



Department of Electrical and Computing Engineering

UNIVERSITY OF CONNECTICUT

ECE 3411 Microprocessor Application Lab: Fall 2015

Question VII

There are 3 short questions in this quiz. There are 2 pages in this quiz booklet. Answer each question according to the instructions given.

You have **5 minutes** to answer the questions.

If you find a question ambiguous, be sure to write down any assumptions you make.

Be neat and legible. If we can't understand your answer, we can't give you credit!

Write your name in the space below. Write your initials at the bottom of each page.

**THIS IS A CLOSED BOOK, CLOSED NOTES QUIZ.
PLEASE TURN YOUR NETWORK DEVICES OFF.**

Any form of communication with other students is considered cheating and will merit an F as final grade in the course.

Do not write in the box below

Total (xx/10)

Name:

Student ID:

1. Is the following statement true or false?

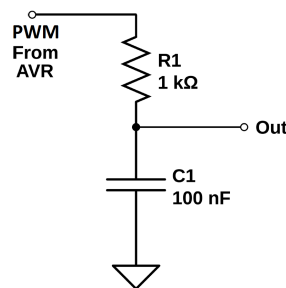
PWM toggles the logic output ON and OFF very fast, so quickly that whatever is attached to the output can't react fully.

- (a) True
- (b) False

2. Encircle the correct option.

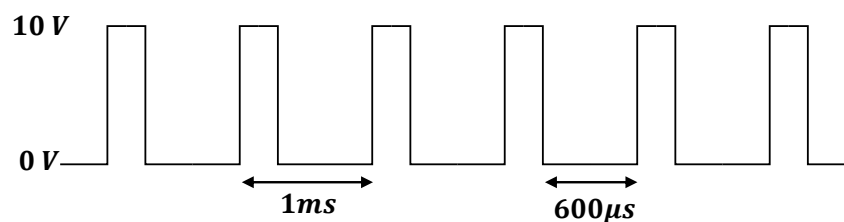
In the figure below, the average voltage at node "Out" is proportional to:

- (a) PWM Frequency
- (b) PWM Duty Cycle
- (c) Both (a) and (b)



3. Write the values of the following parameters for the PWM waveform shown below:

- (a) PWM Frequency (Hz) =
- (b) PWM Duty Cycle (%) =
- (c) Resultant Average Voltage (V) =



End of Question

Please double check that you wrote your name on the front of the question.

Initials: