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