

Lesson: Motion

I. Direction: Select **TRUE** if the statement is correct and **FALSE** if the statement is wrong.

- 1.) In Python Programming, it is a best practice if you will start typing your code after the **# main thread** comment / part of the Programming Area.
- 2.) You can delete the **import sys** and **import vexiq** codes in your Python Program. It will not affect your program.
- 3.) Lines of codes under the **#region config** shows the motors and sensors configuration of the robot model you are using.
- 4.) If you put “#” symbol on a code, it will be a comment, then the text turns green. It will be downloaded on the robot together with the python codes, and it has effect on the program.
- 5.) The code “**for count in range ()**” will repeat certain commands for specific number of times.

II. Direction: Choose the best answer for each question.

6. Which of the following is being controlled by the first parameter of the given python code below?

```
dt.drive_until(50, 500)
```

- How far the robot moves.
- How fast the robot moves
- Which motors to turn on
- The direction of the robot's movement

7. Which of the following statements best describes the flow of this program?

```
15 # main thread
16 dt.drive_until (50, 750)
17 dt.turn_until (50, 90)
```

- The robot will move forward for 50mm with 750 power level, then turn left for 90-degree angle with 50 power level.
- The robot will move forward for 750mm with 50 power level, then turn right for 90-degree angle with 50 power level.
- The robot will move forward for 750mm with 50 power level, then turn left for 90-degree angle with 50 power level.
- The robot will move forward for 750mm with 50 power level, then turn right for 50-degree angle with 90 power level.

8. Which parameter of the **dt.drive_until ()** code should be negative to make the robot move backwards?

- Power level
- Distance
- Motor
- None of the choices

9. What happens when you use a negative speed value on the given code below?

```
Lift.run(20)
```

- Arm motor will be lifted
- Arm motor will move down
- Claw motor will open
- Claw motor will close

10. What is the function of the python code below?

```
while True:
```

- It repeats certain commands for a specific number of times.
- It repeats certain commands until a terminating condition is met.
- It repeats certain commands infinitely.
- It repeats certain commands twice.