

Student Name: _____ Student ID: _____

Problem 2

In Jameco's parts catalog there exist several serial port based LCDs. If you send a ascii character as a byte through the tx pin of the SCI port, it will be displayed on the LCD.

Write an initialization subroutine that will:

- 1) enable the TOV interrupt as a periodic interrupt with a period between 5 and 10 milliseconds,
- 2) enable the SCI for transmission at 19600 baud rate. Do not enable reception. No other requirements.

Assume that a TOV interrupt service routine exists that will transmit the appropriate ascii characters through the SCI. You just need to initialize the SCI and TOV for later use given the requirements above.

Student Name: _____ **Student ID:** _____

Problem 3

Write a subroutine to initialize the PWM peripheral with one (two) active channels:

- 1) Channel 3 running at 60 Hz and 25% duty cycle. (full credit)**
- 2) Channel 4 running at 100 KHz and 25% duty cycle (2 point bonus)**
- 3) All other channels should be disabled.**

Show all calculations and ensure values with 4% tolerance.