

01	☐ A	☐ B	☐ C	☒ D	☐ E
02	☐ A	☐ B	☐ C	☒ D	☐ E
03	☐ A	☐ B	☐ C	☐ D	☒ E
04	☐ A	☐ B	☐ C	☐ D	☒ E
05	☒ A	☐ B	☐ C	☐ D	☐ E
06	☐ A	☐ B	☒ C	☐ D	☐ E
07	☒ A	☐ B	☐ C	☐ D	☐ E
08	☐ A	☐ B	☐ C	☐ D	☒ E
09	☐ A	☐ B	☐ C	☐ D	☒ E
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11	☐ A	☐ B	☐ C	☐ D	☒ E
12	☒ A	☐ B	☐ C	☐ D	☐ E
13	☐ A	☐ B	☐ C	☒ D	☐ E

14	☐ A	☐ B	☐ C	☒ D	☐ E
15	☐ A	☒ B	☐ C	☐ D	☐ E
16	☐ A	☐ B	☐ C	☐ D	☒ E
17	☐ A	☐ B	☐ C	☐ D	☒ E
18	☐ A	☒ B	☐ C	☐ D	☐ E
19	☒ A	☐ B	☐ C	☐ D	☐ E
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24	☐ A	☒ B	☐ C	☐ D	☐ E
25	☐ A	☐ B	☐ C	☒ D	☐ E
26	☐ A	☐ B	☒ C	☐ D	☐ E

27	☒ A	☐ B	☐ C	☐ D	☐ E
28	☒ A	☐ B	☐ C	☐ D	☐ E
29	☐ A	☐ B	☐ C	☐ D	☒ E
30	☒ A	☐ B	☐ C	☐ D	☐ E
31	☐ A	☐ B	☐ C	☐ D	☒ E
32	☐ A	☐ B	☒ C	☐ D	☐ E
33	☐ A	☒ B	☐ C	☐ D	☐ E
34	☐ A	☒ B	☐ C	☐ D	☐ E
35	☐ A	☐ B	☐ C	☐ D	☒ E
36	☐ A	☒ B	☐ C	☐ D	☐ E
37	☐ A	☐ B	☐ C	☐ D	☒ E
38	☐ A	☒ B	☐ C	☐ D	☐ E
39	☐ A	☒ B	☐ C	☐ D	☐ E

PRACTICE QUESTIONS

Connecticut Department of Public Health, Drinking Water Section

PW8VTF8C

WPI Water Treatment Operator Class II Exam

EDITION

Demo

QUESTIONS

9

FORMAT

Limited Edition PDF

Before you begin

What this is

9 practice questions for Connecticut Department of Public Health, Drinking Water Section PW8VTF8C, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, PW8VTF8C
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1

SINGLE CHOICE

What is the primary purpose of a sedimentation basin in a conventional water treatment plant?

- ☐ A To disinfect water by destroying pathogenic microorganisms
- ☒ B To remove suspended floc by gravity settling before filtration
- ☐ C To add chemicals that cause dissolved minerals to precipitate
- ☐ D To force water through a membrane under pressure

ANSWER B

WHY Sedimentation basins allow coagulated suspended material, or floc, to settle out by gravity before the water proceeds to the filters. Disinfection destroys microorganisms, coagulation destabilizes particles, and membrane filtration is a separate treatment process.

QUESTION 2

MULTIPLE CHOICE

Which two operating practices help prevent pump damage at a water treatment plant? (Choose two.)

- ☐ A Operate a pump with its discharge valve fully closed for an extended period
- ☒ B Maintain proper bearing lubrication and monitor bearing temperature
- ☒ C Check pump packing or mechanical seals for abnormal leakage
- ☐ D Run the pump dry whenever the suction reservoir is empty

ANSWER B - C

WHY Proper lubrication and temperature monitoring help protect pump bearings, while monitoring packing or mechanical-seal leakage can identify developing seal or equipment problems. A pump should not be operated against a closed discharge for an extended period or run dry because both conditions can cause overheating and damage.

QUESTION 3

TRUE FALSE

Disinfection is intended to inactivate pathogenic microorganisms in water before distribution.

☒ **A** True

☐ B False

ANSWER A

WHY True. Disinfection reduces the risk of waterborne disease by inactivating pathogenic microorganisms. It does not remove all dissolved substances or necessarily remove every physical contaminant from the water.

QUESTION 4

SINGLE CHOICE

What is the main purpose of adding a coagulant during water treatment?

☐ A To raise the water pH without producing a chemical reaction

☒ **B To destabilize fine particles so they can aggregate into larger floc**

☐ C To provide a disinfectant residual throughout the distribution system

☐ D To remove taste and odor by aeration alone

ANSWER B

WHY Coagulants destabilize the electrical charges on suspended particles, allowing them to collide and form larger, settleable or filterable floc during flocculation and sedimentation.

QUESTION 5

SINGLE CHOICE

Which statement best describes the principal function of a rapid sand filter in a conventional treatment plant?

- ☒ **A** It removes suspended material by passing water through a filter medium and retaining particles in the bed
- ☐ **B** It converts dissolved organic matter directly into carbon dioxide and water
- ☐ **C** It injects a disinfectant residual into the finished water
- ☐ **D** It removes only water hardness by ion exchange

ANSWER A

WHY A rapid sand filter passes water through a granular medium that removes remaining suspended material. Disinfection provides a treatment barrier against microorganisms, while ion exchange is used for specific dissolved constituents such as hardness.

QUESTION 6

MULTIPLE CHOICE

Which two conditions should a Class II water treatment operator investigate when a finished-water sample shows an unexpected increase in turbidity? (Choose two.)

- ☒ **A** A filter that is approaching breakthrough or operating improperly
- ☒ **B** An upset in the coagulation, flocculation, or sedimentation process
- ☐ **C** A change in disinfectant concentration that guarantees all turbidity is physically removed
- ☐ **D** A normal increase in source-water temperature that has no effect on treatment performance

ANSWER A - B

WHY A turbidity increase can indicate filter operating problems or an upset in an upstream clarification process. Disinfectant concentration is important for microbial safety but does not replace physical turbidity control, and source-water temperature alone would not establish the listed condition.

QUESTION 7

SINGLE CHOICE

Why is alkalinity important in coagulation operations?

- ☒ **A** It provides the capacity to resist pH changes and helps stabilize the coagulation process
- ☐ **B** It is the primary disinfectant used to inactivate microorganisms
- ☐ **C** It determines the physical size of the filter medium
- ☐ **D** It replaces the need for coagulation and flocculation

ANSWER A

WHY Alkalinity buffers pH changes and can be consumed during coagulation. Maintaining suitable alkalinity helps stabilize treatment chemistry and the formation and settling of floc. It is not a disinfectant and does not eliminate the need for coagulation, flocculation, or filtration.

QUESTION 8

SINGLE CHOICE

A chlorine residual measured in water leaving the treatment plant is primarily used to indicate what?

- ☒ **A** The amount of chlorine or available chlorine remaining after the disinfection demand has been satisfied
- ☐ **B** The total amount of suspended solids removed by the filters
- ☐ **C** The pressure available at the furthest point in the distribution system
- ☐ **D** The exact concentration of dissolved calcium and magnesium hardness

ANSWER A

WHY A chlorine residual is the disinfecting capacity remaining after chlorine has reacted with substances in the water. It does not directly measure turbidity, distribution pressure, or hardness.

QUESTION 9

SINGLE CHOICE

Which observation is most indicative of poor floc settling in a sedimentation basin?

- ☒ **A** Small, light floc particles remain suspended and the settled sludge is difficult to distinguish
- ☐ **B** The basin has a continuous, even overflow weir
- ☐ **C** The settled sludge forms a compact mass on the basin floor
- ☐ **D** The water entering the basin has a stable, uniform flow

ANSWER A

WHY Poor settling is indicated when floc remains suspended rather than separating from the water. Compact settled sludge, even flow distribution, and a uniform overflow pattern are generally associated with more stable basin operation.