

TS00 – Pre-Instructional Survey

Name: _____ Date: _____

1. A pressure gauge that reads 100 PSIA is indicating _____ PSIG.
 - a. 3.61
 - b. 85.30
 - c. 100.00
 - d. 114.70

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

3. A temperature of 273.15 Kelvin is the same as _____°Celsius
 - a. 212.00
 - b. 186.64
 - c. 100.00
 - d. 0.00

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. 35.0 Ω
 - c. 175 Ω
 - d. 0.28 M Ω

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

6. You have a standard pneumatic instrument loop with a span of 200 units, what is the steady state gain?
 - a. 0.06 PSIG/unit
 - b. 0.07 PSIG/unit
 - c. 0.08 PSIG/unit
 - d. 0.12 PSIG/unit

7. _____ control is often used when a specific blend of two different materials is required.
- ratio
 - cascade
 - feedback
 - feed forward
8. There are approximately _____ time constants from the point at which the process reaction curve begins to change and reaching its maximum value.
- 1
 - 3
 - 5
 - 7
9. An instrument location plan shows the _____ of each instrument
- location and wiring plan
 - location, elevation, and tag number
 - specification number, and tag number
 - location, specification number, and elevation
10. Maintenance that occurs following equipment failure is called _____ maintenance
- creative
 - preventive
 - corrective
 - predictive
11. The single most important document in the drawing package defining and organizing a project is the _____
- specification sheets
 - layout drawings
 - P&IDs
 - PFDs
12. The PLC program can use _____ logic to control the process
- relay
 - ladder
 - analog
 - standard
13. A magnetic flow meter determines the flow of a process material by measuring the _____ of the fluid.
- velocity
 - density
 - volume
 - temperature

14. A _____ only controller will have an offset from the desired set point.
- integral
 - derivative
 - pneumatic
 - proportional
15. With a direct acting controller an increasing input will cause a (an) _____ output.
- continuous
 - decreasing
 - increasing
 - pulsating
16. When a d/p cell is used to measure hydrostatic pressure in an open tank and the transmitter is mounted below the zero reference point for the level a _____ error must be corrected for.
- suppression
 - elevation
 - span
 - zero
17. A process where material is fed and removed from the process at the same time is called a _____ process.
- batch
 - distillation
 - separation
 - continuous
18. The controlled variable may also be the _____ variable.
- distributed
 - disturbance
 - measured
 - handled
19. The density of water at standard temperature and pressure is _____ lbs/ft³.
- 62.4
 - 27.7
 - 14.7
 - 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 _____.
- span
 - zero
 - range
 - linearity

TS00 - Pre-Instructional Survey Answer Sheet

1. B
2. A
3. D
4. A
5. A
6. A
7. A
8. C
9. B
10. C
11. C
12. B
13. A
14. D
15. C
16. A
17. D
18. C
19. A
20. C