

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) If you want to output the text "go reds", *including the quote marks*, which of the following could do that?
 - A. `System.out.println("\"go reds\"");`
 - B. `System.out.println("\go reds");`
 - C. `System.out.println("go reds");`
 - D. `System.out.println("'go reds'");`
 - E. none, it is not possible to output a quote mark because it is used to mark the beginning and ending of the String to be output.
- 2) In the String `major = "Cincinnati Bengals"`, what is returned by `major.charAt(1)`?
 - A. 'i'
 - B. 'n'
 - C. 'C'
 - D. "C"
 - E. "Cincinnati"
- 3) Of the following types, which one cannot store a **numeric** value?
 - A. `char`
 - B. `int`
 - C. `double`
 - D. all of these can store numeric values
 - E. none of these can store numeric values
- 4) What value will `z` have if we execute the following assignment statement?
`int z = 100 / 20.00;`
 - A. 50
 - B. 5.0
 - C. 10
 - D. 5
 - E. none of the above, a run-time error arises because `z` is an `int` and `100 / 20.00` is not
- 5) What value is stored in `result` if `int result = 13 - 3 * 6 / 4 % 3;`
 - A) 13
 - B) -1
 - C) -5
 - D) 12
 - E) 0
- 6) What will be the result of the following assignment statement? (Assume `b = 5` and `c = 10`)
`int a = b * (-c + 2) / 2;`
 - A) -20
 - B) -6
 - C) 30
 - D) 20
 - E) -30

For questions 7&8, refer to the class defined below:

```
import java.util.Scanner;
public class Questions {
    public static void main(String[] args) {
        int x, y, z;
        double average;
        Scanner scan = new Scanner (System.in);
        System.out.println("Enter an integer value");
        x = scan.nextInt();
        System.out.println("Enter another integer value");
        y = scan.nextInt();
        System.out.println("Enter a third integer value");
        z = scan.nextInt();
        average = (x + y + z) / 3;
        System.out.println("The result of my calculation is " + average);
    }
}
```

- 7) What is the output if x = 0, y = 1 and z = 1?
- A. 0.67
 - B. 1
 - C. 0.6666666666666666
 - D. 1.0
 - E. 0.0
- 8) The Questions program shown above computes:
- A. The sum of x, y and z
 - B. The remainder of the sum of x, y and z divided by 3
 - C. The correct average of x, y and z as an int
 - D. The correct average of x, y and z as a double
 - E. The average of x, y and z as a double, but the result may not be accurate

Use the following class definition to answer questions 9,10,11,12.

```
public class StringStitch
{
    public static void main(String[] args) {
        System.out.print("Here");
        System.out.println("There " + "Everywhere");
        System.out.println("But not" + "in Texas");
    }
}
```

- 9) The program will print the word "Here" and then print
- A. "There Everywhere" on the line after "Here"
 - B. "There" on the line after "Here" and "Everywhere" on the line after "There"
 - C. "There Everywhere" on the same line as "Here"
 - D. "ThereEverywhere" on the same line as "Here"
 - E. "ThereEverywhere" on the line after "Here"
- 10) The final println command will output
- A. "But not in Texas"
 - B. "But notin Texas"
 - C. "But not" on one line and "in Texas" on the next line
 - D. "But not+in Texas"
 - E. "But not + in Texas"

- 11) How many lines of output are provided by this program?
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
- 12) A reasonable comment for this program might be
- A. // a program that demonstrates the differences between print, println and how + works
 - B. // a program that outputs a message about Texas
 - C. // a program that demonstrates nothing at all
 - D. // a program that outputs the message "Here There Everywhere But not in Texas"
 - E. // a program that has three output statements in it
- 13) One of the rules for converting English to Pig Latin states: If a word begins with a consonant, move the consonant to the end of the word and add "ay". Thus "dog" becomes "ogday," and "crisp" becomes "rispcay". Suppose s is a String containing an English word that begins with a consonant. Which of the following creates the correct corresponding word in Pig Latin? Assume the declarations
- ```
String ayString = "ay";
String pigString;
```
- A. pigString = s.substring(0, s.length()) + s.substring(0,1) + ayString;
  - B. pigString = s.substring(1, s.length()) + s.substring(0,0) + ayString;
  - C. pigString = s.substring(1, s.length()-1) + s.substring(0,0) + ayString;
  - D. pigString = s.substring(0, s.length()-1) + s.substring(0,1) + ayString;
  - E. pigString = s.substring(1, s.length()) + s.substring(0,1) + ayString;
- 14) Consider the following statement:
- ```
System.out.println("She sells sea \t shells \n by the sea \r shore");
```
- This statement will output ____ lines of text
- A. 1
 - B. 2
 - C. 3
 - D. 4
 - E. 5
- 15) What value will z have if we execute the following assignment statement?
- ```
double z = 5 / 10;
```
- A. z will equal 0.0
  - B. z will equal 0.5
  - C. z will equal 5.0
  - D. z will equal 0.05
  - E. none of the above, a run-time error arises because z is a double and 5 / 10 is an int
- 16) A cast is required in which of the following situations?
- A. using charAt to take an element of a String and store it in a char
  - B. storing an int in a double
  - C. storing a double in a double
  - D. storing a double in an int
  - E. all of the above require casts
- 17) If x is an int and y is a double, all of the following are legal except which assignment statement?
- A. y = x;
  - B. x = y;
  - C. y = (double) x;
  - D. x = (int) y;
  - E. all of the above are legal