BNSF AIR BRAKE AND TRAIN HANDLING PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://bnsfairbraketrainhandling.examzify.com

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.

SAMPLE

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!

SAMPLE

Questions

SAMPLE

1. During normal operating conditions, how is dynamic brake retarding force limited?

A. By adjusting the brake handle position

B. By limiting the number of operative dynamic brake axles

C. By increasing the speed of the locomotive

D. By checking the brake pressure levels

2. Can a train instructed to reduce speed for fuel conservation operate at timetable speed?

A. Yes, when able to do so without the use of power

B. No, it must always reduce speed

C. Yes, regardless of conditions

D. No, unless otherwise instructed

3. Why is the equalizing reservoir considered a "reference volume"?

A. It maintains a constant air pressure

B. It allows engineers to measure pressure changes

C. It reduces airflow to the brake system

D. It stabilizes brake cylinder pressure

4. Which feature of the freight car control valve uses emergency reservoir air for brake release?

A. Quick Release System

B. Accelerated Service Release

C. Rapid Discharge Valve

D. Instant Release Mechanism

5. How many locomotives may be coupled for multiple-unit operation without exceeding regulations?

A. 10

B. 12

C. 14

D. 16

SAMPLE

6. If an unintentional brake release occurs when the brakes are applied, what should be done?

A. Increase the brake pipe reduction at least 5 psi below the last effective brake pipe reduction

B. Decrease the brake pipe reduction by 5 psi

C. Maintain the current brake pipe reduction

D. Check for any leaks in the air brake system

7. What should be done after receiving a signal to release the brakes during the AFM test?

A. Directly notify the dispatcher

B. Check the coupling between cars

C. Move the automatic brake valve handles to the RELEASE position

D. Inspect the locomotive for defects

8. What should the independent brake valve handle be set to when adding helpers to the rear of a train?

A. APPLY

B. RELEASE

C. STOP

D. COAST

9. If a brake pipe reduction greater than the limit is needed to control train speed, what action must be taken?

A. Reduce the speed gradually until compliant

B. Stop the train and inspect the reason for the requirement

C. Increase the braking effort using throttle control

D. Continue operating at current speed

10. Do the dynamic brake axles need to be limited on a consist of 4 SD-60 locomotives with high capacity dynamics?

A. Yes

B. No

C. Only if specified by the dispatcher

D. Only on certain tracks

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. During normal operating conditions, how is dynamic brake retarding force limited?

A. By adjusting the brake handle position

B. By limiting the number of operative dynamic brake axles

C. By increasing the speed of the locomotive

D. By checking the brake pressure levels

The limiting of dynamic brake retarding force during normal operating conditions occurs primarily through the number of operative dynamic brake axles. This is because the effectiveness of dynamic braking is directly related to how many axles are equipped and actively participating in the dynamic braking process. Dynamic braking operates by utilizing the traction motors of the locomotive, which generate electricity as they are driven by the train's momentum, effectively acting as generators. The braking force generated is proportional to the amount of power that can be managed and dissipated by the dynamic brake system. When there are fewer dynamic brake axles that are functioning, this will diminish the overall retarding force that can be applied to slow the train down. Thus, if a locomotive has limited operative dynamic brake axles — whether due to mechanical issues or design limitations — it inherently restricts the total retarding force available when using dynamic braking. Adjusting the brake handle position, increasing the speed of the locomotive, or checking brake pressure levels do not serve to limit the retarding force itself, but rather affect how brakes are engaged or how the system operates under different conditions, making them secondary factors in the context of dynamic brake force limitations.

2. Can a train instructed to reduce speed for fuel conservation operate at timetable speed?

A. Yes, when able to do so without the use of power

B. No, it must always reduce speed

C. Yes, regardless of conditions

D. No, unless otherwise instructed

The correct response highlights a key principle in train operation related to speed adjustments for fuel conservation. A train can indeed operate at timetable speed if it can do so without the use of power. This means that if the train is coasting and doesn't require power to achieve or maintain that speed, it can operate within the timetable speed parameters. This concept is important because it balances safety and efficiency. Trains often need to conserve fuel, but they may also need to adhere to specific speed limits outlined in their schedules. If a train is capable of maintaining the requisite speed by coasting, it is permissible to operate at those speeds as long as it does not compromise safety. Other options suggest restrictions that do not account for the possibility of coasting or achieving timeline speeds without power, which would not be practical in situations where the train's dynamics allow for such maneuvering. The flexibility provided in this correct choice emphasizes operational efficiency while still adhering to safety practices in train handling.

SAMPLE

3. Why is the equalizing reservoir considered a "reference volume"?

A. It maintains a constant air pressure

B. It allows engineers to measure pressure changes

C. It reduces airflow to the brake system

D. It stabilizes brake cylinder pressure

The equalizing reservoir is considered a "reference volume" primarily because it serves as a point from which engineers can measure and assess pressure changes throughout the brake system. In a train's air brake system, the equalizing reservoir functions to equalize air pressure, helping ensure that pressure variations are standardized across different components. This standardization allows for accurate diagnostics, effective adjustments, and coordination in the operation of the braking system. By providing a stable reference point, the equalizing reservoir aids in maintaining consistency and predictability within the braking system, where any change in pressure can be directly monitored and understood in relation to the overall braking performance. This capability is vital for effective train handling and safety, as it allows for timely responses to changes in braking parameters. Other options focus on aspects such as maintaining constant pressure or reducing airflow, which do not capture the primary function of the equalizing reservoir as a central point for pressure measurement and reference within the system.

4. Which feature of the freight car control valve uses emergency reservoir air for brake release?

A. Quick Release System

B. Accelerated Service Release

C. Rapid Discharge Valve

D. Instant Release Mechanism

The Accelerated Service Release feature of the freight car control valve utilizes emergency reservoir air to facilitate the quick release of brakes. This mechanism is designed to improve the efficiency of brake release during regular operations, allowing for a faster transition from a braking situation to a release state. By leveraging the air stored in the emergency reservoir, this system helps to ensure that the brakes can be released more quickly, which is particularly beneficial in situations where shorter stopping distances are required or when prompt acceleration is needed after a stop. This feature's primary purpose is to enhance the overall responsiveness and handling of the train, promoting safety and operational efficiency. The use of emergency reservoir air specifically is crucial because it provides a reliable source of pressure that can be utilized quickly, ensuring that the necessary power for braking or releasing is readily available.

5. How many locomotives may be coupled for multiple-unit operation without exceeding regulations?

A. 10

B. 12

C. 14

D. 16

The correct number of locomotives that may be coupled for multiple-unit operation in most commonly followed regulations is indeed 12. This limit is set to ensure that operational efficiency is maintained while preventing excessive strain on the train handling systems and air brake capacities. Keeping the number of locomotives within this limit helps in managing factors such as brake distance and overall train dynamics. When the number of locomotives surpasses this threshold, factors such as increased stopping distances and more complex operational considerations come into play, which could potentially compromise safety and performance. Thus, the regulation serves to standardize locomotive configurations for optimal reliability and safety during operation.

SAMPLE

6. If an unintentional brake release occurs when the brakes are applied, what should be done?

A. Increase the brake pipe reduction at least 5 psi below the last effective brake pipe reduction

B. Decrease the brake pipe reduction by 5 psi

C. Maintain the current brake pipe reduction

D. Check for any leaks in the air brake system

When an unintentional brake release occurs while the brakes are applied, it is crucial to respond appropriately to ensure safety and maintain control of the train. Increasing the brake pipe reduction by at least 5 psi below the last effective brake pipe reduction helps restore braking force. This adjustment allows for a more effective engagement of the brakes, which is essential when facing unexpected releases. Maintaining the current brake pipe reduction does not address the issue of the unintentional release and would leave the train in a potentially unsafe condition. Decreasing the brake pipe reduction by 5 psi does not effectively manage the situation and may even lessen the braking force further. Checking for leaks in the air brake system is important during routine maintenance or if there are persistent issues, but it does not provide an immediate solution to the unintentional brake release. In summary, increasing the brake pipe reduction is the proactive and necessary action to regain effective braking after an unintentional release, ensuring safety and control of the train.

7. What should be done after receiving a signal to release the brakes during the AFM test?

A. Directly notify the dispatcher

B. Check the coupling between cars

C. Move the automatic brake valve handles to the RELEASE position

D. Inspect the locomotive for defects

Releasing the brakes during the Air Brake and Train Handling test is a critical step in ensuring that the train is ready to move safely and efficiently. When you receive a signal to release the brakes, the appropriate action is to move the automatic brake valve handles to the RELEASE position. This function is essential because it activates the air brake system, allowing the train to prepare for movement. Properly releasing the brakes ensures that there is no unnecessary drag on the train, which can affect its ability to accelerate and maintain speed following the test. This procedure must be executed correctly to verify that the braking system is functioning as intended. While other actions, such as notifying the dispatcher, checking the coupling between cars, or inspecting the locomotive for defects, are important in various contexts of train operations and safety checks, they are not the immediate actions required upon receiving a signal to release the brakes during this specific test. Focusing on moving the brake handles to the RELEASE position directly addresses the instruction given by the signal and is essential for advancing the test procedures and maintaining operational safety.

SAMPLE

8. What should the independent brake valve handle be set to when adding helpers to the rear of a train?

A. APPLY

B. RELEASE

C. STOP

D. COAST

When adding helpers to the rear of a train, the independent brake valve handle should be set to the RELEASE position. This allows the air brakes on the train to deactivate, which is important for several reasons. Firstly, releasing the brakes ensures that the train can move freely as the helpers are coupled onto the rear. If the brakes were applied during the coupling process, it could cause excessive strain on the couplings or even damage the brake systems on either the train or the helpers. Additionally, by releasing the brakes, it helps to prevent any potential issues with the brake system when the helpers are engaged. This can facilitate smoother coupling operations and ensure that all units are properly synchronized when the train resumes movement. The goal is to create a safe and efficient coupling environment, minimizing the risk of accidents or equipment damage. In contrast, positions like APPLY or STOP would keep the brakes engaged, which is not advisable when making couplings, and COAST might not provide the control needed during such an operation. This is why releasing the brakes is essential in this context.

9. If a brake pipe reduction greater than the limit is needed to control train speed, what action must be taken?

A. Reduce the speed gradually until compliant

B. Stop the train and inspect the reason for the requirement

C. Increase the braking effort using throttle control

D. Continue operating at current speed

When a brake pipe reduction greater than the limit is required to control train speed, it indicates a potential issue that needs to be addressed. Stopping the train and inspecting the reason for the requirement is critical because it ensures safety and helps identify any underlying problems that may have caused the excessive braking need. This could be due to various factors such as a malfunctioning brake system, an improperly loaded train, or track conditions that may require evaluation before further action is taken. Taking this step allows operators to assess the situation effectively, rather than risking the integrity of the train and safety of personnel by continuing operation or making adjustments that could compound the issue. Ensuring compliance with safety standards is crucial, and stopping the train allows for a thorough investigation and proper response.

SAMPLE

10. Do the dynamic brake axles need to be limited on a consist of 4 SD-60 locomotives with high capacity dynamics?

A. Yes

B. No

C. Only if specified by the dispatcher

D. Only on certain tracks

The dynamic brake axles need to be limited on a consist of 4 SD-60 locomotives with high capacity dynamics due to the potential for excessive braking force generated by multiple locomotives when relying on dynamic braking. When several locomotives equipped with high-capacity dynamics are used together, the cumulative effect can lead to an imbalance. This may cause issues such as wheel slip or flat spotting, which can damage the locomotive's wheels and affect overall train handling. By limiting the dynamic brake axles, the braking force is distributed more evenly across the train and helps to prevent such complications. Understanding the dynamics of multiple locomotives working together is essential for safe train operation, particularly in scenarios involving heavy loads or challenging track conditions. This practice ensures that braking forces do not exceed safe operating limits, protecting the integrity of both the locomotive and the entire train system.

SAMPLE

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://bnsfairbraketrainhandling.examzify.com

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

SAMPLE