

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