

# IME 408 Industrial Robotics -- Edwards

## Test I

June 12, 2020

Answer the Following Questions to the Best of Your Ability – GOOD LUCK!!

### **SAFETY FIRST!!!**

- 1) If there were an incident in the Robotics Lab which required Emergency attention, what telephone number should you call if you were to use your cell phone?

b) Why THIS number??

- 2) If we wish to get into a control panel on a Robot and it is unplugged, then we safe.

True

False

- 3) If you need to go into a robotic work cell, Turning the Teach Pendant “On” and taking it into a robotic work cell is a layer of safety.

True

False

Why??

- 4) Name at least 3 industry applications where Robots can be used.

- 4) Do some of the Classic 7 forms of Wastes apply to robots/robotic systems as well?

5) Name 3 different **Robotic** Coordinate Systems on a Robot Teach Pendant.

1.

2.

3.

6) In a Cartesian coordinate system, How many data points are in need to determine position and orientation of an object?

What are they?

1.

2.

3.

4.

5.

6.

7) An Advantage of Robots is that they are precise and repeatable.

True

False

8) Name a Robotic simulation software package.

9) Ideally, a Body Shop wishes to Build in Large Batch Sizes.

True

False

10) Robots and automation are always the solution to a manufacturing issue.

True

False

### **Extra Credit**

I) Who is the Manufacturer of our "4 Beetles" robots??

II) What is a Unimate and its significance?

III) Who wrote the Book "The Goal?"

What was the Overweight Boy Scout's Name?