

ERAU Instrument Checkride Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright	1
Table of Contents	2
Introduction	3
How to Use This Guide	4
Questions	5
Answers	8
Explanations	10
Next Steps	16

SAMPLE

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

SAMPLE

- 1. What weather is commonly associated with a warm front?**
 - A. Severe thunderstorms**
 - B. Gentle rain or good calm weather**
 - C. Harsh winds and low temperatures**
 - D. Persistent fog**

- 2. Is WAAS required when flying a Victor airway?**
 - A. Yes, it is mandatory**
 - B. No, just RAIM is sufficient**
 - C. Only for specific routes**
 - D. No, but it enhances safety**

- 3. What weather condition typically occurs in a high-pressure system regarding clouds and visibility?**
 - A. Good visibility and few clouds**
 - B. Poor visibility and many clouds**
 - C. Clear skies and excellent visibility**
 - D. Overcast skies and fog**

- 4. What is a necessary element to create a thunderstorm?**
 - A. High altitudes**
 - B. Wind shear**
 - C. Wet soil**
 - D. Water vapor**

- 5. What are the two types of Departure Procedures (DPs) in aviation?**
 - A. Standard and emergency procedures**
 - B. Obstacle and Standard instrument departure**
 - C. Instrument and visual departure**
 - D. Direct and indirect departure**

- 6. What does VDP stand for?**
 - A. Visual Decision Point**
 - B. Vertical Decision Point**
 - C. Variable Decision Point**
 - D. Visual Data Point**

- 7. How does the magnetic compass work?**
- A. With a rotating magnet mounted on a pivot**
 - B. Using a liquid-filled case around a static magnet**
 - C. By reading the Earth's magnetic field directly**
 - D. Through electronic sensors in the cockpit**
- 8. What does SBAS stand for?**
- A. Satellite Based Augmentation System**
 - B. Satellite Broadcast Augmentation System**
 - C. Satellite Boundary Augmentation System**
 - D. Satellite Base Accuracy System**
- 9. How many satellites are required for RAIM and fault detection?**
- A. 4**
 - B. 5**
 - C. 6**
 - D. 7**
- 10. What three aspects does the AHRS primarily control?**
- A. Altitude, speed, heading**
 - B. Attitude, rate of turn, skid/slip**
 - C. Heading, yaw, thrust**
 - D. Roll, pitch, yaw**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What weather is commonly associated with a warm front?

- A. Severe thunderstorms
- B. Gentle rain or good calm weather**
- C. Harsh winds and low temperatures
- D. Persistent fog

A warm front is characterized by the transition of warm air rising over a cooler air mass, leading to specific weather phenomena. This typically results in gradual changes in weather as the warm air brings moisture with it. The typical weather associated with a warm front is gentle rain or, in some cases, calm and clear skies following the front's passage. As the warm air ascends, it cools, which can lead to cloud formation and precipitation. The precipitation is usually steady and widespread rather than intense or severe, characterized by less turbulent conditions that are considered safer for flight operations. In contrast, other weather conditions such as severe thunderstorms are more commonly linked to cold fronts, where warm, moist air is abruptly lifted. Harsh winds and low temperatures are associated with different weather systems, typically cooler fronts or other atmospheric disturbances. Persistent fog is not a primary characteristic of warm fronts, though warm air over cool surfaces can lead to fog formation under certain conditions; however, this is not the defining trait associated with all warm fronts.

2. Is WAAS required when flying a Victor airway?

- A. Yes, it is mandatory
- B. No, just RAIM is sufficient**
- C. Only for specific routes
- D. No, but it enhances safety

The assertion that RAIM (Receiver Autonomous Integrity Monitoring) is sufficient when flying a Victor airway is based on the understanding of the regulatory requirements and capabilities of the navigation systems in use. Victor airways are traditional airways used primarily for navigation with ground-based aids like VORs (VHF Omnidirectional Range). To operate safely along these routes, aircraft need to follow specific navigation rules, which can include using GPS with RAIM. RAIM provides a means to validate the integrity of the GPS signal, ensuring that the navigation system remains reliable during flight. It serves as a crucial safeguard, particularly in airspace where GPS might be the primary navigation source. While WAAS (Wide Area Augmentation System) significantly improves the accuracy and reliability of GPS signals through ground-based reference stations, it is not a mandatory requirement for flying Victor airways. Many aircraft can navigate effectively within the constraints of RAIM alone, allowing for compliance with established IFR (Instrument Flight Rules) requirements. While utilizing WAAS is beneficial and enhances safety due to its improved accuracy and reliability, it is not strictly required for navigation along Victor airways. Therefore, the emphasis on RAIM as sufficient is correct within the context of regulations governing prescribed routes and the infrastructure in place for

3. What weather condition typically occurs in a high-pressure system regarding clouds and visibility?

- A. Good visibility and few clouds**
- B. Poor visibility and many clouds**
- C. Clear skies and excellent visibility**
- D. Overcast skies and fog**

In a high-pressure system, the typical weather conditions lead to good visibility and few clouds, making the correct choice the concept of clear skies and excellent visibility. High-pressure systems are associated with descending air, which inhibits cloud formation and leads to stable atmospheric conditions. As a result, the air becomes clearer, and visibility improves, allowing for fewer clouds in the sky. While it is possible to encounter some variations in specific regions or under certain circumstances, the overall trend in high-pressure systems is characterized by reduced cloud cover and better visibility. It is important to understand how atmospheric pressure influences weather patterns, as this knowledge is crucial for instrument flying and aviation safety.

4. What is a necessary element to create a thunderstorm?

- A. High altitudes**
- B. Wind shear**
- C. Wet soil**
- D. Water vapor**

To create a thunderstorm, the presence of water vapor is an essential element. Water vapor is a key component of the atmosphere and acts as the fuel for thunderstorms. When water vapor is present, it can rise and cool as it ascends in the atmosphere. This process can lead to condensation, which releases latent heat, further enhancing upward motion and the development of convective clouds. The combination of sufficient moisture, rising air, and instability in the atmosphere creates conditions conducive for thunderstorms to form. While high altitudes and wind shear may influence the development and intensity of thunderstorms, they are not prerequisites for their formation. Wet soil, while it can contribute to increased moisture in the local atmosphere, is not directly necessary for the thunderstorms to initiate. The absolute requirement for thunderstorms is water vapor, as it initiates the process of convection and cloud formation that leads to thunderstorm development.

5. What are the two types of Departure Procedures (DPs) in aviation?

- A. Standard and emergency procedures**
- B. Obstacle and Standard instrument departure**
- C. Instrument and visual departure**
- D. Direct and indirect departure**

The two types of Departure Procedures (DPs) in aviation are indeed categorized as Obstacle and Standard Instrument Departure. An Obstacle Departure Procedure focuses on providing safe navigation routes for aircraft in relation to obstacles present in the surrounding landscape, ensuring that aircraft can safely clear any obstructions after takeoff. These procedures are especially important in areas where terrain or man-made structures pose significant hazards, thus these procedures typically incorporate takeoff minimums and specific routing to maintain safety. On the other hand, a Standard Instrument Departure offers a predefined route that is designed for efficiency and is published in the chart format for pilots to follow under instrument flight rules (IFR). These procedures help to streamline traffic flow in busy airspaces and ensure that aircraft can safely transition from the airport environment to the en route phase of flight while adhering to air traffic control requirements. Understanding these two types of DPs allows pilots to effectively plan their departures by taking into account both safety and efficiency when navigating from the airport to the en route structure.

6. What does VDP stand for?

- A. Visual Decision Point**
- B. Vertical Decision Point**
- C. Variable Decision Point**
- D. Visual Data Point**

The term VDP stands for Visual Decision Point. This concept is particularly important in instrument flying and approaches, as it refers to a point in an approach where a pilot must decide whether to continue with the landing or execute a go-around based on visual references. The VDP typically occurs at a specific distance from the runway threshold and is closely associated with non-precision approaches. Pilots are trained to recognize the VDP as a critical decision-making point, especially when transitioning from instrument flight conditions to visual conditions. This aids in enhancing situational awareness during the landing phase, ensuring that safety is prioritized. Understanding the Visual Decision Point is vital for maintaining proper decision-making processes during landing procedures, contributing to the overall safety and effectiveness of instrument flying. In contrast, the other terminology options do not appropriately describe the specific role and relevance of the decision point in the context of visual approaches.

7. How does the magnetic compass work?

- A. With a rotating magnet mounted on a pivot
- B. Using a liquid-filled case around a static magnet**
- C. By reading the Earth's magnetic field directly
- D. Through electronic sensors in the cockpit

The magnetic compass operates by utilizing a magnet within a liquid-filled case. The magnet itself is suspended so that it can rotate freely. This design allows the magnet to align itself with the Earth's magnetic field, reflecting the direction of magnetic north. The liquid in the case dampens any vibrations and helps to stabilize the floating magnet, ensuring that it can point reliably towards magnetic north without interference from minor movements or turbulence. The other options do not accurately represent the operation of a magnetic compass. For instance, a rotating magnet on a pivot is not how traditional magnetic compasses work, as they rely on a magnet's natural inclination to align with Earth's magnetic field rather than a pivoting mechanism. Reading the Earth's magnetic field directly lacks the detail of how the compass achieves this alignment. Similarly, electronic sensors are used in modern navigation systems, but they pertain to different technologies, such as electronic compasses, and are not a function of the magnetic compass itself.

8. What does SBAS stand for?

- A. Satellite Based Augmentation System**
- B. Satellite Broadcast Augmentation System
- C. Satellite Boundary Augmentation System
- D. Satellite Base Accuracy System

The correct response is "Satellite Based Augmentation System." This term refers to a system that enhances the accuracy, reliability, and availability of GPS signals by using a network of ground reference stations that monitor the GPS signals and send corrections to satellites. The corrections improve precision for users, which is particularly beneficial for aviation applications where accurate positioning is critical for safety and navigation. In the context of aviation and precision approaches, SBAS provides significant benefits by correcting GPS signal errors caused by atmospheric disturbances, satellite orbit drift, and other factors. This system enables pilots to safely conduct approaches with higher levels of accuracy, potentially allowing for approaches in lower visibility conditions. Other options refer to configurations of the term "SBAS" that are not standardized or recognized in the context of satellite-based navigation systems. Therefore, they do not accurately represent the function and definition of the system as it is used in aviation and related fields.

9. How many satellites are required for RAIM and fault detection?

- A. 4
- B. 5**
- C. 6
- D. 7

For Receiver Autonomous Integrity Monitoring (RAIM) and fault detection, a minimum of five satellites is necessary. This requirement arises from the need to have enough satellite signals for both the accurate positioning of the aircraft and for the system to evaluate the integrity of these signals. With five satellites, the receiver can compute a position solution and still assess one of the satellites for potential faults or errors. If the receiver detects that one satellite's data is inconsistent with the others, it can exclude that satellite from the calculation and still maintain a valid position solution using the remaining four satellites. This capability is crucial for ensuring safe navigation in IFR (Instrument Flight Rules) conditions, where precise positioning is paramount. Therefore, the option of five satellites stands as the correct answer for RAIM and fault detection requirements.

10. What three aspects does the AHRS primarily control?

- A. Altitude, speed, heading
- B. Attitude, rate of turn, skid/slip**
- C. Heading, yaw, thrust
- D. Roll, pitch, yaw

The correct answer focuses on the primary functions of the Attitude and Heading Reference System (AHRS), which are fundamental to an aircraft's operation during flight. The AHRS primarily controls and provides information regarding attitude, rate of turn, and skid/slip. Attitude refers to the aircraft's orientation in three-dimensional space — specifically, how it is pitched, rolled, and yawed relative to the horizon. This is crucial for maintaining controlled flight and ensuring the aircraft is in the desired position relative to its intended flight path. The rate of turn is the speed at which the aircraft is changing its heading. This measurement is essential for pilots to execute turns safely and effectively, maintaining proper altitude and ensuring that the aircraft remains coordinated and stable during the turn. Skid/slip refers to the side-to-side movements that can occur during turns, indicating whether the aircraft is flying straight or banked. This information helps pilots maintain coordinated flight, which is vital for avoiding unwanted aerodynamic effects such as losing control or entering a stall. In summary, the AHRS plays a critical role in providing real-time data on attitude, rate of turn, and the balance of the aircraft, thereby ensuring safe and efficient flight operations.

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://erauinstrumentcheckride.examzify.com>

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

SAMPLE