AG Mechanics CDE Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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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. Flux coated metal welding rods are referred to as:

A. arc

B. electrodes

C. slag

D. puddle

2. The footing should be placed:

A. above the frost line

B. at ground level

C. below the frost line

D. below water level

3. How many holes are there in the end of tips used in oxyacetylene welding?

A. One

B. Three

C. Two

D. Four

4. The exhaust valve is difficult to cool because of:

A. air density

B. high temperature exhaust gases

C. oil temperature

D. water condensation

5. On L-head engines, if the valve tappet clearance is too big, the proper clearance can be obtained by:

A. grinding on the end of the valve stem

B. increasing the camshaft lift

C. precutting the seat

D. refacing the valve, precutting the seat, lapping the valve

6. What does OHV stand for when referring to a type of engine?

A. Overhauled Valve

B. Overhead Valve

C. Overhead Vertical

D. Over-wired Valve

7. Which term does not represent a type of carburetor found on small gasoline engines?

A. Downdraft

B. Nozzle feed

C. Sidedraft

D. Updraft

8. Which of the following items is needed in the welding area in case of emergency?

A. Fire blanket

B. First aid kit

C. Protective goggles

D. Ventilation fan

9. Which of the following is not a part of the TIG welding torch?

A. collet

B. gas nozzle

C. gauge

D. tungsten electrode

10. A square of shingles equals?

A. 1 bundle

B. 2 bundles

C. 3 bundles

D. 4 bundles

Answers

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

Explanations

1. Flux coated metal welding rods are referred to as:

A. arc

B. electrodes

C. slag

D. puddle

Flux coated metal welding rods are referred to as "electrodes" because they serve as a conductor that carries the welding current to the arc. The flux coating on the welding rod helps to create a protective gas shield around the weld pool, preventing contamination and oxidation of the molten metal. This feature of electrodes makes them an essential component in many welding processes. The other options, such as "arc," "slag," and "puddle," are not the correct terms to describe flux coated metal welding rods.

2. The footing should be placed:

A. above the frost line

B. at ground level

C. below the frost line

D. below water level

The footing should be placed above the frost line because a frost line is the maximum depth at which the ground freezes in winter. Placing the footing above the frost line helps prevent the ground from freezing and heaving under the footing, which could potentially cause structural damage to the building or structure. Keeping the footing above the frost line ensures stability and longevity of the structure. Options B, C, and D are incorrect because placing the footing at ground level, below the frost line, or below water level can lead to various issues such as frost heave, foundation instability, and water damage.

3. How many holes are there in the end of tips used in oxyacetylene welding?

A. One

B. Three

C. Two

D. Four

One is the correct answer because the number of holes in the tip depends on its size and type and is determined by the manufacturer. The tips used in oxyacetylene welding can have one, two, three, or even four holes, but typically have only one for precision and control. Options B, C, and D are incorrect as they assume a specific number of holes, whereas the number can vary.

4. The exhaust valve is difficult to cool because of:

A. air density

B. high temperature exhaust gases

C. oil temperature

D. water condensation

The exhaust valve is difficult to cool primarily due to high temperature exhaust gases. As the exhaust gases pass through the exhaust valve, they carry a substantial amount of heat energy, causing the valve to reach high temperatures. This heat transfer process is a key factor in why the exhaust valve is challenging to cool effectively. While factors such as air density, oil temperature, and water condensation may play a role in overall engine performance, they are not directly related to the cooling challenges specifically faced by the exhaust valve.

5. On L-head engines, if the valve tappet clearance is too big, the proper clearance can be obtained by:

A. grinding on the end of the valve stem

B. increasing the camshaft lift

C. precutting the seat

D. refacing the valve, precutting the seat, lapping the valve

If the valve tappet clearance is too big, it means that there is too much space between the valve and the tappet. This is caused by wear and tear over time. Options B and C would not fix this issue as they do not directly address the clearance. Option D involves extensive repairs and would not be necessary for simply fixing the clearance issue. Grinding down the end of the valve stem allows for a smaller gap between the valve and tappet, thus adjusting the clearance to the proper size.

6. What does OHV stand for when referring to a type of engine?

A. Overhauled Valve

B. Overhead Valve

C. Overhead Vertical

D. Over-wired Valve

OHV stands for Overhead Valve, which refers to a type of engine where the valves are positioned above the combustion chamber. Option A, "Overhauled Valve," is incorrect because it suggests that the valve has been repaired or redone, which is not the case. Option C, "Overhead Vertical," is incorrect because it combines two unrelated terms and does not accurately describe the type of engine. Option D, "Over-wired Valve," is incorrect because it also combines two unrelated terms and does not accurately describe the type of engine.

7. Which term does not represent a type of carburetor found on small gasoline engines?

A. Downdraft

B. Nozzle feed

C. Sidedraft

D. Updraft

The term that does not represent a type of carburetor found on small gasoline engines is "Nozzle feed." In small gasoline engines, carburetors can be categorized as downdraft, sidedraft, or updraft based on the direction in which the air enters the carburetor in relation to the engine. A downdraft carburetor has the air flowing downward into the engine, a sidedraft carburetor has the air intake positioned to the side, and an updraft carburetor has the air entering from below the carburetor. However, "nozzle feed" does not correspond to a common type of carburetor orientation on small gasoline engines.

8. Which of the following items is needed in the welding area in case of emergency?

A. Fire blanket

B. First aid kit

C. Protective goggles

D. Ventilation fan

In a welding area, a fire blanket is an essential safety item to have in case of an emergency. If a fire breaks out during the welding process, a fire blanket can be used to smother the flames, helping to prevent the fire from spreading and allowing individuals to safely escape the area. Protective goggles are important for eye protection during welding, but they are not specifically for emergencies. A first aid kit is important for treating minor injuries that may occur, but it is not as crucial in immediate emergency situations as a fire blanket. A ventilation fan is important for maintaining good air quality by removing welding fumes, but it is not typically used as an emergency response item.

9. Which of the following is not a part of the TIG welding torch?

A. collet

B. gas nozzle

C. gauge

D. tungsten electrode

The collet is not a part of the TIG welding torch. The collet is typically used in some types of MIG welding torches to hold the welding wire in place. In contrast, a TIG welding torch consists of components such as the gas nozzle, gauge, and tungsten electrode. The gas nozzle directs the shielding gas to protect the weld pool, the gauge is used to regulate the flow of gas, and the tungsten electrode is used to create the electric arc needed for welding.

10. A square of shingles equals?

A. 1 bundle

B. 2 bundles

C. 3 bundles

D. 4 bundles

A square of shingles equals 1 bundle. In the roofing industry, a "square" refers to an area of roofing material that is sufficient to cover 100 square feet of roof. Typically, a bundle of shingles is designed to cover 1/3 of a square (or 33.3 square feet). Therefore, three bundles of shingles would equal one square (100 square feet), making option A the correct choice.

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://agcde.examzify.com

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