MCAWS Marine Corps Cannoneer Course (MCCC) Practice Test (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. Which action is performed first upon hearing a Quadrant Set announcement by the A-Gunner?

A. Recorder verifies information from the DA Form 4513

B. A-Gunner applies Quadrant to M18A1

C. Recorder records in Fire Mission Data

D. Fire action begins

2. What tool is used to mate the M1156 PGK to projectiles?

A. M14 Hammer

B. M8 Socket

C. M2 Allen Wrench

D. M76 Spanner Wrench

3. ETWD determines the sustained rate of fire as 2 rounds per minute.

A. False

B. True

C. Not specified

D. ETWD determines only the maximum

4. What is Time of Flight (TOF) and what factors influence it?

A. The time a round takes to reach the target; influenced by range, muzzle velocity, and air resistance

B. The time on a clock before firing

C. The distance to target only

D. The time between rounds

5. Which of the following is NOT a DFCS mode?

A. Off

B. Standby

C. Aux

D. Comm

6. Who announces the 'READY DROP' during the procedure?

A. Cannoneer #4

B. Cannoneer #2

C. Cannoneer #1

D. Section Chief

7. How do you measure and report target bearing in field conditions?

A. Use a laser rangefinder only.

B. Use a compass or GPS-based bearing and report to FDC with reference to grid/polar coordinates.

C. Guess bearing based on terrain.

D. Report bearing in degrees only without coordinates.

8. If air density changes due to weather, what adjustment is required in ballistic data?

A. No adjustment.

B. Adjust ballistic data to account for air density changes.

C. Increase fuse time only.

D. Decrease ammunition supply.

9. Which of the following best describes the Fire Direction Center's role during the execution phase of a firing mission?

A. It coordinates firing solutions and directs guns to the target.

B. It handles only weather observations.

C. It dispatches infantry to the target.

D. It maintains vehicle maintenance.

10. What is Counter-Battery Fire and when is it used?

A. Fire directed against enemy infantry to disrupt their formations.

B. Fire directed against friendly artillery to test communications.

C. Fire directed against enemy artillery to suppress or neutralize their guns.

D. Fire directed against air defenses to suppress their radar.

Answers

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

Explanations

1. Which action is performed first upon hearing a Quadrant Set announcement by the A-Gunner?

A. Recorder verifies information from the DA Form 4513

B. A-Gunner applies Quadrant to M18A1

C. Recorder records in Fire Mission Data

D. Fire action begins

When the Quadrant Set is announced, the immediate step is for the Recorder to verify the information on the DA Form 4513. This form contains the fire mission data, including the quadrant data, target details, and related firing parameters. Verifying it first ensures that what the crew is about to set matches the agreed mission and prevents errors before any equipment is adjusted or firing begins. After this verification, the next steps would be to apply the quadrant to the M18A1, log the data in Fire Mission Data, and then proceed with firing—each of those actions occurring only after the data has been confirmed.

2. What tool is used to mate the M1156 PGK to projectiles?

A. M14 Hammer

B. M8 Socket

C. M2 Allen Wrench

D. M76 Spanner Wrench

When attaching the M1156 PGK to a projectile, you need a tool that's specifically shaped to engage the PGK's mating interface and allow the correct seating and alignment. The M76 Spanner Wrench is designed for this exact task, providing the proper engagement with the PGK and projectile interface so you can rotate and snug the kit to the right position without damaging parts. This ensures a secure mechanical fit and proper electrical connections for the guidance system to work. Other tools don't fit the PGK's interface or don't provide controlled torque, so they're not suitable for this operation.

3. ETWD determines the sustained rate of fire as 2 rounds per minute.

A. False

B. True

C. Not specified

D. ETWD determines only the maximum

Sustained rate of fire is the rate you can maintain for an extended period without overheating or causing feeding or wear issues. ETWD provides the standard firing rates used for planning and training, assigning a specific sustained rate for each weapon system or scenario. In this case, ETWD sets the sustained rate at 2 rounds per minute, so firing at that pace can be sustained over a longer period under the established conditions. That makes the statement true because it reflects ETWD's designation for how fast you can keep firing without breaking cooling or reliability constraints. Remember, sustained rate is different from maximum rate—the latter is higher but not maintainable—so ETWD would specify a separate maximum rate if that were in question.

4. What is Time of Flight (TOF) and what factors influence it?

A. The time a round takes to reach the target; influenced by range, muzzle velocity, and air resistance

B. The time on a clock before firing

C. The distance to target only

D. The time between rounds

Time of flight is the time a round spends in the air from firing until it hits the target. How long that lasts depends on how far away the target is, how fast the round leaves the muzzle, and the resistance of the air it moves through. If the target is farther, the projectile must travel longer, so it stays aloft longer. A higher muzzle velocity lets the round cover the distance more quickly, reducing TOF. Air resistance slows the projectile and can extend the flight time, especially over longer ranges or at higher speeds. Gravity also plays a role by pulling the round downward, which interacts with the launch angle to shape the flight path; in simple, drag-free terms, TOF grows with the vertical component of the initial velocity and decreases as that velocity is larger or as gravity has less time to act, but drag and elevation change the real-world behavior. So the best description is the time a round takes to reach the target, influenced by how far away the target is, the muzzle velocity, and air resistance. The other interpretations involve timing before firing, the distance alone, or the interval between shots, none of which capture the actual flight time of the projectile.

5. Which of the following is NOT a DFCS mode?

A. Off

B. Standby

C. Aux

D. Comm

DFCS modes define the active states in which the Digital Fire Control System can operate with processing and data flow enabled. In these modes, the system either powers down, keeps essential components alive, or maintains a data link for fire control data. Off means the system is completely powered down and not performing calculations or data handling. Aux provides a secondary power/processing path to keep critical components available when needed, ensuring continued functionality of essential DFCS functions. Comm enables the communications link so data and commands can be exchanged with other fire control elements or command networks, allowing coordinated fire control. Standby is not a defined DFCS mode. It's not a state that actively configures or enables DFCS processing or data flow; rather, it's a general readiness state used by some systems or procedures. Therefore, Standby is not a DFCS mode.

6. Who announces the 'READY DROP' during the procedure?

A. Cannoneer #4

B. Cannoneer #2

C. Cannoneer #1

D. Section Chief

The signal to begin feeding the round into the breech—“Ready Drop”—is given by the ammunition handler, Cannoneer who is responsible for the rounds. This crew member is stationed with the ammo and controls the drop sequence, confirming that the round is properly seated and everything is aligned before it is dropped into the chamber. The Section Chief oversees the overall operation and the firing sequence, but the immediate, hands-on signal to drop comes from Cannoneer #4, who handles the ammunition and coordinates the next step with the loader and breech crew. This role separation keeps safety and timing tight during the drill, ensuring the gun fires only when everything is ready.

7. How do you measure and report target bearing in field conditions?

A. Use a laser rangefinder only.

B. Use a compass or GPS-based bearing and report to FDC with reference to grid/polar coordinates.

C. Guess bearing based on terrain.

D. Report bearing in degrees only without coordinates.

Measuring target bearing in the field hinges on getting a precise direction to the target with a reliable instrument and then reporting it in a format the fire control team can use. Use a compass to determine the bearing (magnetic) and adjust to grid bearing using magnetic declination so it aligns with the map, or use a GPS-based bearing to obtain a true bearing directly. Then report to the Fire Direction Center with the target’s position in grid coordinates and include the polar data (range to the target and the bearing). This combination gives the FDC an exact location and direction to compute a firing solution, ensuring accurate delivery even under failing visibility or rough terrain. Relying on a rangefinder alone provides distance but not bearing or location; guessing from terrain lacks reliability; reporting only degrees without coordinates deprives the team of the map-based reference needed to plot the target.

8. If air density changes due to weather, what adjustment is required in ballistic data?

A. No adjustment.

B. Adjust ballistic data to account for air density changes.

C. Increase fuse time only.

D. Decrease ammunition supply.

Air density affects how much drag a bullet experiences in flight. When weather changes, the density can become higher or lower, which speeds up or slows down the bullet's deceleration and alters its range and drift. Ballistic data is built around a given air density; if that density changes, the data used to compute firing solutions becomes inaccurate. Updating ballistic data to reflect the current air density keeps range estimates, wind drift, and time of flight in line with actual conditions. Not adjusting would lead to mispredictions in where the round lands. Adjusting fuse time or ammunition quantity doesn't address the aerodynamic effects of density changes on the projectile's flight trajectory.

9. Which of the following best describes the Fire Direction Center's role during the execution phase of a firing mission?

A. It coordinates firing solutions and directs guns to the target.

B. It handles only weather observations.

C. It dispatches infantry to the target.

D. It maintains vehicle maintenance.

During execution, the Fire Direction Center acts as the battery's control hub, turning target information into actionable firing data and directing the guns toward that target. It takes the target location and ballistic information, applies wind and fuse settings as needed, and issues precise firing data to each gun. It also coordinates the firing sequence and, as observations come back, issues corrections to keep rounds on target, ensuring the entire fire mission is synchronized and on time. Other tasks described in the alternatives aren't the FDC's primary role during execution. Weather data is typically managed by the weather section and used to inform ballistic computations, while infantry movement and vehicle maintenance are handled by separate units outside the firing control.

10. What is Counter-Battery Fire and when is it used?

A. Fire directed against enemy infantry to disrupt their formations.

B. Fire directed against friendly artillery to test communications.

C. Fire directed against enemy artillery to suppress or neutralize their guns.

D. Fire directed against air defenses to suppress their radar.

Counter-battery fire is artillery fire directed at the enemy's guns, with the goal of suppressing or destroying their artillery and the crews that operate them. The point is to degrade the enemy's ability to fire on friendly forces, thereby reducing their cover and firepower on the battlefield. This starts with locating the enemy artillery—through observers, sensors, or reconnaissance—and then delivering fires onto those positions to render their tubes unusable or at least tedious to operate. It's used whenever enemy artillery threatens your position or maneuver area, to neutralize their fire support. It's not aimed at infantry, not a test of communications, and not directed at air defenses, which are different tasks.

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://mcawsmccc.examzify.com

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