

Republic Airways Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2025 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 from reliable sources accurate, complete, and timely information about this product.

SAMPLE

Questions

- 1. What is a common action taken when smoke is noticed in the flight deck during descent?**
 - A. Continue descent without change**
 - B. Declare an emergency and land immediately**
 - C. Discussion within the crew**
 - D. Shut down all electronic equipment**
- 2. What does RVR stand for and how is it measured?**
 - A. Runway Vertical Range, by altimeters**
 - B. Runway Visual Range, by transmissometers**
 - C. Runway Visibility Rating, by pilot reports**
 - D. Runway Visual Representation, by satellite**
- 3. Are cloud heights reported in AGL or MSL?**
 - A. Height above mean sea level (MSL)**
 - B. Height above ground level (AGL)**
 - C. Height above sea surface (ASS)**
 - D. Height at the base of the cloud layer**
- 4. What is the role of fusible plugs in aircraft tire assemblies?**
 - A. Control tire pressure**
 - B. Prevent tire explosions from overheating**
 - C. Provide tire traction**
 - D. Enhance tire durability**
- 5. Below what altitude is the speed limit strictly 250 KIAS?**
 - A. 5,000'**
 - B. 10,000'**
 - C. 8,000'**
 - D. 15,000'**
- 6. If visibility falls below prescribed limits inside the FAF, what is allowed?**
 - A. Continue the approach and land**
 - B. Execute a go-around**
 - C. Divert to an alternate airport**
 - D. Perform a missed approach**

- 7. What is the primary purpose of runway edge lights?**
- A. To indicate altitude**
 - B. To define the edges of the runway**
 - C. To show direction for taxiing**
 - D. To provide weather information**
- 8. What is required to maintain IFR operations at an airport?**
- A. Visual flight rules (VFR) conditions.**
 - B. Weather must be below standard minimums.**
 - C. Weather must be at or above the approach minimums.**
 - D. Only visual approaches are allowed.**
- 9. What leads to an increase in induced drag?**
- A. Higher speed**
 - B. Decreased altitude**
 - C. Increased angle of attack**
 - D. Lower weight**
- 10. What is the minimum visibility requirement to avoid instrument conditions?**
- A. 4 statute miles**
 - B. 3 statute miles**
 - C. 2 statute miles**
 - D. 1 statute mile**

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is a common action taken when smoke is noticed in the flight deck during descent?

- A. Continue descent without change**
- B. Declare an emergency and land immediately**
- C. Discussion within the crew**
- D. Shut down all electronic equipment**

When smoke is noticed in the flight deck during descent, discussing the situation within the crew is crucial for effective management of the emergency. This communication allows the flight crew to assess the source of the smoke, determine the appropriate procedures to follow, and ensure that both pilots are aligned in their response to the situation. Open communication can lead to a more thorough understanding of the issue, allowing for the evaluation of potential causes—such as electrical failures or environmental factors—and the development of a strategy to respond effectively. This collaborative approach can enhance situational awareness and improve decision-making during a critical phase of flight. While the other options may seem plausible, they do not prioritize the necessary communication and evaluation steps that are essential in managing such emergencies. Continuing the descent without addressing the situation could exacerbate any problems, and immediately declaring an emergency and landing without a full assessment can lead to hasty decisions that may not be in the best interest of safety. Shutting down all electronic equipment might not only be unnecessary but also could lead to the loss of critical instruments needed for navigation and operation. Thus, discussing the situation within the crew is the most reasonable and responsible action.

2. What does RVR stand for and how is it measured?

- A. Runway Vertical Range, by altimeters**
- B. Runway Visual Range, by transmissometers**
- C. Runway Visibility Rating, by pilot reports**
- D. Runway Visual Representation, by satellite**

The term RVR stands for Runway Visual Range, which is a critical measurement in aviation indicating the distance over which a pilot of an aircraft on the runway can see the runway environment. It is primarily measured using transmissometers, which are instruments designed to assess the amount of light that can pass through the air over a specified distance. These measurements help determine visibility conditions during various weather scenarios, such as fog or heavy rain. Accurate RVR readings are essential for ensuring that pilots receive reliable information regarding the visibility level on approach and landing, which directly impacts safety and operational decisions. The measurement helps pilots make informed decisions regarding their ability to land and take off safely based on current visibility conditions at the runway.

3. Are cloud heights reported in AGL or MSL?

- A. Height above mean sea level (MSL)
- B. Height above ground level (AGL)**
- C. Height above sea surface (ASS)
- D. Height at the base of the cloud layer

Cloud heights are typically reported in height above mean sea level (MSL). This standard is adopted in aviation and meteorology to provide a consistent reference point for understanding cloud altitudes. Reporting cloud heights in MSL ensures that all pilots and meteorologists are considering the same baseline, which is crucial for flight safety and weather prediction. Choosing height above ground level (AGL) as the answer may be confusing because while AGL measurements are important in certain contexts, cloud heights specifically relate to an absolute elevation above sea level, not the height relative to the ground beneath the clouds. This means cloud heights can vary significantly depending on the elevation of the terrain where measurements are taken. Thus, accurate communication about cloud heights in aviation relies on the use of MSL, allowing for consistent reporting across different geographical areas, accounting for variations in topography.

4. What is the role of fusible plugs in aircraft tire assemblies?

- A. Control tire pressure
- B. Prevent tire explosions from overheating**
- C. Provide tire traction
- D. Enhance tire durability

Fusible plugs serve a critical safety function in aircraft tire assemblies by preventing tire explosions due to overheating. When aircraft tires experience excessive heat, often caused by prolonged use or rapid stop-and-go operations, the air inside the tire can expand and increase pressure to dangerous levels. The fusible plug, which is made from a material that melts at a specific temperature, acts as a safety valve. If the temperature exceeds a certain threshold, the plug will melt, allowing air to escape from the tire. This controlled release of air helps to reduce pressure inside the tire, thereby preventing a potential blowout or explosion. While other components of tire assemblies play various roles, such as managing pressure or enhancing traction, the unique function of fusible plugs is primarily related to safety. They ensure that in conditions where tires could fail due to excessive heat, the situation is mitigated effectively. This illustrates their essential role in maintaining operational safety during flight and ground operations.

5. Below what altitude is the speed limit strictly 250 KIAS?

- A. 5,000'**
- B. 10,000'**
- C. 8,000'**
- D. 15,000'**

The speed limit of 250 knots indicated airspeed (KIAS) below 10,000 feet is established by Federal Aviation Administration (FAA) regulations to help manage traffic in busy airspace and to reduce noise pollution near airports. This limit is a critical safety and operational measure that applies to all aircraft flying below this altitude, regardless of their size or type. Maintaining this speed limit allows for better spacing and separation between aircraft, which is especially important in congested air traffic environments. Above 10,000 feet, the regulations allow for higher speeds to accommodate the different operational needs of aircraft as they climb to cruising altitude, where the airspace is typically less congested. Thus, the altitude of 10,000 feet is significant for establishing controlled airspeed limits to promote safety and streamline air traffic operations.

6. If visibility falls below prescribed limits inside the FAF, what is allowed?

- A. Continue the approach and land**
- B. Execute a go-around**
- C. Divert to an alternate airport**
- D. Perform a missed approach**

When visibility falls below prescribed limits inside the Final Approach Fix (FAF), the appropriate action is to ensure safety and compliance with regulations. Continuing the approach and landing under such conditions is not permitted, as it compromises safety standards set by aviation authorities. Executing a go-around or diverting to an alternate airport, while they may be valid procedures in response to certain in-flight situations, do not align with the context of continuing an approach once specified visibility criteria have not been met. A missed approach might be a valid maneuver during an approach, but in this case, it is not directly related to the condition of visibility being below limits. Therefore, the correct approach when visibility is below the prescribed limits is to execute a missed approach, ensuring that the aircraft safely retracts from the approach path until conditions improve, or a decision is made to pursue alternative routing.

7. What is the primary purpose of runway edge lights?

- A. To indicate altitude**
- B. To define the edges of the runway**
- C. To show direction for taxiing**
- D. To provide weather information**

The primary purpose of runway edge lights is to define the edges of the runway. These lights are essential for providing visual guidance to pilots as they approach and land on the runway, especially during low visibility conditions such as nighttime or adverse weather. The edge lights are typically white and are positioned along the sides of the runway, helping to delineate the usable area and ensuring that pilots can safely identify the boundaries of the runway. By clearly marking the edges, they help prevent runway excursions and enhance overall safety during takeoff and landing operations.

8. What is required to maintain IFR operations at an airport?

- A. Visual flight rules (VFR) conditions.**
- B. Weather must be below standard minimums.**
- C. Weather must be at or above the approach minimums.**
- D. Only visual approaches are allowed.**

To maintain IFR (Instrument Flight Rules) operations at an airport, it is essential that the weather conditions are at or above the specified approach minimums. This requirement is in place to ensure that pilots have sufficient visibility and cloud clearance to safely conduct approaches and landings using instrument procedures. When the weather meets or exceeds the approach minimums, it indicates that pilots can rely on their instruments and have the necessary visual references to execute a safe landing. This is crucial for flying in and out of airports when using IFR operations, particularly in poor weather conditions where visibility might be limited. In contrast, other options present conditions that do not support the maintenance of IFR operations. For example, VFR conditions imply that visibility is good enough for visual flight rules, which is not necessary for IFR operations. Weather below standard minimums prohibits safe IFR operations, and only allowing visual approaches does not align with the requirements for maintaining full IFR operations.

9. What leads to an increase in induced drag?

- A. Higher speed**
- B. Decreased altitude**
- C. Increased angle of attack**
- D. Lower weight**

Induced drag rises as the angle of attack increases due to the aerodynamic principles governing lift generation. When an aircraft's angle of attack is increased, it generates more lift until reaching a critical point. At this higher angle of attack, the airflow over the wings becomes more turbulent and creates a greater difference in pressure between the upper and lower surfaces of the wing. This increased lift comes at a cost, as it also leads to a rise in induced drag, which is a byproduct of lift generation. Induced drag is particularly significant at lower speeds and higher angles of attack, where maintaining lift requires more force. As such, while increasing speed or decreasing altitude can impact drag levels, it is the increased angle of attack specifically that directly correlates with an increase in induced drag. Therefore, the answer is rooted in the nature of lift and drag relationships in aerodynamics.

10. What is the minimum visibility requirement to avoid instrument conditions?

- A. 4 statute miles**
- B. 3 statute miles**
- C. 2 statute miles**
- D. 1 statute mile**

To avoid instrument conditions, the minimum visibility requirement is indeed 3 statute miles. This standard is important because it helps ensure that a pilot can maintain visual reference outside the cockpit, which is critical for safe flight operation. When visibility is less than this amount, pilots may find themselves unable to see the horizon or landmarks, leading to a reliance on instruments for navigation and control, thus entering instrument conditions. Maintaining visibility of 3 statute miles provides a pilot with enough distance to visually acquire and maintain clearance from obstacles or other aircraft. This standard reflects safety protocols designed to prevent accidents under conditions where visual references may be lacking.