FG15E – Pre-Instructional Survey

Name: _______________________________ Date: _____________________

1. P&ID is an abbreviation for:
   a. Proportional and Integral Diagram
   b. Proper and Identified Drawing
   c. Planning and Implementation Diagram
   d. Piping and Instrumentation Drawing

2. The symbol describes:
   
   a. Part of a distributed control system
   b. A computer controlled process loop
   c. Part of an integrated circuit board
   d. A pneumatic pressure controller

3. Two pressure gauges form an instrument loop.
   a. True
   b. False
   c. Not enough information

4. A globe-type control valve:
   a. Has a special inner valve
   b. Is always made of 316 stainless steel
   c. Can be operated by a spring and diaphragm actuator
   d. Is never welded into the process piping

5. A logic diagram defines:
   a. On-off or sequential control
   b. Continuous process control
   c. How a typical process operator thinks
   d. Typical continuous process set points for process controllers
6. When information is transferred pneumatically, the range used is:
   a. 0-15 psi
   b. 3-15 psi
   c. 4-20 psi
   d. 4-15 psi

7. ISA Standards and Recommended Practices:
   a. Are copyrighted and cannot be duplicated
   b. Are law in most states
   c. Are followed in many parts of the world
   d. Both A & C

8. A loop diagram is:
   a. A map of the elevated rail system of Chicago
   b. A diagram that shows all parts of an instrument loop
   c. Used only for pneumatic instrumentation
   d. None of the above

9. Give an example of an automatic control system not in a process plant:

10. “Tuning a loop” means:
    a. To set the frequency of the transmitted signal
    b. Setting the amount of proportional band in a proportional only controller
    c. Matching the impedance of the transmitter and controller
    d. None of the above

11. Safety shut-down software can be developed using:
    a. Interlock logic description only
    b. Sequence logic description only
    c. Instrument Index

12. The instrument index (list) is derived from:
    a. Software Functional description
    b. P&ID
    c. All of the above