The next test will be on Wednesday October 13, 2004

1. When is the next test? ______________________________________

2. What is the Department of Defense symbol for an OR device?

3. What is the Department of Defense symbol for an AND device

4. Which item shown above is a set of normally open push button?
   ______

5. Which item shown above is a normally closed contacts? ______

6. A light emitting diode (LED) circuit is shown above as item (6).
   The LED is ON when the circuit is working as it is shown drawn
   in the diagram.
   If both of the inputs in the circuit in item 11 are passive the
   LED is ON ?        Yes ___   No ___

7. If the set of normally closed contacts in Item 5 are open
   What is the logic of the signal at the circuit's output? ______

8. Item 5 is a pressure sense low device, does it have an active
   low output?        Yes___    No ___

9. Item 1 is a temperature sense high device does it have an active
   low output?         Yes___  No____
10. When both inputs in item 12 are active the LED is on. The LED is ON when either of the inputs is at logic 1.       Yes ___  No ___

11. If the middle input to the logic device shown as item 8 is active, is the value of the logic signal (1 or 0) of the output of that device known?       Yes ____ No ____
    If so, what is that value?  __________

12. If the middle input to the logic device shown as item 8 is passive, is the value of the logic signal (1 or 0) of the output of that device known?       Yes ____ No ____
    If so, what is that value?  __________

13. Draw the circuit diagram for a sensor that has a set of normally closed contacts and will provide the logic "1 " signal when the contacts are opened.

14. Draw the circuit diagram for a sensor that has a set of normally open contacts and will provide the logic "0 " signal when the contacts are open.

15. What is the unique input pattern for a 5 input AND device?