ADEQ Wastewater Collections 2 Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. What is the psi corresponding to the 42 ft lift height?

A. 18 psi

B. 21 psi

C. 48 psi

D. 97 psi

2. During float level indicator maintenance, which component should be checked?

A. Cables

B. Air tube

C. Probe

D. Air supply

3. Dye testing in sewer systems is used to determine what?

A. Blockage location

B. pH level

C. Temperature

D. Flow rate

4. A Lift Station Basin Measures 10 by 30 Feet. If the Water Level Drops 3 Feet in One Hour, Approximately How Many Gallons Per Minute Is the Pump Moving?

A. 50 GPM

B. 112 GPM

C. 250 GPM

D. 500 GPM

5. Manhole covers that are properly designed and periodically inspected will provide what outcome?

A. Adequate air exchange

B. Unlimited sewer access

C. Justification of mapping and geographical information

D. System expenditures

6. A portion of the sewer installed under an obstruction in which sewage is pushed under the obstacle is called what?

A. Energy Grade Line

B. Inverted Siphon

C. Offset Invert

D. Interconnected Sewer

7. What is the function of lantern rings in a stuffing box?

A. Distribute water, protects the shaft and the shaft casing

B. Provide lubrication

C. Increase suction

D. Seal water tight

8. Which practice is recommended for pumps and motors to ensure reliable operation?

A. Clean and rebuilt annually

B. Inspect on regular basis and log observations

C. Replace every 3 years

D. Lubricate weekly to install maximum performance

9. Which accessory on the jetter hose protects the nozzle and prevents it from turning in the hole?

A. Hose Guard

B. Extension With Fins

C. Shield Cap

D. Nozzle Keeper

10. A pig is most likely used in which type of sewer?

A. House or building sewer

B. Storm sewer

C. Gravity sewer

D. Force Main

Answers

1. A
2. C
3. D
4. B
5. B
6. B
7. A
8. B
9. B
10. D

Explanations

1. What is the psi corresponding to the 42 ft lift height?

A. 18 psi

B. 21 psi

C. 48 psi

D. 97 psi

Pressure from a water column grows with the height of the column. In feet of water, each foot adds about 0.433 psi. So for a 42 ft lift: 42 × 0.433 ≈ 18.2 psi, which rounds to 18 psi. That matches the given option. The other numbers would require much taller water columns (roughly 48.5 ft for 21 psi, about 110 ft for 48 psi, or around 224 ft for 97 psi), not the 42 ft height shown.

2. During float level indicator maintenance, which component should be checked?

A. Cables

B. Air tube

C. Probe

D. Air supply

Float level indicators rely on a sensing element that directly detects the liquid level. The probe is that sensing element—the part that actually detects the float's position and sends the signal to the indicator. During maintenance, checking the probe is essential because fouling, deposits, or damage can insulate or disrupt the sensor, leading to inaccurate readings or a loss of signal. Clean the probe, inspect for corrosion or cracks, and verify it still provides a proper signal. While cables, the air tube, and the air supply matter for overall operation, they don't determine the level reading in the same direct way as the probe.

3. Dye testing in sewer systems is used to determine what?

A. Blockage location

B. pH level

C. Temperature

D. Flow rate

Dye testing uses a tracer to watch how wastewater flows through the sewer. By introducing a colored dye at one point and observing its arrival at another point, you can see how fast the sewage moves between those locations. That travel time is what lets you estimate the flow rate (or velocity) in that part of the system. The test isn't used to measure pH or temperature, and while dye movement can reveal unusual flow paths or potential blockages, its main purpose in this context is assessing how quickly the wastewater is moving.

4. A Lift Station Basin Measures 10 by 30 Feet. If the Water Level Drops 3 Feet in One Hour, Approximately How Many Gallons Per Minute Is the Pump Moving?

A. 50 GPM

B. 112 GPM

C. 250 GPM

D. 500 GPM

The pump's flow is found by turning a drop in depth into a volume and then dividing by time. The basin is 10 ft by 30 ft, so its surface area is 10 × 30 = 300 square feet. A 3-foot drop over that area means the volume removed is 300 × 3 = 900 cubic feet. Since 1 cubic foot holds about 7.48 gallons, 900 ft^3 ≈ 900 × 7.48 ≈ 6720 gallons. This amount leaves the basin in one hour (60 minutes), so the pump flow is 6720 ÷ 60 ≈ 112 gallons per minute. Therefore, about 112 GPM.

5. Manhole covers that are properly designed and periodically inspected will provide what outcome?

A. Adequate air exchange

B. Unlimited sewer access

C. Justification of mapping and geographical information

D. System expenditures

Properly designed and maintained manhole covers support adequate air exchange in the sewer system. As wastewater moves, air must flow in and out to prevent pressure build-up, reduce odors, and avoid dangerous gas accumulation. A good cover remains secure and sealed when needed, while still allowing the necessary ventilation. The other options don't describe what these covers achieve: they don't give unlimited access (that would be unsafe), they're not about mapping information, and the outcome isn't about system expenditures.

6. A portion of the sewer installed under an obstruction in which sewage is pushed under the obstacle is called what?

A. Energy Grade Line

B. Inverted Siphon

C. Offset Invert

D. Interconnected Sewer

An inverted siphon is the pipeline section that carries sewage under an obstacle by dipping the pipe below the barrier so the flow continues under gravity from upstream to downstream. The sewage is effectively pushed through under the obstacle by the hydraulic head, reemerging on the other side. This setup is used to cross roads, streams, or other obstructions while keeping the sewer flowing in a continuous grade. The other terms don't describe a crossing beneath an obstacle: the energy grade line is about head losses along the system, an offset invert refers to changing the invert level to fit the route, and interconnected sewer describes network connections rather than the crossing method.

7. What is the function of lantern rings in a stuffing box?

A. Distribute water, protects the shaft and the shaft casing

B. Provide lubrication

C. Increase suction

D. Seal water tight

Lantern rings are placed around the shaft inside a stuffing box to deliver lubricant to the packing. Their perforations let oil (or another lubricant) pass from the supply into the space between the ring and the packing, creating a continuous lubricating film around the shaft. This reduces friction and wear, dissipates heat, and helps flush away contaminants, helping the packing last longer and maintain a good seal. While some systems use water as a carrying fluid for cooling or flushing, the primary function of lantern rings is to provide lubrication to the packing rather than to seal or increase suction.

8. Which practice is recommended for pumps and motors to ensure reliable operation?

A. Clean and rebuilt annually

B. Inspect on regular basis and log observations

C. Replace every 3 years

D. Lubricate weekly to install maximum performance

Regular inspection and logging observations is the recommended practice because it creates an ongoing picture of pump and motor condition, allowing you to catch wear, misalignment, overheating, leaks, unusual noises, or electrical issues before they lead to failures. When you inspect routinely and record what you find, you can track trends over time, schedule maintenance proactively, and minimize downtime in wastewater systems where pump reliability is crucial. What to check commonly includes bearing and seal condition, vibration, temperature, lubrication status, belt or coupling wear, leaks, and electrical readings like amperage and voltage. Documenting these observations with dates and notes builds a maintenance history that informs future decisions. The other options don't provide the same protective value. Cleaning and rebuilding on a fixed annual schedule may be unnecessary and disruptive. Replacing components on a rigid timetable wastes resources. Lubricating weekly to maximize performance ignores manufacturer guidance and can cause over-lubrication or contamination; lubrication should follow the equipment's specifications as part of a broader preventive maintenance plan.

9. Which accessory on the jetter hose protects the nozzle and prevents it from turning in the hole?

A. Hose Guard

B. Extension With Fins

C. Shield Cap

D. Nozzle Keeper

In jetting, keeping the nozzle oriented and protected as it travels through the pipe is essential. An extension with fins attaches just ahead of the nozzle and adds stabilizing fins that interact with the flow to create drag, helping to prevent the nozzle from spinning or turning in the hole. That stabilization keeps the cleaning action consistent and reduces wear on the nozzle by limiting unnecessary rotation. The fins also provide a protective buffer, distributing contact forces and shielding the nozzle from rough spots or debris inside the pipe. Other accessories serve different protective or securing roles—protecting the nozzle tip, securing the nozzle in place, or guarding the hose—but they don't offer the same anti-rotation stabilization as an extension with fins. This makes the extension with fins the best choice for preventing nozzle rotation and protecting it during jetting.

10. A pig is most likely used in which type of sewer?

A. House or building sewer

B. Storm sewer

C. Gravity sewer

D. Force Main

A pig (pipeline inspection gauge) is used in a sewer system that is under positive pressure, so it can be pushed through the pipe by the pumping system. In a force main, sewage is pumped and kept under pressure, which lets a pig be advanced to clean the line, push out blockages, or aid during tests and maintenance. Gravity-based systems like house or building sewers and storm sewers rely on slope and flow rather than sustained pressure, so there isn't a reliable way to propel a pig through those pipes. That's why the force main is the type of sewer where a pig is most typically used.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://adeqwastewatercollections2.examzify.com

We wish you the very best on your exam journey. You've got this!