

# FG25C - Pre-Instructional Survey

Name: \_\_\_\_\_ Date \_\_\_\_\_

For each question, select all answers that apply.

1. Which of the following is not a Fieldbus?
  - a. ProfiBus
  - b. HART
  - c. 4-20mA
  - d. Foundation Fieldbus
  
2. What is the main difference between the 4-20mA standard and Foundation Fieldbus?
  - a. Foundation Fieldbus is a fully digital protocol, the 4-20mA standard is not.
  - b. Foundation Fieldbus is somewhat slower in the actual communication effort.
  - c. 4-20mA standard can be used in hazardous areas, Foundation Fieldbus cannot.
  - d. They are both the same.
  
3. What is meant by interoperability with respect to Foundation Fieldbus?
  - a. This allows instrument/control devices from various vendors to be used on the same digital fieldbus using any type of digital communication standard, including custom types.
  - b. You can use either digital or analog communication on the same bus provided one is asynchronous and the other is synchronous.
  - c. Devices on a fieldbus segment are wired the same way with the red wire going to positive and the black wire to negative.
  - d. This allows instrument/control devices from different vendors to be used on the same digital fieldbus with a common standard for configuration, control and communication.
  
4. Compared to the 4-20mA standard, Foundation Fieldbus uses:
  - a. More field wiring.
  - b. Less field wiring.
  - c. Sometimes more, sometimes less wiring.
  - d. The same amount of wiring.

5. Which one the following can a Foundation Fieldbus field device NOT do?
  - a. Have both mA and digital Fieldbus outputs
  - b. Perform PID control
  - c. Trend
  - d. Alarm
  
6. What is a function block in Foundation Fieldbus?
  - a. Something you use to program control systems in C language.
  - b. A function block is a software tool to easily configure measurement/control devices.
  - c. A function block is used to do square root extraction in DP flow and level meters.
  - d. A function block is used in control systems to do calculations only not having an analog output.
  
7. Compared to smart 4-20mA based field device, Foundation Fieldbus technology allows the field devices to be configured:
  - a. Slower.
  - b. In the same amount of time as 4-20mA smart field devices.
  - c. Quicker.
  - d. They both take the same amount of time.
  
8. What instrument/control drawings and documentation do you need to rethink when applying Foundation Fieldbus technology?
  - a. P & I Ds
  - b. Loop diagrams
  - c. Wiring diagrams
  - d. Instrument data sheets
  
9. Foundation Fieldbus technology will:
  - a. Increase the cost of a project compared to using 4-20mA field devices.
  - b. Cost the same as conventional 4-20mA projects.
  - c. Lower the cost of a project compared to using 4-20mA field devices.
  - d. Has unpredictable project costs since the software costs are an unknown factor.
  
10. What kind of HOST can Foundation Fieldbus field devices be connected to?
  - a. DCS
  - b. Windows PC
  - c. PLC
  - d. HMI

## FG25C- Pre-Instructional Survey Answers

1. c
2. a
3. d
4. b
5. c
6. b
7. c
8. a,b,c,d
9. c
10. a,b,c,d