TH-73A Systems 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. **In which part of the transmission system are variable capacitance fuel quantity probes located?**

   A. Upper case

   B. Lower case

   C. Main transmission

   D. Accessory gearbox

2. **What is the upper part of each PFD called?**

   A. Navigation Data (ND)

   B. Primary Flight Information area (PFI)

   C. Essential

   D. Full engine

3. **If the ITT rises more slowly than normal and the gas generator turbine speed (N1) stabilizes lower than normal, should you abort the start?**

   A. True

   B. False

   C. Depends on the altitude

   D. Monitor for further indications

4. **Is each pitot tube equipped with an integral heating element that receives power from the 28 VDC bus?**

   A. True

   B. False

5. **In the case of a No.1 inverter failure, will the No.2 inverter power the AC bus bars?**

   A. True

   B. False

6. **How many tail rotor blades does the TH-73A have?**

   A. One

   B. Two

   C. Three

   D. Four

7. When does the X-FER PUMP caution message turn on in the TH-73A?

A. When fuel pressure is optimal

B. The No. 2 cell runs dry

C. When the transfer pump has failed

D. Both B and C

8. What is the purpose of the fire detection system in the TH-73A?

A. To detect fire or excessive temperature

B. To control engine temperature

C. To monitor fuel levels

D. To enhance flight safety

9. What feature do the TH-73A's cockpit seats have?

A. Fixed positioning

B. Adjustable height

C. Crash attenuated

D. Extra padding

10. True or False: The landing light system consists of a landing light and taxi light, installed under the cockpit just forward of the cross tube.

A. True

B. False

Answers

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

Explanations

1. In which part of the transmission system are variable capacitance fuel quantity probes located?

A. Upper case

B. Lower case

C. Main transmission

D. Accessory gearbox

Variable capacitance fuel quantity probes are typically located in the upper case of the transmission system. This is important because the upper case section is designed to accommodate various components that monitor and interact with fluid levels, including fuel. The structure and positioning of these probes within the upper case ensure they can effectively measure the fuel quantity while maintaining the integrity of the transmission's operation. In the context of the transmission system, the other sections may not provide the same accessibility or the necessary environmental conditions for accurate fuel measurement. The main transmission primarily houses gears and mechanical components, while the accessory gearbox is focused on transmitting power to accessories rather than monitoring fuel. The lower case typically contains other mechanical components and does not play a role in fuel quantity measurement. Thus, the upper case is the correct and logical location for these probes.

2. What is the upper part of each PFD called?

A. Navigation Data (ND)

B. Primary Flight Information area (PFI)

C. Essential

D. Full engine

The upper part of each PFD (Primary Flight Display) is known as the Primary Flight Information area (PFI). This section is crucial because it provides the pilot with the most important flight data needed for safe operation. The PFI typically displays critical information such as attitude, airspeed, altitude, and heading, which are essential for maintaining control of the aircraft during all phases of flight. By consolidating key flight parameters into one area, the PFI enhances situational awareness for the pilot, allowing for quick interpretation and decision-making. This streamlined presentation of vital information is particularly important in modern avionics where pilots must manage multiple data sources efficiently within a high-stakes environment. Understanding the role of the PFI is important for effective flight operation and management of the systems aboard the TH-73A.

3. If the ITT rises more slowly than normal and the gas generator turbine speed (N1) stabilizes lower than normal, should you abort the start?

A. True

B. False

C. Depends on the altitude

D. Monitor for further indications

Aborting the start in this scenario is essential due to the unusual behavior of the ITT and gas generator turbine speed (N1). When the ITT rises more slowly than expected, and N1 stabilizes at a lower than normal speed, it indicates a potential issue with the engine start process. These parameters are critical for ensuring that the engine is reaching its operational thresholds for a stable start; deviations can signal problems such as fuel flow issues, ignition failures, or compressor stalls. In aviation operations, safety protocols dictate immediate action when there are abnormal readings that can suggest an impending engine failure or malfunction. By choosing to abort the start, operators can prevent potential damage to the engine and ensure the safety of the aircraft and crew. Hence, it's essential to recognize that when faced with these specific conditions, a decision to abort the start is warranted to mitigate risk.

4. Is each pitot tube equipped with an integral heating element that receives power from the 28 VDC bus?

A. True

B. False

Each pitot tube being equipped with an integral heating element that receives power from the 28 VDC bus is indeed accurate. This design serves a crucial function in maintaining the accuracy of the airspeed measurements under various environmental conditions, particularly in cold weather. Ice accumulation on the pitot tube can obstruct airflow, leading to erroneous readings. By incorporating a heating element, the pitot tube can effectively prevent icing, ensuring that the airflow is unobstructed and measurements remain reliable. This integral feature enhances the safety and performance of the aircraft by providing consistent data to the pilot. The use of the 28 VDC bus for power supply is standard in many aircraft systems, providing sufficient voltage for the heating elements without overwhelming other electrical systems. This ensures the pitot tube is heated as necessary while also maintaining the efficiency of the overall electrical system in the aircraft.

5. In the case of a No.1 inverter failure, will the No.2 inverter power the AC bus bars?

A. True

B. False

When considering the functionality of inverters in aircraft systems, it's important to understand their role in ensuring reliability and redundancy within the electrical system. In the scenario of a No.1 inverter failure, the No.2 inverter is designed to take over the powering of the AC bus bars. This capability is essential to maintain continuous power supply to critical systems and instruments that rely on AC power. The primary purpose of having two inverters in such systems is to provide redundancy. If one inverter fails, the other can seamlessly supply power to the AC bus bars without interruption. This feature is crucial for operational safety and reliability, especially in aviation applications where power loss can lead to significant issues. Therefore, the assertion that the No.2 inverter will power the AC bus bars in the event of a failure of the No.1 inverter is correct, as it reflects the intended design of these systems to enhance safety and operational integrity.

6. How many tail rotor blades does the TH-73A have?

A. One

B. Two

C. Three

D. Four

The TH-73A helicopter is equipped with two tail rotor blades. This design choice provides a balance between performance and stability, ensuring effective control of the aircraft during flight. The dual-blade configuration helps optimize power efficiency while also contributing to the overall weight management of the helicopter. Additionally, having two blades allows for smoother operation and reduced vibration compared to a single-blade system, enhancing the flight experience for both pilots and passengers. This is important for training purposes, as stability and control are critical aspects of piloting an aircraft.

7. When does the X-FER PUMP caution message turn on in the TH-73A?

A. When fuel pressure is optimal

B. The No. 2 cell runs dry

C. When the transfer pump has failed

D. Both B and C

The X-FER PUMP caution message is designed to alert the pilot to specific conditions relating to the fuel system's performance, particularly focusing on the functionality of the fuel transfer pump and the status of the fuel cells. The caution message activates under two primary scenarios: when the No. 2 fuel cell has run dry, which indicates that the fuel in that cell has been depleted and requires action to prevent engine starvation, and when there is a failure of the transfer pump itself. Each of these scenarios poses a risk to safe flight operations, as an inadequate fuel supply from the designated cell or a malfunctioning transfer pump could affect engine performance and lead to hazardous situations. Thus, the correct choice encompasses both conditions, emphasizing the system's design to prioritize pilot awareness and safety regarding critical fuel management issues. This functionality ensures that pilots are promptly informed about significant changes in the fuel system's status that require immediate attention.

8. What is the purpose of the fire detection system in the TH-73A?

A. To detect fire or excessive temperature

B. To control engine temperature

C. To monitor fuel levels

D. To enhance flight safety

The fire detection system in the TH-73A is designed specifically to detect fire or excessive temperature. This is a critical safety feature in aircraft, as it ensures that any signs of fire are identified swiftly, allowing for prompt action to be taken to protect both the aircraft and its occupants. By continuously monitoring for heat levels and potential combustion, the system plays an essential role in incident prevention and contributes directly to the overall operational safety of the helicopter. While the functions related to controlling engine temperature, monitoring fuel levels, and enhancing flight safety are essential aspects of aircraft operation, they do not capture the specific function assigned to the fire detection system, which is primarily focused on identifying fire hazards. The emphasis on fire detection underscores the importance of proactive safety measures in aviation, where early detection can be crucial in preventing catastrophic outcomes.

9. What feature do the TH-73A's cockpit seats have?

A. Fixed positioning

B. Adjustable height

C. Crash attenuated

D. Extra padding

The cockpit seats of the TH-73A are designed with a crash attenuated feature, which means they are built to absorb and mitigate the risks associated with sudden deceleration during an impact. This feature enhances pilot and passenger safety by reducing the forces transmitted to the occupants in the event of a crash. The design specifically includes energy-absorbing mechanisms that help lessen potential injuries, making them an integral aspect of aviation safety in the TH-73A. In addition to their primary safety function, crash attenuated seats may also support various other ergonomic needs for pilots, but their main focus remains on reducing the impact of accidents. Other options, such as fixed positioning or extra padding, do not contribute specifically to safety in an impact scenario and simply refer to comfort or structure rather than enhanced survivability. Adjustable height could refer to seat customization for pilot comfort and fit, but it doesn't specifically relate to the critical safety aspect that the crash attenuated feature does.

10. True or False: The landing light system consists of a landing light and taxi light, installed under the cockpit just forward of the cross tube.

A. True

B. False

The statement is true because the landing light system on the TH-73A includes both a landing light and a taxi light, which are installed in a specific location under the cockpit, just forward of the cross tube. This configuration allows for adequate illumination during landing and taxiing operations. The landing light is designed to provide clarity and visibility during the landing phase, while the taxi light serves to illuminate the area around the helicopter during ground movement. Their placement is strategically chosen to ensure that pilots have optimal visibility in critical phases of flight operations, enhancing safety and situational awareness.

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://th37asystems.examzify.com

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