TRUE/FALSE

1. Comments in Python begin with the **#** character.
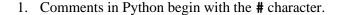
   ANS: T

2. When using the camelCase naming convention, the first word of the variable name is written in lowercase and the first characters of all subsequent words are written in uppercase.

   ANS: T

3. According to the behavior of integer division, when an integer is divided by an integer, the result will be a **float**.

   ANS: F

4. Python allows programmers to break a statement into multiple lines.

   ANS: T

5. Python formats all floating-point numbers to two decimal places when outputting with the **print** statement.

   ANS: F

6. A flowchart is a tool used by programmers to design programs.

   ANS: T

7. In Python, math expressions are always evaluated from left to right, no matter what the operators are.

   ANS: F

8. Computer programs typically perform three steps: input is received, some process is performed on the input, and output is produced.

   ANS: T

9. In Python, **print** statements written on separate lines do not necessarily output on separate lines.

   ANS: T

10. The **\t** escape character causes the output to skip over to the next horizontal tab.

ANS: T

11. Since a named constant is just a variable, it can change any time during a program's execution.

ANS: F

MULTIPLE CHOICE

1. What is the informal language, used by programmers use to create models of programs, that has no syntax rules and is not meant to be compiled or executed?

    a. flowchart
    b. algorithm
    c. source code
    d. pseudocode

    ANS: D

2. A(n) _____ is a diagram that graphically depicts the steps that take place in a program?

    a. flowchart
    b. algorithm
    c. source code
    d. pseudocode

    ANS: A

3. The _____ function reads a piece of data that has been entered at the keyboard and returns that piece of data, as a string, back to the program.

    a. `input()`
    b. `output()`
    c. `eval_input()`
    d. `str_input()`

    ANS: A

4. The line continuation character is a

    a. `#`
    b. `%`
    c. `&`
    d. `\`

    ANS: D

5. Which mathematical operator is used to raise 5 to the second power in Python?

    a. `/`
    b. `**`
    c. `^`
    d. `~`

    ANS: B

6. In a `print` statement, you can set the _____ argument to a space or empty string to stop the output from advancing to a new line.

a. stop
b. end
c. separator
d. newLine

ANS: B

7. After the execution of the following statement, the variable **sold** will reference the numeric literal value as (n) _____ data type.

```
sold = 256.752
```

a. **int**
b. **float**
c. **str**
d. **currency**

ANS: B

8. After the execution of the following statement, the variable **price** will reference the value _____.

```
price = int(68.549)
```

a. **68**
b. **69**
c. **68.55**
d. **68.6**

ANS: A

9. What is the output of the following **print** statement?

```
print 'I\'m ready to begin'
```

a. **Im ready to begin**
b. **I\'m ready to begin**
c. **I'm ready to begin**
d. **'I\'m ready to begin'**

ANS: C

10. What is the output of the following command, given that **value1 = 2.0** and **value2 = 12**?

```
print(value1 * value2)
```

a. **24**
b. **value1 * value2**
c. **24.0**
d. **2.0 * 12**

ANS: C

11. What is the output of the following **print** statement?

```
print('The path is D:\\sample\\test.')
```

a. **'The path is D:\\sample\\test.'**
b. **The path is D:\\sample\\test.**
c. **The path is D\\sample\\test.**

d. **The path is D:\sample\test.**

ANS: D

12. The _____ built-in function is used to read a number that has been typed on the keyboard.

a. **input()**
b. **read()**
c. **get()**
d. **keyboard()**

ANS: A

13. Which of the following will display **20%**?

a. **print(format(20, '.0%')) <enter>**
b. **print(format(0.2, '.0%')) <enter>**
c. **print(format(0.2 * 100, '.0%')) <enter>**
d. **print(format(0.2, '%')) <enter>**

ANS: B

14. What symbol is used to mark the beginning and end of a string?

a. a slash (**/**)
b. an asterisk (*****)
c. a quote mark (**"**)
d. a comma (**,**)

ANS: C

15. To use Python's turtle graphics, you must include which of the following statements in your program?

a. **import turtle_module**
b. **import turtle_graphics**
c. **import turtle**
d. **import Turtle**

ANS: C

16. The Python turtle is initially positioned in the _____ of a graphics window and it first appears, by default, to be heading _____.

a. center, up
b. top left corner, east
c. bottom left corner, down
d. center, east

ANS: D

MULTIPLE RESPONSE

1. Select all that apply. Which of the following are steps in the program development cycle?

a. design the program
b. write the code and correct syntax errors
c. test the program
d. correct logic errors

ANS: A, B, C, D

2. Select all that apply. Assume you are writing a program that calculates a user's total order cost that includes sales tax of 6.5%. Which of the following are advantages of using a named constant to represent the sales tax instead of simply entering 0.065 each time the tax is required in the code?

    a. It will be easier for another programmer who may need to use this code to understand the purpose of the number wherever it is used in the code.
    b. If the tax amount changes to 7.0%, the value will only have to be changed in one place.
    c. It allows the end-user to always see the value of the sales tax.
    d. It avoids the risk that any change to the value of sales tax will be made incorrectly or that an instance of the tax value might be missed as might occur if the number had to be changed in multiple locations.

    ANS: A, B, D

COMPLETION

1. _____ are notes of explanation that document lines or sections of a program.

    ANS: Comments

2. The % symbol is the remainder operator, also known as the _____ operator.

    ANS: modulus, mod

3. A(n) _____ character is a special character that is preceded with a backslash (\), appearing inside a string literal.

    ANS: escape

4. The _____ specifier is a special set of characters that specify how a value should be formatted.

    ANS: formatting

5. When applying the .3f formatting specifier to the number 76.15854, the result is _____.

    ANS: 76.159

6. A(n) _____ is a single task that the program must perform in order to satisfy the customer.

    ANS: software requirement

7. In the expression 12.45 + 3.6, the values to the right and left of the + symbol are the _____.

    ANS: operands

8. A(n) _____ is a name that represents a value stored in the computer's memory.

    ANS: variable

9. Python uses _____ to categorize values in memory.

ANS: data types

10. When the **+** operator is used with two strings, it performs string _____.

ANS: concatenation

11. A _____ is a name that represents a value the cannot be changed during a program's execution.

ANS: named constant