EC50CT - Pre-Instructional Survey

Name: _____________________________________ Date: ______________________

1. What is a Safety instrumented systems - SIS?
   a. A system that provide protection to Instruments
   b. A system that takes the Process to a safe state?
   c. A Safety Protection Independent Layer
   d. A layer of protection made out of instruments
   e. A system made out of instruments that takes the plant to a safe state

2. One advantage of performing control and safety in two separate logic solvers would be:
   a. Increase in common cause
   b. Reduction of spare parts
   c. Increase in training costs
   d. Reduction of common cause

3. The majority of control and safety system accidents are due to errors in what?
   a. Incorrect and incomplete specifications
   b. Design and implementation
   c. Installation and commissioning
   d. Operations and maintenance
   e. Changes after commissioning

4. Risk is a function of what two things?
   a. Failure rates & failure modes
   b. Frequency & severity
   c. Severity & consequences
   d. Frequency & likelihood

5. Which configuration is the safest (the one most likely to respond to a true demand)?
   a. 1 out of 1
   b. 1 out of 2
   c. 2 out of 2
   d. 2 out of 3
6. What is SIL?
   a. A method to determine degree of safety
   b. A level of Safety
   c. An average performance of Safety
   d. A qualitative method to determine Safety Levels
   e. None of the above

7. What does ALARP means?
   a. American logistics Reliable Processing
   b. As Low as Reasonably Practicable
   c. Average Level of Reliability in Process Control
   d. Acoustic Lineal Reliability parameters
   e. None of the above
EC50CT - Pre-Instructional Survey Answers

1. What is a Safety instrumented systems - SIS?
   e. A system made out of instruments that takes the plant to a safe state

2. One advantage of performing control and safety in two separate logic solvers would be:
   d. Reduction of common cause

3. The majority of control and safety system accidents are due to errors in what?
   a. Incorrect and incomplete specifications

4. Risk is a function of what two things?
   b. Frequency & severity

5. Which configuration is the safest (the one most likely to respond to a true demand)?
   b. 1 out of 2

6. What is SIL?
   c. An average performance of Safety

7. What does ALARP means?
   b. As Low as Reasonably Practicable