



**Water Treatment
Final Exam**

1. As per Table 6-1, the specialized process for Antimony is:
 - a. AA
 - b. RO
 - c. IX
 - d. GAC

2. As per Table 6-1, the conventional process for Epichlorohydrin is:
 - a. PAP
 - b. GAC
 - c. C-F
 - d. AR

3. *Disinfection* involves the removal, destruction, or _____ of pathogenic (disease-causing) organisms:
 - a. neutralization
 - b. emulsification
 - c. solidification
 - d. inactivation

4. *Disinfection* may be accomplished by oxidizing chemicals, including:
 - a. ammonium hydroxide
 - b. hydrogen peroxide
 - c. sodium bisulfate
 - d. sodium peroxide

5. _____ is by far the most popular form of *chlorine* for use at larger water treatment plants.
 - a. Granular chlorine
 - b. Concentrated chlorine
 - c. Liquified chlorine gas
 - d. Calcium hypochlorite

6. *Ultraviolet (UV) radiation* has been recognized for many years as having germicidal properties, and has been proposed for disinfection of water supplies since:
- 1974
 - World War II
 - the early twentieth century
 - the mid 1990s
7. The two basic methods of *hardness removal* (softening) are chemical precipitation and:
- electrolysis
 - de-ionizing
 - covalent bonding
 - ion exchange
8. Considering *taste and odor removal*, a common cause of complaint is _____, which produces a “rotten egg” odor.
- hydrogen sulfide
 - iridium hydroxide
 - sulfuric acid
 - radon
9. Commercially available *reverse osmosis* units vary mostly in the _____, and are suitable for flow rates of a few hundred to a million liters per day.
- casing materials
 - charcoal filters used
 - initial expense
 - pressures and membrane materials used
10. Recent improvements in *membrane technologies* have allowed _____ applications of drinking water treatment for small systems.
- fewer
 - more versatile
 - more costly
 - less efficient