**Test 1 – Robotics 1**

**1. Which is not a principle of robot design?**

1. Prototype before making design decisions
2. Never stop designing
3. Iterate design over time
4. Allow for changes over time

**2. What is an embedded micro-controller?**

1. A program that cannot be changed
2. A device that lets a user deploy programs
3. A device that has a defined behaviour
4. A program that can be changed

**3. What is "deploying a program"?**

1. Sending a program into a processor
2. Removing a program on a robot
3. Transferring a program into a processor
4. Downloading a program into a robot

**4. Which of these would be considered a goal?**

1. Can pick up balls
2. Uses an arm
3. Picks up balls with an arm
4. Uses an arm to pick up balls

**5. Which industry are robots not used in?**

1. Assembly lines
2. Agriculture
3. Military (bomb-squads, drones)
4. Domestic usages (vacuums, cars, etc.)

**6. Which concept do motors not use?**

1. Electromagnetism
2. Electron flow
3. Polarity
4. Pressure

**7. What do pneumatic regulators do?**

1. Contain air pressure
2. Keep air pressure from expanding
3. Only allow a max pressure through output
4. Allow air flow through tanks

**8. What do electronic controllers do?**

1. Control output to actuators
2. Control input from sensors
3. Control output to motors
4. Control output from user

**9. Which is not a property of a gearbox?**

1. Has one output shaft
2. Controls speed of output shaft
3. Combines input into one
4. Adds or reduces speed

**10. Which is not powered via electricity?**

1. Processor
2. Signals
3. Cylinders
4. Solenoids