



Certification Boulevard

Test Your Knowledge of Water Treatment Topics

1. If the discharge head on an electrically driven vertical turbine pump increases, what does the motor current do?
 - A. It remains the same
 - B. It goes up
 - C. It goes down
 - D. It will oscillate

2. Given the following data, what is the total lbs/day of chlorine consumption in this water plant?
 - Raw water flow rate is 1.547 cfs
 - Inlet chlorination treatment is 3.5 mg/L
 - Pre-filtration chlorination is 1.75 mg/L
 - Finished water disinfection is 2.75 mg/L
 - A. 103 lbs/day
 - B. 61.9 lbs/day
 - C. 66.7 lbs/day
 - D. 14.9 lbs/day

3. If a water sample has 40 mg/L Calcium and 10 mg/L Magnesium, what is the total hardness measured as calcium carbonate equivalent?
 - A. 100 mg/L CaCO₃
 - B. 185 mg/L CaCO₃
 - C. 140 mg/L CaCO₃
 - D. 95 mg/L CaCO₃

4. If a finished water sample has a temperature of 29 °C, what is the conversion to °F?
 - A. 77 °F
 - B. 61 °F
 - C. 84 °F
 - D. 72 °F

5. Alkalinity is a measure of which ions?
 - A. Carbonate, bicarbonate, and hydroxide
 - B. Calcium and magnesium
 - C. Hydrogen and hydroxide
 - D. Sulfate, chlorate, and nitrate

6. What is created when chlorine reacts with volatile organics?
 - A. Ammonia
 - B. Trihalomethane
 - C. Alkalinity
 - D. Trimethylamine

7. What should typically happen to filter backwash rates during summer months?
 - A. Decrease
 - B. Stay the same
 - C. Increase
 - D. Ramped up more slowly

8. Which two chemicals are typically used in a water system chlor-ammonation process?
 - A. Chlorine and Sulfur Dioxide
 - B. Ammonia and Sodium Hydroxide
 - C. Chlorine and Caustic
 - D. Chlorine and Ammonia

9. Which of the following is not a by-product of disinfection?
 - A. Trihalomethanes
 - B. Bromate
 - C. Haloacetic acids
 - D. Nitrite

10. Which of the following chemicals is not an ozone scavenger?
 - A. Sodium bisulfite
 - B. Calcium sulfate
 - C. Hydrogen peroxide
 - D. Calcium thiosulfate

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Please forward your comments and sample questions for publication to:

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