled or declared by the method in which they are thrown?
- A. NullPointerException
- B. Exception
- C. RuntimeException
- D. ArithmeticException

```
package game;
public class BasketBall {
  public static void main(String[] dribble) {
  try {
    System.out.print(1);
  throw new ClassCastException();
  } catch (ArrayIndexOutOfBoundsException ex) {
    System.out.print(2);
  } catch (Throwable ex) {
    System.out.print(3);
  } finally {
    System.out.print(4);
  }
    System.out.print(5);
  }
}
```

- B. 1235
- C. The code does not compile.
- D. The code compiles but throws an exception at runtime.

- 13. Which of the following statements about a finally block is true?
- A. Every line of the finally block is guaranteed to be executed.
- B. The finally block is executed only if the related catch block is also executed.
- C. The finally statement requires brackets {}.
- D. The finally block cannot throw an exception.

14. Given that FileNotFoundException is a subclass of IOException, what is the output of

the following application?

```
package office;
import java.io.*;
public class Printer {
public void print() {
try {
throw new FileNotFoundException();
} catch (IOException exception) {
System.out.print("Z");
} catch (FileNotFoundException enfe) {
System.out.print("X");
} finally {
System.out.print("Y");
}
}
public static void main(String... ink) {
new Printer().print();
}
}
A. XY
B. zy
```

- C. The code does not compile.
- D. The code compiles but a stack trace is printed at runtime.

- 15. Which keywords are required with a try statement?
- I. catch
- II. finalize
- III. finally
- A. I only
- B. II only
- C. I or III, or both
- D. None of these statements are required with a try statement.

- 16. Which statement about the role of exceptions in Java is incorrect?
- A. Exceptions are often used when things "go wrong" or deviate from the expected path.
- B. An application that throws an exception will terminate.
- C. Some exceptions can be avoided programmatically.
- D. An application that can properly handle its exception may recover from unexpected problems.

```
package harbor;
class CapsizedException extends Exception {}
class Transport {
public int travel() throws CapsizedException { return 2; };
}p
ublic class Boat {
public int travel() throws Exception { return 4; }; // j1
public static void main(String... distance) throws Exception{
try {
System.out.print(new Boat().travel());
} catch (Exception e) (
System.out.print(8);
)
}
}
A. 4
B. 8
```

- C. The code does not compile due to line j1.
- D. The code does not compile for another reason.

18. Which of following method signatures would not be allowed in a class implementing

```
the Printer interface?

class PrintException extends Exception {}

class PaperPrintException extends PrintException {}

public interface Printer {

abstract int printData() throws PrintException;

}

A. public int printData() throws PaperPrintException

B. public int printData() throws Exception
```

- C. public int printData()
- D. None of the above

19. Which import statement is required to be declared in order to use the Exception,

RuntimeException, and Throwable classes in an application?

- A. import java.exception.\*;
- B. import java.util.exception.\*;
- C. import java.lang.\*;
- D. None of the above

## 20. Which statement about the following classes is correct?

```
class GasException extends Exception {}
class Element {
public int getSymbol() throws GasException { return -1; } // g1
}p
ublic class Oxygen extends Element {
public int getSymbol() { return 8; } // g2
public void printData() {
try {
System.out.print(getSymbol());
} catch { // g3
System.out.print("Unable to read data");
}
}
```

- A. The code does not compile because of line g1.
- B. The code does not compile because of line g2.
- C. The code does not compile because of line g3.
- D. None of the above