

Certification Boulevard Answer Key

From page 20

1. *The typical new residential home with an in-ground sprinkler system utilizes approximately 400 gpd of potable water for all uses (indoor and outdoor). The irrigation fraction of the domestic use is 50 percent of the total. Which of the following options provides the best method of water conservation?*
D. All of the above will provide daily water savings.
2. *What does the term absorption mean?*
B. Taking one substance into the body of another.
3. *Which type of solid is typically the highest percentage in the total solids profile of raw wastewater?*
B. Dissolved
4. *What is another term for organic solids?*
A. Volatile
5. *What is the term when ammonia-N and organic-N are added together?*
A. TKN
6. *What is the closest hydraulic loading equivalent in domestic wastewater?*
C. About 100 to 150 gallons per capita per day
7. *What is the term when chlorine reacts with ammonia and forms chloramines?*
B. Combined Residual
8. *What is the term when ammonia-N, nitrate-N and nitrite-N are added together?*
D. TIN
9. *Given the following data, calculate the Oxygen Uptake rate (OUR) in mg/L/hr.*
 - Beginning D.O. is 7.2 mg/L
 - Ending D.O. is 4.5 mg/L
 - Test Time is 10 minutesB. 16.2 mg/L/hr
OUR Formula, mg/L/hr
 $((\text{Beginning D.O., mg/L} - \text{Ending D.O., mg/L}) \div \text{Test Time, minutes}) \times 60 \text{ mins/hr}$
 $= ((7.2 \text{ mg/L} - 4.5 \text{ mg/L}) \div 10 \text{ minutes}) \times 60 \text{ mins/hr}$
 $= 16.2 \text{ mg/L/hr}$
10. *Select the closest oxygen demand value, in pounds of O₂ for each pound of CBOD₅ oxidized or converted:*
B. 0.8 to 1.2

