**Team Number:**

**Teammate #1 Name:**

**Teammate #2 Name:**

**MINI ROBOTIC ARM (Automation) SCORE SHEET**

**Project Category Tutor/TA Signature**

1. **Challenge 1: PCB DESIGN WITH EAGLE**

- What is pull-down resistor? and why do you need it?

- What is the point of smoothing capacitor and decoupling capacitor?

- Why do we use a diode in conjunction with a voltage regulator?

- The PCB board and schematic are finished

1. **Challenge 2: SMD/THD SOLDERING OF PCB BOARD**

- Obtain all SMD components from TA and tape them on page 9

- Complete soldering the PCB board

- The PWR\_LED is on when connecting the board with battery

1. **PROGRAM AUTOMATION MODE**

- Algorithm correctly implements protothread technique

- Robotic arm can record position values

- Robotic arm can write stored values to servos continuously

**4.** **Challenge 4: MEMORY MANAGEMENT**

- Robotic Arm can record at least 5 seconds of movement

**Comments from TA/tutor:**

**Note:** PLEASE STAPLE THIS PAGE IN FRONT OF THE PROJECT PACKET. ONE PROJECT PACKET SUBMISSION PER TEAM. MAKE SURE THAT YOU FILL OUT ALL BLANKS AND ANSWER ALL QUESTIONS IN YOUR PROJECT PACKET.