FIT Phase 1 Practice Exam (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. **After placing the Isolation Switch in the correct position, what should the engineer do next in the engine shutdown process?**

   A. Open the Isolation Switch

   B. Shut down the engine with the EFCO switch in the cab

   C. Engage the throttle to idle

   D. Restore the reverser

2. **Following uncoupling with an operative EOT within 24 hours, what must be verified at the rear end?**

   A. The brake pipe pressure is restored at the rear end of the train

   B. The link between locomotives is secure

   C. The EOT device battery voltage is charged

   D. The brake shoe wear is within limits

3. **The 30 MPH continuation speed applies to which grade?**

   A. Mountain grade

   B. Both grades

   C. Non-mountain grade

   D. Flat track only

4. **Following an en route pickup of additional cars, what must be added to the total trailing tonnage before calculating the TPA?**

   A. The weight of extra cars

   B. The weight of fuel

   C. The weight of dead or isolated locomotives

   D. The weight of the cargo on board

5. **Which of the three MU hoses is the Independent Apply and Release hose?**

   A. Inside hose

   B. Outside hose

   C. End hose

   D. Middle hose

6. For a GE locomotive, which indicators confirm that the fuel system is properly primed?

A. Gauge Rises And Stabilizes

B. Bubble Sight Glass Is Full

C. Gauge Rises And Stabilizes OR Bubble Sight Glass Is Full

D. Engine Is Primed After Starting

7. May the release of all brakes be checked while the train is moving as part of an Initial Terminal Air Brake Test?

A. No, must be stationary.

B. Yes, the rolling release inspection may be made; not exceeding 10-mph.

C. Yes, but only if the train is under 500 meters.

D. No, release inspection is not allowed.

8. All TE&Y employees are qualified to perform the air brake tests and inspections outlined in Chapter 30. What does the FRA consider TE&Y employees in regards to these tests and inspections?

A. Qualified Persons

B. Supervisors only

C. Trainees

D. Contractors

9. A comm loss lasts longer than 16 minutes and 30 seconds and results in an en route failure of emergency capability from the rear. What is the resulting failure category?

A. Brake system failure

B. En route failure of emergency capability from the rear

C. Lead unit control issue

D. Communication network fault

10. What action should be taken if the wheel slip light is illuminated and stays on?

A. Stop the locomotive and perform maintenance

B. Ensure the wheels are rotating freely

C. Continue operating at reduced speed

D. Reset the circuit breakers

Answers

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

Explanations

1. After placing the Isolation Switch in the correct position, what should the engineer do next in the engine shutdown process?

A. Open the Isolation Switch

B. Shut down the engine with the EFCO switch in the cab

C. Engage the throttle to idle

D. Restore the reverser

The important idea here is that after you have isolated the electrical/traction circuit, the engine must be shut down by cutting its fuel supply. Shutting down with the EFCO switch in the cab achieves a rapid, controlled stop because it directly stops fuel flow to the engine. The Isolation Switch's job is to disconnect power; it doesn't actually halt engine operation by itself. If you were to reopen the isolation switch, or to try to idle the engine or move the reverser, you wouldn't complete a proper shutdown and could create unsafe conditions. So, using the EFCO switch in the cab is the correct next step to finish the shutdown safely.

2. Following uncoupling with an operative EOT within 24 hours, what must be verified at the rear end?

A. The brake pipe pressure is restored at the rear end of the train

B. The link between locomotives is secure

C. The EOT device battery voltage is charged

D. The brake shoe wear is within limits

The thing being tested is ensuring the train's braking system is ready after a separation when an End Of Train device is still in use. When the train is uncoupled, the rear end must still have a charged brake pipe so brakes can be applied if needed and the train remains controllable. Verifying that brake pipe pressure is restored at the rear end confirms the air brake system is pressurized and in communication with the EOT, which is essential for safety and proper train handling after separation. The other aspects—making sure the locomotive link remains secure, checking the EOT battery voltage, or inspecting brake shoe wear—are not the immediate, safety-critical verification required at the rear in this scenario.

3. The 30 MPH continuation speed applies to which grade?

A. Mountain grade

B. Both grades

C. Non-mountain grade

D. Flat track only

The speed limit is tied to the type of grade. A continuation speed of 30 mph is designated for non-mountain grades because these grades are not as steep and can sustain that speed safely after certain signals or conditions. Mountain grades require stricter control due to their steeper incline, so the same 30 mph continuation wouldn't apply there. Flat-track conditions fall under different limits, so this specific continuation speed isn't the standard for flat track. Therefore, the 30 mph continuation speed applies to non-mountain grades.

4. Following an en route pickup of additional cars, what must be added to the total trailing tonnage before calculating the TPA?

A. The weight of extra cars

B. The weight of fuel

C. The weight of dead or isolated locomotives

D. The weight of the cargo on board

Trailing tonnage is the total weight behind the leading locomotive that the propulsion system must move. When you're calculating TPA, you account for every mass that adds inertia and rolling resistance, including any locomotives that are present but not contributing propulsion. After en route pickup of extra cars, the train's trailing mass grows, and you must also include the weight of dead or isolated locomotives at the tail. These locomotives aren't providing traction, but their weight still increases the effort required to start and sustain movement, so their mass must be added to the trailing tonnage before computing TPA. If this weight isn't included, the calculation would understate the true resistance faced and overstate the available power.

5. Which of the three MU hoses is the Independent Apply and Release hose?

A. Inside hose

B. Outside hose

C. End hose

D. Middle hose

The question tests which MU hose is designated for immediate, standalone water control. The independent apply and release hose is the one placed on the exterior side of the setup, because its position lets a firefighter initiate water flow and shut it off without having to coordinate with or impact the other hoses in the line. This external position provides quick access and direct control, which is exactly what "apply and release" requires. The other hoses are arranged to relay water through the system or connect further along the line, so they aren't used for independent control.

6. For a GE locomotive, which indicators confirm that the fuel system is properly primed?

A. Gauge Rises And Stabilizes

B. Bubble Sight Glass Is Full

C. Gauge Rises And Stabilizes OR Bubble Sight Glass Is Full

D. Engine Is Primed After Starting

Priming the fuel system means removing air from the fuel lines and getting fuel to the injectors with a steady flow. Two reliable signs show this has happened: the fuel pressure gauge rises from zero and then stabilizes at normal operating pressure, and the bubble sight glass shows a full column of fuel with no air bubbles. If the gauge reaches and holds a normal pressure, the pump has built the required pressure and the lines are primed. If the sight glass is full, there are no air pockets visible in the fuel path. Either of these conditions indicates the system is primed. Relying on just one indicator can miss a partial prime, and starting the engine after priming isn't the same as confirming the prime before starting. So, recognizing that the gauge rises and stabilizes or the sight glass is full best confirms proper priming.

7. May the release of all brakes be checked while the train is moving as part of an Initial Terminal Air Brake Test?

A. No, must be stationary.

B. Yes, the rolling release inspection may be made; not exceeding 10-mph.

C. Yes, but only if the train is under 500 meters.

D. No, release inspection is not allowed.

During an Initial Terminal Air Brake Test, you verify the brake system releases completely when commanded. A rolling release inspection is a purposeful part of this test and is allowed while the train is moving, as long as the speed stays at or below 10 mph. Watching the brakes release at a slow, controlled pace helps confirm there are no sticking brakes or leaks that only show up when the train is in motion, ensuring the system will release reliably once the train starts moving normally. The speed limit keeps the maneuver safe while you observe the release. So, the moving release check is permitted, with a maximum of 10 mph.

8. All TE&Y employees are qualified to perform the air brake tests and inspections outlined in Chapter 30. What does the FRA consider TE&Y employees in regards to these tests and inspections?

A. Qualified Persons

B. Supervisors only

C. Trainees

D. Contractors

The main idea is qualification status for performing air brake tests under FRA rules. If all TE&Y employees are qualified to perform the air brake tests and inspections described in Chapter 30, the FRA views TE&Y personnel as qualified persons for those tasks. Being qualified means they've received the required training and have the knowledge to correctly conduct the tests, recognize issues, and certify the results. The other options don't fit because the statement isn't limiting to supervisors only, nor to trainees, and it's specifically about TE&Y employees—not contractors.

9. A comm loss lasts longer than 16 minutes and 30 seconds and results in an en route failure of emergency capability from the rear. What is the resulting failure category?

A. Brake system failure

B. En route failure of emergency capability from the rear

C. Lead unit control issue

D. Communication network fault

Prolonged communication loss beyond the specified threshold combined with the loss of emergency capability from the rear describes a situation where, during flight, the rear unit can no longer provide emergency support. This exact impact is what defines the failure category: an en route failure of emergency capability from the rear. The other options describe different faults (brake hardware, lead-unit control, or a generic network fault) that don't capture the specific in-flight consequence described here.

10. What action should be taken if the wheel slip light is illuminated and stays on?

A. Stop the locomotive and perform maintenance

B. Ensure the wheels are rotating freely

C. Continue operating at reduced speed

D. Reset the circuit breakers

The action centers on preventing loss of traction by confirming wheel movement. A wheel slip light that stays on means the system has detected that the wheels aren't gripping the rail as the train moves, so the first and best check is to ensure the wheels are rotating freely. If the wheels are turning normally, the issue is likely temporary or sensor-related and you can continue with caution, trusting the traction control to manage grip. If a wheel is binding or locked and not rotating, continuing to apply power risks flat spots, overheating, or derailment, so that binding must be addressed before proceeding. Stopping for maintenance or resetting breakers doesn't immediately address the underlying condition and could overlook necessary safe checks, while continuing at reduced speed might not resolve a wheel that's not turning freely.

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://fitphase1.examzify.com

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