Java Language Practice

Choose one answer per question. Circle A, B, C, or D.

1. Which primitive type belongs in the blank in ___ ready = true?
   A. boolean
   B. int
   C. char
   D. double

2. The declaration long stars = 5_000_000_000L uses an L after the number. What does the L indicate?
   A. The literal has type double
   B. The variable can be assigned only once
   C. The literal has type long
   D. The value is rounded to fit an int

3. What value does the Java expression -17 / 5 produce?
   A. -4
   B. -3
   C. 3
   D. -3.4

4. What text does the Java expression "Tray " + 2 + 3 produce?
   A. 23 Tray
   B. Tray 5
   C. 5 Tray
   D. Tray 23

5. An int[] named sizes contains {4, 7, 9} in that order. Which value does sizes[1] read?
   A. 4
   B. 7
   C. 9
   D. 1

6. What string does "planet".substring(1, 4) return?
   A. lan
   B. plane
   C. lane
   D. pla

7. Basket has a field int count and a constructor Basket(int count) { this.count = count; }. What value does new Basket(6).count read?

A. Undefined
B. 0
C. 1
D. 6

8. Both value and total are ints, starting at 5 and 0. The program runs do { total += value; value--; } while (value < 3); What is total afterward?

A. 4
B. 0
C. 5
D. 9

9. Both a and b are initialized by their own new String("mint") expression. In order, what are the results of a.equals(b) and a == b?

A. true, false
B. true, true
C. false, true
D. false, false

10. What is total after this Java snippet? int total = 0; for (int i = 1; i < 5; i++) { if (i == 2) continue; total += i; }

A. 6
B. 10
C. 1
D. 8

11. The UTF-16 code unit for 'A' has the numeric value 65. What is the type and value of the Java expression 'A' + 1?

A. A String with the value A1
B. A char with the value 'B'
C. An int with the value 66
D. An int with the value 65

12. One class declares pick(int n), which returns "int", and pick(double n), which returns "double". What does the call pick(3) return?

A. double
B. int
C. 3
D. 3.0

13. An ArrayList<Integer> named values contains [7, 3, 1]. What is in the list after values.remove(1)?

A. [7, 3, 1]
B. [7, 3]
C. [3, 1]
D. [7, 1]

14. Label declares an instance method text() that returns "plain". BrightLabel extends Label and overrides text() to return "bright". Given Label tag = new BrightLabel(), what does tag.text() return?

A. bright
B. plain
C. BrightLabel
D. null

15. The method adjust(int[] values) first sets values[0] = 9 and then sets values = new int[]{4}. The caller starts with int[] boxes = {1, 2} and calls adjust(boxes). What does boxes contain afterward?

A. [1, 2]
B. [4]
C. [9, 2]
D. [9]