

Final Exam
Continuing Education Course #501
Water Reuse Applications

1. What is water reuse?
 - ☐ a. Using water again and again indefinitely with no discharge
 - ☐ b. Using treated wastewater as a water source
 - ☐ c. Zero liquid discharge
2. Which is NOT another word for reused water?
 - ☐ a. Recycled water
 - ☐ b. Reclaimed water
 - ☐ c. Rescued Water
3. Which is the first known example of water reuse?
 - ☐ a. Covering farmland with discarded water and waste
 - ☐ b. Indoor plumbing systems
 - ☐ c. Boiling water to avoid illness
4. Which is NOT a motivation for water reuse?
 - ☐ a. Decrease water supply demands
 - ☐ b. Minimize wastewater discharges
 - ☐ c. Dilute pollutant concentrations
5. Which is the most popular water reuse application?
 - ☐ a. Industrial reuse
 - ☐ b. Agricultural reuse
 - ☐ c. Environmental reuse
6. Which reuse application normally requires a greater level of treatment?
 - ☐ a. Pasture grass
 - ☐ b. Landscaping
 - ☐ c. Food crops
7. Which formula can be used to calculate pollutant concentrations when combining different water sources?
 - ☐ a. Mixing formula
 - ☐ b. Water quality index
 - ☐ c. Dosing formula
8. What are the three basic options for discharging industrial wastewater?
 - ☐ a. Direct, indirect, and greywater
 - ☐ b. Direct, indirect, and zero liquid
 - ☐ c. Direct, recycled, and biosludge

9. What is a name for salvaging lost products from wastewater?
- ☐ a. Offsite disposal
 - ☐ b. Commercial reuse
 - ☐ c. Resource recovery
10. Which is NOT a reason to recover phosphorus from wastewater?
- ☐ a. Avoid nitrification
 - ☐ b. Avoid eutrophication
 - ☐ c. Recover a valuable resource
 - ☐ d. Minimize geopolitical issues
11. What is a common color for reclaimed water pipes?
- ☐ a. Green
 - ☐ b. Purple
 - ☐ c. Blue
12. Which is a common application of urban reuse?
- ☐ a. Aquaculture
 - ☐ b. Steam generation
 - ☐ c. Toilet flushing
13. What is the formula for Net Zero Water?
- ☐ a. $\text{Alternative water use} + \text{Water returned} > \text{Freshwater consumption}$
 - ☐ b. $\text{Alternative water use} - \text{Water returned} > \text{Freshwater consumption}$
 - ☐ c. $\text{Alternative water use} + \text{Water returned} < \text{Freshwater consumption}$
14. Which type of plant is most sensitive to reclaim water quality?
- ☐ a. Turfgrass
 - ☐ b. Trees
 - ☐ c. Bushes
 - ☐ d. Flowers
15. What are the three main types of potable reuse?
- ☐ a. Direct, recharge, and unplanned
 - ☐ b. Indirect, direct, and unplanned
 - ☐ c. Indirect, direct, and environmental
16. Which is true of indirect potable reuse?
- ☐ a. Sends wastewater straight to the water treatment plant
 - ☐ b. Uses an environmental buffer
 - ☐ c. Uses backflow prevention
17. Which of the following is NOT a typical disinfection method?
- ☐ a. Free Chlorine
 - ☐ b. Chloramines
 - ☐ c. UV
 - ☐ d. Ultrafiltration
18. What value is needed from an EPA table to calculate the contact time for disinfection?
- ☐ a. Baffling factor
 - ☐ b. Maximum velocity

☐ c. Chlorine effectiveness

19. Which is a common application of environmental reuse?

☐ a. Constructed wetland

☐ b. "De facto" reuse

☐ c. Golf course irrigation

20. Which form of water reuse can counter saltwater intrusion?

☐ a. Urban reuse

☐ b. Groundwater recharge

☐ c. Agricultural