

TS00 – Pre-Instructional Survey

Name: _____ Date: _____

1. A pressure gauge that reads 100 PSIA is indicating _____ PSI
 - a. 100
 - b. 3.61
 - c. 85.3
 - d. 114.7

2. The specific gravity of a gas is the ratio of the density of the gas to the density of _____.
 - a. hydrogen
 - b. air
 - c. water
 - d. gasoline

3. A temperature of 273.15^o Kelvin is the same as _____^oCelsius
 - a. -186.64
 - b. 212
 - c. 100
 - d. 0

4. A circuit has a 100 Ω resistor, a 50 Ω resistor, and a 200 Ω resistor all in parallel with each other. What is the total resistance of the circuit?
 - a. 28.6 Ω
 - b. 350 Ω
 - c. 175 Ω
 - d. 28 M Ω

5. Primary standard reference units and physical constants are maintained by _____.
 - a. the plant instrument shop
 - b. testing labs
 - c. NIST
 - d. instrument tech's

6. You have an standard pneumatic instrument loop with a span of 200 units, what is the steady state gain?
- a. .06 PSI/unit
 - b. .12 PSI/unit
 - c. .075PSI/unit
 - d. .08PSI.unit
7. _____ control is often used when a specific blend of two different materials is required.
- a. cascade
 - b. ratio
 - c. feed forward
 - d. feedback
8. There are a total of _____time constant adjustments from the start point of a set point change and reaching the final set point.
- a. 1
 - b. 3
 - c. 7
 - d. 5
9. An instrument location plan _____of each instrument
- a. shows the location, elevation, and tag number
 - b. shows the location, specification number, and elevation
 - c. shows the specification number, and tag number
 - d. shows the location, and wiring plan
10. Maintenance that occurs following equipment failure is called _____maintenance
- a. creative
 - b. preventive
 - c. corrective
 - d. predictive
11. The single most important document in the drawing package defining and organizing a project is the_____
- a. specification sheets
 - b. P&IDs
 - c. layout drawings
 - d. PFDs

12. PLC programs use _____ logic to control the process
- a. relay
 - b. standard
 - c. analog
 - d. ladder
13. A magnetic flow meter determines the flow of a process material by measuring the _____ of the fluid.
- a. velocity
 - b. density
 - c. temperature
 - d. volume
14. A _____ only controller will have an offset from the desired set point.
- a. pneumatic
 - b. proportional
 - c. integral
 - d. derivative
15. With a direct acting controller an increasing input will cause a (an) _____ output
- a. decreasing
 - b. increasing
 - c. continuous
 - d. pulsating
16. A (an) _____ error must be correct for when a pressure transmitter is located lower than the bottom of the vessel being measured.
- a. suppression
 - b. zero
 - c. elevation
 - d. span
17. A process where material is fed and removed from the process at the same time is called a _____ process.
- a. batch
 - b. continuous
 - c. distillation
 - d. separation

18. The controlled variable may also be the _____ variable.
- a. disturbance
 - b. manipulated
 - c. measured
 - d. handled
19. The density of water at standard temperature and pressure is _____ lbs/ft³.
- a. 62.4
 - b. 14.7
 - c. 27.7
 - d. 0.433
20. The region between the limits within which a quantity is measured, received, or transmitted, expressed by stating the lower and upper limits is called the _____.
- a. span
 - b. linearity
 - c. zero
 - d. range

TS00 - Pre-Instructional Survey Answer Sheet

1. c
2. b
3. d
4. a
5. c
6. a
7. b
8. d
9. a
10. c
11. b
12. d
13. a
14. b
15. b
16. a
17. b
18. c
19. a
20. d