# 2016 Robotics Examination

**Examiner Comments** 

Yiwei's comments in black Kris's comments in blue

**General Comments:** 

Missing Semicolons were rampant.

Q1.a)

Generally done very poorly. Most people got the first number correct but failed to see that the loop is still going

**BODMAS** applies!

Q1.b)

Also poorly done. Many did not realise x is an integer and cannot store numbers with decimal places(which are truncated).

However, everybody who attempted the Q correctly realised zero cannot be printed.

Q2.

Mostly very well done. Minor issues with newlines  $\n'$ n'. Quite a few issues with the correct use of printf() and scanf()

Q3.a)

Some people spotted the error and made the right correction. Please note the circling everything is not the way to get this question correct.

Q3.b)

Most people got this right.

Q3.c)

This was a trick question and stumped the majority of students. There was no if statement to check for the exact value of 50 so the program continues the last thing it was doing.

It stumped both of us as well because I forgot it was a trick question.

# Q3.d)

Easy. Almost everyone got this correct.

#### Q4.a)

This was tough. Quite a few people did some of this Q in Q4.b) and were given some pity points. Many did not know how to use the function parameters in the definition of the function but the general idea to use if statements was good. Note: a function of type void does not have a return value. Comparison operators were written incorrectly from a few people.

# Q4.b)

Some people forgot the return 0; needed in int main(). Others using task main() for RobotC code was also accepted but had to have no return values. Some people had missing/mismatching braces for their if blocks.

# Q5.a)

Some interesting designs were seen. There were difficult requirements to fulfil with only one motor. Many that attempted the Q solved the grab issue or the lift issue but rarely both.

# Q5.b)

Generally well done.