

CDC 3E551 ENGINEERING JOURNEYMAN PRACTICE TEST (SAMPLE) STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://cdc3e551engrjourneyman.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	15

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. Which statement correctly matches an IP stake to its distance from the left edge?**
 - A. Inboard PAPI stake is 25 feet from the left edge.
 - B. Inboard PAPI stake is 50 feet from the left edge.
 - C. Outboard PAPI stake is 25 feet from the left edge.
 - D. Outboard PAPI stake is 35 feet from the left edge.
- 2. Which USACE manual number focuses on monument installation guidance?**
 - A. 10-401
 - B. 100-5-0001
 - C. 1110-1-1005
 - D. 1110-A-1005
- 3. When establishing a pavement reference marking system (PRMS), which rule establishes left and right of the centerline when facing away from the runway zero point?**
 - A. Letter
 - B. Left/Right
 - C. Centerline
 - D. Zero point
- 4. How much fuel in gallons per hour does one 60 kilowatt mobile electric power generator use?**
 - A. 5
 - B. 3
 - C. 20
 - D. 55
- 5. For Static survey, which two files are required for post-processing?**
 - A. Receiver's .T02 and the controller's .t02
 - B. Receiver's .TT2 and the controller's .tt2
 - C. Receiver's .dat and the controller's .dat
 - D. Receiver's .T02 and the controller's .job

- 6. To minimize damage from an explosion, toward which side of a facility should the blast occur?**
- A. Shortest side
 - B. Top
 - C. Bottom
 - D. Longest side
- 7. What do we call the moisture content at which a soil stops being rigid and becomes moldable?**
- A. Organic Tier
 - B. Plastic Limit
 - C. Liquid Limit
 - D. Plastic Index
- 8. Which dataset would you consult to view current land use patterns within an installation?**
- A. Land use
 - B. Constraints
 - C. Future development plan
 - D. Common installation picture
- 9. Which combination of initial beddown contingency construction standards is used?**
- A. Initial, organic, and permanent
 - B. Initial, secondary, and permanent
 - C. Organic, synthetic, and conventional
 - D. Organic, initial, and temporary
- 10. What is the web address for GNSS Planning Online?**
- A. www.tyndall.com/surveys
 - B. www.trimble.com/gnssplanningonline/
 - C. www.trimble.com/surveyplanning/
 - D. www.trimble.com/gnssplanningonline/

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. Which statement correctly matches an IP stake to its distance from the left edge?

- A. Inboard PAPI stake is 25 feet from the left edge.
- B. Inboard PAPI stake is 50 feet from the left edge.
- C. Outboard PAPI stake is 25 feet from the left edge.**
- D. Outboard PAPI stake is 35 feet from the left edge.

Lateral layout using fixed edge references is how we position features like PAPI stakes precisely. The outboard stake is placed closer to the left edge to achieve the correct horizontal offset for the outer PAPI unit while keeping adequate clearance and alignment with the runway approach path. So the setting that states the outboard PAPI stake is 25 feet from the left edge matches the design intent for proper geometry. Distances like 50 feet or 35 feet would misplace the stake relative to the plan, potentially affecting alignment and clearance, which is why they aren't the correct choice.

2. Which USACE manual number focuses on monument installation guidance?

- A. 10-401
- B. 100-5-0001
- C. 1110-1-1005**
- D. 1110-A-1005

Understanding how USACE manuals are numbered helps you locate the exact guidance for a task. The code 1110-1-1005 is the manual that specifically addresses monument installation guidance, covering how to place and document survey monuments, acceptable materials and tolerances, protective measures, and the QA/QC steps for field installation. This makes it the best fit when you're looking for guidance on monument installation. The other numbers belong to different subjects or are administrative variants, so they don't serve as the primary reference for monument installation.

3. When establishing a pavement reference marking system (PRMS), which rule establishes left and right of the centerline when facing away from the runway zero point?

- A. Letter
- B. Left/Right
- C. Centerline
- D. Zero point**

In a pavement reference marking system, you need a fixed origin to keep everything oriented the same way as you move along the pavement. That fixed origin is the runway zero point. The rule that determines how left and right are defined when you're looking away from that point is the zero point rule. It sets a single reference so, no matter where you are, left and right are interpreted consistently from the perspective of facing away from the zero point. Why this is the best answer: the zero point serves as the origin for all orientation decisions in PRMS. Without a defined zero point, the terms left and right could become ambiguous as you move along the centerline. The other options either refer to labeling or to the feature itself, not to the rule that standardizes the directionality relative to the origin.

4. How much fuel in gallons per hour does one 60 kilowatt mobile electric power generator use?

A. 5

B. 3

C. 20

D. 55

Fuel use for a generator scales with the power it must deliver and the engine's efficiency. A 60 kW diesel mobile generator, when running at its full rated output, typically consumes about five gallons of fuel per hour. To see why, convert power to horsepower (60 kW $\approx$ 80 hp). Diesel engines often have a brake specific fuel consumption around 0.45–0.50 lb of fuel per horsepower per hour. Multiplying 80 hp by about 0.48 lb/hp-hr gives roughly 38 lb of fuel per hour. With diesel density around 6.8–7.0 lb per gallon, that's about 5–6 gallons per hour. In practice, manufacturers cite roughly five gallons per hour at full load for a generator of this size, so five is the best choice. Lower load uses less fuel, while the other options imply either unrealistically high or low consumption for a 60 kW unit.

5. For Static survey, which two files are required for post-processing?

A. Receiver's .T02 and the controller's .t02

B. Receiver's .TT2 and the controller's .tt2

C. Receiver's .dat and the controller's .dat

D. Receiver's .T02 and the controller's .job

Static post-processing needs the two streams of raw observations from both receivers so the software can form a common baseline and solve for positions. The T02 file is the raw observation file format used by many GNSS receivers, containing all the necessary measurements (pseudorange, carrier phase, Doppler, etc.) for each epoch. Having the rover's raw data and the base station's raw data in the same T02 format allows the processing software to align the observations in time and perform the precise, differential calculations required for a static survey. That's why the correct pairing is the rover's raw observation file in T02 format and the base station's raw observation file in T02 format (as stored on the controller). Other options reference file types that do not contain the raw observation data needed for post-processing, such as non-raw data formats or project metadata, so they won't provide the necessary information for accurate static processing.

6. To minimize damage from an explosion, toward which side of a facility should the blast occur?

A. Shortest side

B. Top

C. Bottom

D. Longest side

Directing the blast toward the shortest side minimizes the area of facade that faces the explosion. The incident overpressure and impulse act on exterior surfaces, so a smaller exposed area means less total energy being transferred into the structure. With a shorter end, there's less span for the blast to drive load into along the building length, reducing bending, interior loading, and potential damage to interior spaces. In contrast, a long side presents a larger target, allowing more energy to couple into the structure and propagate damage further inside. So, targeting the shortest side helps limit the amount of energy the building has to absorb and spread, which lowers overall damage.

7. What do we call the moisture content at which a soil stops being rigid and becomes moldable?

- A. Organic Tier
- B. Plastic Limit**
- C. Liquid Limit
- D. Plastic Index

The moisture content at which a soil stops being rigid and becomes moldable is the Plastic Limit. In Atterberg limits, soils go from solid (rigid) to plastic as water content increases. The Plastic Limit marks the boundary between the semi-solid and plastic states: below this limit it's rigid and crumbly, and at or above it it can be molded without cracking. If you add more water, the soil reaches the Liquid Limit, where it behaves plastically and then flows like a liquid. The Plastic Index is the difference between the Liquid Limit and the Plastic Limit, indicating the range of moisture over which the soil behaves plastically. Organic Tier isn't a standard term in this context.

8. Which dataset would you consult to view current land use patterns within an installation?

- A. Land use**
- B. Constraints
- C. Future development plan
- D. Common installation picture

Viewing current land use patterns relies on a dataset that records how land is used today—where buildings, roads, open space, and vegetation actually exist and how they're distributed across the installation. The land use dataset provides this exact information, usually in a GIS format with categories for different land-use types and precise boundaries. It lets you see the present layout, identify how space is allocated, and support planning, safety, and infrastructure decisions. The other datasets don't capture current usage in the same way: constraints describe limits or restrictions on development rather than how land is presently used; a future development plan outlines what is intended to be built, not what exists now; and a common installation picture is just imagery, which may show views but doesn't provide a structured, searchable view of land-use categories across the site.

9. Which combination of initial beddown contingency construction standards is used?

- A. Initial, organic, and permanent
- B. Initial, secondary, and permanent
- C. Organic, synthetic, and conventional
- D. Organic, initial, and temporary**

Beddown contingency construction standards are about getting usable facilities up quickly without tying up long-term resources. The best fit is facilities that are organic to the force (owned or controlled by your own organization), used for the initial phase, and designed to be temporary. This combination lets you start operations fast with the assets you already have, keeps costs and commitments low, and provides flexibility to upgrade or replace those structures as the mission evolves. Other options would push for permanent or non-organic approaches too soon, or mix in terms that imply different procurement or durability expectations, which isn't appropriate for the urgent, short-term nature of initial beddown.

10. What is the web address for GNSS Planning Online?

- A. www.tyndall.com/surveys
- B. www.trimble.com/gnssplanningonline/**
- C. www.trimble.com/surveyplanning/
- D. www.trimble.com/gnssplanningonline/

The page for GNSS Planning Online is on Trimble's site, using the path that matches the product name. So the correct address starts with www.trimble.com and includes [gnssplanningonline](http://www.trimble.com/gnssplanningonline/) as the path (www.trimble.com/gnssplanningonline/). The other options point to unrelated domains or different sections (such as a survey planning page) and won't lead to the GNSS Planning Online resource. Using the exact [/gnssplanningonline/](http://www.trimble.com/gnssplanningonline/) path helps ensure you reach the intended product page on Trimble's site.

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://cdc3e551engrjourneyman.examzify.com>

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

SAMPLE