



Tetrix Microcontrollers Assignment #1 Questions

Answer questions in sentence form neatly in the space provided. Use the website, Tetrix builder and programming guides to help you answer these questions. 1/2 mark for quick answers and 1 mark for each explanation, see left column for mark breakdown.

1. What is an 'autonomous' robot?

a. _____

2. What are two safety rules each for sanitization, mechanical, and electrical concerns?

a. _____

b. _____

c. _____

3. Explain what Arduino code is?

a. _____

4. What are Microcontrollers and where are they used?

a. _____

5. What does Arduino IDE stand for and what does it do?

a. _____

6. What is the name of the microcontroller, amount of memory, number of servo ports, and the power requirements?

a. _____

7. What are sketches in Arduino?

8. _____

Which Tetrix kit do we have, its cost, and number of parts?

a. _____

Mark
Breakdown
Column

Q#	A
1	1.5
2	3
3	1.5
4	2
5	2
6	4
7	1
8	2
9	2
10	2
11	2
12	1
13	6
14	3
15	4
16	3
T=	40



Computer Engineering

Western Technical-Commercial School

Name:

Date:

Section:

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Tetrix Microcontrollers Assignment #1 Answers Questions

9. What is the purpose of the battery pack that is mounted to the Tetrix?

a. _____

10. What is Ardublockly and why is it used instead of Arduino IDE?

a. _____

11. What is the difference between the DC motor and the servo motor?

a. _____

12. Why must a library be also installed with the Arduino software?

a. _____

13. What are the two main sensors that come in the Tetrix kit and explain what they do, and how they do it?

a. _____

14. Name and describe 3 coding standards you should be doing when you write your own code?

a. _____

15. Name and explain the two main types of fastening systems used to put the Tetrix bot together?

a. _____

16. What is the difference of using the R/C remote controller with signal receiver vs using the onboard microcontroller on the Tetrix, and which of the two would you learn a lot more from?

a. _____

Mark
Breakdown
Column

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1	1.5
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T=	40