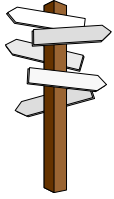


# Certification Boulevard



## *Test Your Knowledge of Water Supply and Other Miscellaneous Topics*

1. A potable water flow meter reads 175 gpm for 8.5 hrs/day, 95 gpm for 6.5 hrs/day and 48 gpm for the remainder of the 24-hour day. What is the total daily flow in mgd?
  - a. 0.64740 mgd
  - b. 0.09576 mgd
  - c. 0.1522 mgd
  - d. 0.1870 mgd
  
2. Given the following data, what is the annual budget for sodium hypochlorite at this package water plant?
  - Finished water flow is 200,000 gpd
  - Chlorine dosage is 20 mg/L
  - Sodium Hypochlorite solution strength is 11.25%
  - Bulk density of solution is 9.7 lbs/gal
  - Cost per bulk liquid gallon is \$0.38
  - a. \$22,655 per year
  - b. \$4,240 per year
  - c. \$26,224 per year
  - d. \$3,396 per year
  
3. What is the velocity in cubic feet per minute (cfm) of a 1 mgd stream of water?
  - a. 1.55 cfm
  - b. 8.34 cfm
  - c. 7.48 cfm
  - d. 92.84 cfm
  
4. Given the following data, calculate the approximate horsepower delivered by this pump:
  - Flow is 700 gpm
  - TDH is 85 feet
  - Does not consider pump and motor efficiency
  - a. 15 HP
  - b. 20 HP
  - c. 25 HP
  - d. 7.5 HP

5. Which repair kit is designed for use with 150-pound chlorine cylinders?
  - a. "A" kit
  - b. "B" kit
  - c. "C" kit
  - d. None of the above
  
6. If a gallon of water weighs 8.34 lbs, and a cubic foot of water holds 7.48 gallons ... how much does a cubic foot of water weigh?
  - a. 92.8 lbs
  - b. 56.7 lbs
  - c. 62.4 lbs
  - d. 3.14 lbs
  
7. What is the flow velocity in a 12-inch pipe as compared to the flow velocity in a 24-inch pipe, assuming both pipes are carrying the same volume of water flow.
  - a. The same
  - b. Twice the velocity
  - c. Three time the velocity
  - d. Four time the velocity
  
8. When pumping water from a well to a treatment process, the Total Dynamic Head is the sum of four (4) components, list these components:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  
9. What is the weight relationship of chlorine liquid as compared to water?
  - a. Water weighs more than liquid chlorine
  - b. Liquid chlorine weighs 2.5 times more than water
  - c. Water weighs 1.5 times more than liquid chlorine
  - d. Liquid chlorine weighs 1.5 times more than water
  
10. What will the pressure gauge read on the suction of a pump if the pump is located at floor elevation of the tank and the tank has 30 feet of static water level?
  - a. About 69 psi
  - b. About 9.5 psi
  - c. About 13 psi
  - d. About 17 psi

*Please forward your comments and sample questions for publication to:*

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