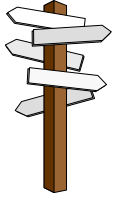


Certification Boulevard



Test Your Knowledge of Water Supply and Wastewater Disposal

1. Given the following data, calculate the approximate horsepower delivered by this pump:
 - Flow is 1,500 gpm
 - TDH is 125 feet
 - Does not consider pump and motor efficiency
 - a. 20 HP
 - b. 47 HP
 - c. 175 HP
 - d. 55 HP

2. 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. 92.4 lbs
 - b. 89.6 lbs
 - c. 62.4 lbs
 - d. 3.14 lbs

3. What test is typically performed to identify toxicity on wastewater effluent discharged to open bodies of water in Florida?
 - a. CBOD₅
 - b. TSS
 - c. pH
 - d. Bioassay

4. What are typical fecal coliform standards for wastewater effluent applied as reuse water in Florida?
 - a. No Greater Than 200 #/100 ml
 - b. 50% of the Samples Less Than 2 #/100 ml
 - c. 75% of the Samples Non-Detectable /100ml
 - d. No Single Sample Greater Than 25 #/100 ml

5. What are the principle nutrients that must be removed from effluent before it is safe for discharge to Florida waters?
 - a. Sulfate and Carbon
 - b. Nitrogen and Carbon
 - c. Phosphorus and Sulfate
 - d. Nitrogen and Phosphorus

6. Given the following data, how many gallons per year of sodium hypochlorite are used to disinfect effluent at this plant?

- Chlorine application rate required is 450 lbs/day
- Sodium Hypochlorite solution strength is 10.5%
- Bulk density of solution is 9.8 lbs/gal

- a. 159,621 gal/year
- b. 57,772 gal/year
- c. 169,013 gal/year
- d. 81,939 gal/year

7. 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) _____

8. A potable water flow meter reads 83 gpm for 13 hrs/day and 47 gpm for the remaining 11 hrs/day. What is the total daily flow in mgd?

- a. 0.64740 mgd
- b. 0.09576 mgd
- c. 0.03102 mgd
- d. 0.1870 mgd

9. What is the flow velocity in a 6-inch pipe as compared to the flow velocity in a 12-inch pipe, assuming both pipes are carrying a water flow of 50 gpm.

- a. The same
- b. Twice the velocity
- c. Three time the velocity
- d. Four time the velocity

10. Which DEP rule governs water reuse in Florida?

- a. 62-900
- b. 62-720
- c. 62-503
- d. 62-610