Chapter 15

Section 15.1

15.1 Q1: Which of the following statements is not true?
   a. Exception handling enables programmers to write robust and fault-tolerant programs.
   b. Exception handling can only catch the exception but cannot resolve the exception.
   c. Exception handling can resolve exceptions.
   ANS: b. Exception handling can only catch the exception but cannot resolve the exception.

Section 15.2

15.2 Q1: Which of the following errors is synchronous?
   a. Divide by zero.
   b. Arithmetic overflow.
   c. Unsuccessful memory allocation.
   d. All of above.
   ANS: d. All of above.

15.2 Q2: To catch an exception, code must be enclosed in a
   a. throws clause.
   b. catch clause.
   c. try block.
   d. finally clause.
   ANS: c. try block.

15.2 Q3: The code in a finally block:
   a. Is always executed if the corresponding try block is entered.
   b. Is executed only if an exception occurs.
   c. Is executed only if an exception does not occur.
   d. Is executed only if there are no catch blocks.
   ANS: a. Is always executed if the corresponding try block is entered.

15.2 Q4: Resources allocated in a try block:
   a. Should be freed in the try block.
   b. Should be freed in the associated finally block.
   c. Should be freed in the next associated catch block.
   d. Should be freed at the end of the method containing the try block.
   ANS: b. Should be freed in the associated finally block.

15.2 Q5: Which of the following statements about try blocks is true?
   a. The try block must be followed by at least one catch block.
   b. The try block must be followed by a finally block.
   c. The try block should contain statements that may throw an exception.
   d. The try block should contain statements to process an exception.
   ANS: c. The try block should contain statements that may throw an exception.

15.2 Q6: Consider the following method declaration:
   public void example()
   {
       DecimalFormat precision3 = new DecimalFormat( "0.000" );

       try {
           int number1 = Integer.parseInt( input1.getText() );
           int number2 = Integer.parseInt( input2.getText() );
   
double result = quotient( number1, number2 );
output.setText( precision3.format( result ) );
}
catch ( NumberFormatException nfe ) {
    JOptionPane.showMessageDialog( this,
        "You must enter two integers",
        "Invalid Number Format",
        JOptionPane.ERROR_MESSAGE );
}
catch ( DivideByZeroException dbze ) {
    JOptionPane.showMessageDialog( this, dbze.toString(),
        "Attempted to Divide by Zero",
        JOptionPane.ERROR_MESSAGE );
}

Which statement with reference to the method example above is not true?

a. The variables number1 and number2 cannot be referenced in either catch block.
b. The variable precision3 can be referenced in both catch blocks.
c. The variable result cannot be referenced in either catch block.
d. All of the above are true.

ANS: d. All of the above are true.

Section 15.3

15.3 Q1: Which of the following is not an existing class in Java?

a. ArithmeticException.
b. DivideByZeroException.
c. NumberFormatException.
d. All of the above exist in Java.

ANS: b. DivideByZeroException.

Section 15.4

15.4 Q1: Which of the following exceptions is a checked exception?

a. ArithmeticException.
b. RuntimeException.
c. IOException.
d. NumberFormatException.

ANS: c. IOException.

Section 15.5

15.5 Q1: Which of the following statements is true after a catch block is entered to handle an exception?

A. A catch block can rethrow an exception that it has not handled
B. A catch block can rethrow an exception that it has partially handled.
C. A rethrown exception is detected by the next enclosing try block.
D. A rethrown exception may be handled by an exception handler list after that enclosing try block.
E. A catch block cannot rethrow an exception that is has completely handled.

a. All of the above.
b. B, C, D, E.
c. A, B, C, D.
d. A, B, D, E.

ANS: c. A, B, C, D.

Section 15.6

15.6 Q1: Which of the following statements is false?

a. A finally clause is placed after the last catch clause.
b. A finally clause should release all resources acquired in the corresponding try block.
c. A finally clause is optional.
d. The finally clause and try block can appear in any order.
ANS: d. The finally clause and try block can appear in any order.

15.6 Q2: Which of the following statements is true?
   a. A finally block is always executed.
   b. A finally block is only executed if an exception is thrown.
   c. A finally block is not executed if the try block exits via a break, continue, or return statement.
   d. A finally block only executes if none of the catch statements respond to the exception that was thrown in the try block.
ANS: a. A finally block is always executed.

Section 15.7
None

Section 15.8

15.8 Q1: Which of the following statements is false?
   a. All exceptions must derive from the class Throwable.
   b. The class Throwable provides the method printStackTrace.
   c. The class Exception stores an information string set by its constructor.
   d. The method getInformationString in the class Exception prints the Exception object’s information string.
ANS: d. The method getInformationString in the class Exception prints the Exception object’s information string.

Section 15.9
15.9 Q1: Which of the following statements is not true?
   a. J2SE 1.4 introduces chained exception.
   b. J2SE 1.4 adds a new constructor to Exception: Exception( String message, Throwable cause).
   c. J2SE 1.4 adds a new method getStackTrace to Throwable.
   d. None of the above is true.
ANS: d. None of the above is true.

Section 15.10

15.10 Q1: Which of the following statements is true?
   a. Using existing exceptions makes the program less robust.
   b. Always create your own exception class.
   c. Like any other class, an exception class can contain fields and methods.
   d. The new class should extend RuntimeException if the program should be required to handle the exception.
ANS: c. Like any other class, an exception class can contain fields and methods.

Section 15.11

( none )