FAA AMT (Aviation Maintenance Technician) Airframe Practice Exam (Sample)

Study Guide

BY EXAMZIFY

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. What is the purpose of finishing tape (surface tape)?

A. To decorate the aircraft

B. To provide additional wear resistance over the edges of fabric forming structures

C. To seal the fabric edges against moisture

D. To identify fabric areas needing repair

2. The operation of an angle of attack indicating system is based on detection of differential pressure

A. At a point parallel to the true angle of attack of the aircraft.

B. At a point not parallel to the true angle of attack of the aircraft.

C. Within the cockpit only.

D. Outside the aircraft fuselage only.

3. What is the purpose of a sequence valve in a hydraulic retractable landing gear system?

A. To ensure operation of the landing gear and gear doors in the proper order

B. To control the flow of hydraulic fluid

C. To prevent gear door jams

D. To reduce landing impact

4. The repair for an out of tolerance toe in condition of main landing gear wheels involves?

A. Replacing the landing gear

B. Adjusting the tire pressure

C. Inserting, removing, or changing the location of washers or spacers at the center pivotal point of the scissor torque links

D. Lubricating the wheel bearings

5. The most common cause of false fire warnings in continuous loop fire detection systems is

A. Low battery

B. Dents, kinks, or crushed sensor sections

C. High humidity

D. Electrical interference

6. What is considered good practice concerning the installation of acrylic plastics?

A. Using metal fasteners without spacers

B. Ensuring tightness without spacers

C. Using glue as the primary adhesive

D. Providing adequate spacer or other means to prevent excessive tightening

7. What is the purpose of flapper type check valves in integral fuel tanks?

A. To prevent fuel from flowing away from the boost pumps

B. To increase fuel pressure in the system

C. To filter the fuel

D. To cool the fuel

8. What is a probable cause for brake pedals having excessive travel in an aircraft?

A. Brake rotors have worn

B. Hydraulic fluid is low

C. Gear is not down and locked

D. Brake pedals are not properly connected

9. What is generally the first step in removing an accumulator from an aircraft?

A. Disconnect the hydraulic lines

B. Remove the accumulator

C. Relieve system pressure

D. Check the accumulator's pressure

10. If the vertical fin of a single engine, propeller driven airplane is rigged properly, it will generally be parallel to

A. The longitudinal axis

B. The lateral axis

C. The vertical axis but not the longitudinal axis

D. Both the vertical and longitudinal axes

Answers

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

Explanations

1. What is the purpose of finishing tape (surface tape)?

A. To decorate the aircraft

B. To provide additional wear resistance over the edges of fabric forming structures

C. To seal the fabric edges against moisture

D. To identify fabric areas needing repair

Finishing tape, also known as surface tape or edge tape, is used to provide additional wear resistance over the edges of fabric forming structures, such as wings and control surfaces on an aircraft. It serves as a protective layer, extending the life of the fabric and preventing fraying and damage to the edges. While decorating the aircraft (option A) may be a potential use for finishing tape, it is not its primary purpose. Sealing fabric edges against moisture (option C) is typically done using a specialized sealer or coating, rather than finishing tape. Additionally, identifying areas needing repair (option D) is typically done through visual inspection or the use of patches, rather than finishing tape.

2. The operation of an angle of attack indicating system is based on detection of differential pressure

A. At a point parallel to the true angle of attack of the aircraft.

B. At a point not parallel to the true angle of attack of the aircraft.

C. Within the cockpit only.

D. Outside the aircraft fuselage only.

In an angle of attack indicating system, the correct answer is "At a point not parallel to the true angle of attack of the aircraft." This is because the system works based on detecting the differential pressure between two points on the aircraft that are not parallel to the true angle of attack. This differential pressure helps to determine the angle of attack of the aircraft, which is crucial information for pilots to maintain safe and efficient flight operations. Options A, C, and D are incorrect because the system does not operate at a point parallel to the true angle of attack, within the cockpit only, or outside the aircraft fuselage only. The critical function of the angle of attack indicating system relies on differential pressure measurements taken at specific locations on the aircraft to provide accurate angle of attack information to the pilots.

3. What is the purpose of a sequence valve in a hydraulic retractable landing gear system?

A. To ensure operation of the landing gear and gear doors in the proper order

B. To control the flow of hydraulic fluid

C. To prevent gear door jams

D. To reduce landing impact

In a hydraulic retractable landing gear system, a sequence valve is used to ensure the proper order of operation of the landing gear and gear doors. This sequential operation is crucial to prevent any potential damage or accidents that may occur if the landing gear or gear doors deploy out of order. By using a sequence valve, the system can guarantee that the landing gear and gear doors extend and retract in the correct sequence, ensuring the safety and efficiency of the aircraft's landing gear system. Option B is incorrect because the primary function of a sequence valve is not to control the flow of hydraulic fluid, but rather to control the order of operation. Option C is incorrect because while a sequence valve can help prevent improper sequencing that may lead to gear door jams, this is not its primary purpose. Option D is incorrect because a sequence valve is not designed to reduce the impact of landing; its main purpose is to ensure the landing gear and gear doors operate in the correct order.

4. The repair for an out of tolerance toe in condition of main landing gear wheels involves?

A. Replacing the landing gear

B. Adjusting the tire pressure

C. Inserting, removing, or changing the location of washers or spacers at the center pivotal point of the scissor torque links

D. Lubricating the wheel bearings

In the scenario described, when dealing with an out-of-tolerance toe-in condition of the main landing gear wheels, the correct repair option involves inserting, removing, or changing the location of washers or spacers at the center pivotal point of the scissor torque links. This adjustment helps in aligning the landing gear wheels properly to ensure they track straight during taxi and landing, preventing issues like uneven tire wear and steering difficulties. Options A, B, and D are incorrect. Replacing the landing gear entirely is unnecessary for this issue, adjusting the tire pressure would not address the toe-in condition, and lubricating the wheel bearings does not directly relate to correcting the alignment problem between the main landing gear wheels.

5. The most common cause of false fire warnings in continuous loop fire detection systems is

A. Low battery

B. Dents, kinks, or crushed sensor sections

C. High humidity

D. Electrical interference

Dents, kinks, or crushed sensor sections are the most common cause of false fire warnings in continuous loop fire detection systems. This is because these damages to the sensor sections can interfere with the accurate detection of fire or smoke, leading to false alarms. The other options, low battery, high humidity, and electrical interference, may also cause false alarms in some cases, but they are not as common or frequent as physical damage to the sensor sections. It is important to regularly inspect and maintain the sensor sections to prevent false fire warnings.

6. What is considered good practice concerning the installation of acrylic plastics?

A. Using metal fasteners without spacers

B. Ensuring tightness without spacers

C. Using glue as the primary adhesive

D. Providing adequate spacer or other means to prevent excessive tightening

When installing acrylic plastics, it is crucial to provide adequate spacers or other means to prevent excessive tightening. Acrylic plastics are more sensitive to stress and can easily crack or shatter if installed too tightly. Therefore, using spacers or other methods to prevent over-tightening helps distribute the force evenly and prevents damage to the acrylic material. This practice ensures the integrity and longevity of the acrylic component being installed. Option A is incorrect because using metal fasteners without spacers can lead to excessive tightening, which is not recommended for acrylic plastics. Option B is incorrect as ensuring tightness without spacers can still result in over-tightening and potential damage to the acrylic material. Option C is incorrect because while glue can be used as an adhesive for acrylic plastics, it is not the primary concern when it comes to preventing excessive tightening during installation.

7. What is the purpose of flapper type check valves in integral fuel tanks?

A. To prevent fuel from flowing away from the boost pumps

B. To increase fuel pressure in the system

C. To filter the fuel

D. To cool the fuel

The flapper type check valves are specifically designed to prevent fuel from flowing away from the boost pumps. This is important in integral fuel tanks because if the fuel were to flow away from the boost pumps, the engine would not receive enough fuel and could potentially fail. The other options, increase fuel pressure, filter the fuel, and cool the fuel, are not the primary function of flapper type check valves in integral fuel tanks. Increasing fuel pressure may be a secondary effect, but it is not the primary purpose. Similarly, while filtering the fuel and cooling the fuel are important functions, they are not the main purpose of flapper type check valves in integral fuel tanks.

8. What is a probable cause for brake pedals having excessive travel in an aircraft?

A. Brake rotors have worn

B. Hydraulic fluid is low

C. Gear is not down and locked

D. Brake pedals are not properly connected

Worn brake rotors are the likely cause for brake pedals having excessive travel in an aircraft because as brake pads wear down, the distance between the brake pads and rotors increases, resulting in a longer distance for the pedal to travel before the brakes engage. Option B is incorrect because low hydraulic fluid would affect the responsiveness of the brakes, not the travel distance. Option C is incorrect because if the gear is not down and locked, the brakes would not engage at all. Option D is also incorrect because if the pedals were not properly connected, they would not be able to move at all.

9. What is generally the first step in removing an accumulator from an aircraft?

A. Disconnect the hydraulic lines

B. Remove the accumulator

C. Relieve system pressure

D. Check the accumulator's pressure

In removing an accumulator from an aircraft, the first step is generally to relieve the system pressure (Option C). This is important to ensure that there is no stored pressure in the system, which could pose a safety risk during the removal process. By relieving the system pressure first, maintenance personnel can work on disconnecting hydraulic lines and removing the accumulator safely and without the risk of hydraulic fluid under pressure.

10. If the vertical fin of a single engine, propeller driven airplane is rigged properly, it will generally be parallel to

A. The longitudinal axis

B. The lateral axis

C. The vertical axis but not the longitudinal axis

D. Both the vertical and longitudinal axes

The vertical fin of an airplane is responsible for providing longitudinal stability, meaning it prevents the plane from rolling or yawing. If the vertical fin is parallel to the vertical axis, it means the fin is perpendicular to the longitudinal axis. This would make it easier for the fin to effectively provide stability and prevent unwanted movement. Options A and D suggest the vertical fin would also be parallel to the longitudinal axis, which is incorrect. Option B suggests the fin would be parallel to the lateral axis, which would not provide the proper stability for the airplane. Therefore, option C is the most accurate answer.

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://amtairframe.examzify.com

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