

COLORADO JOURNEYMAN PRACTICE EXAM (SAMPLE)

STUDY GUIDE



**SAMPLE STUDY GUIDE
WITH LIMITED QUESTIONS**

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

<https://cojourneyman.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.

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 is the definition of electronic computer processing equipment?**
 - A. Utilization equipment
 - B. Installation equipment
 - C. Commercial equipment
 - D. Power equipment

- 2. What is the maximum permitted cord- and plug-connected load to a 15-ampere receptacle?**
 - A. 10 amperes
 - B. 12 amperes
 - C. 15 amperes
 - D. 8 amperes

- 3. Which Code article specifies the minimum requirements for service conductors feeding a 400-ampere service?**
 - A. Article 230
 - B. Article 310
 - C. Article 240
 - D. Article 220

- 4. What is the term used for notes that provide additional information but are not mandatory?**
 - A. Regulatory notes
 - B. Informational notes
 - C. Clarifying notes
 - D. Directive notes

- 5. How are circuit conductors identified according to the NEC?**
 - A. By manufacturer design
 - B. By color coding or labeling
 - C. By conductor gauge
 - D. By installation date

6. When passing over roofs, coaxial cables shall have at least _____ ft of clearance from all points on the roof.
- A. 5 feet
 - B. 6 feet
 - C. 8 feet
 - D. 10 feet
7. What adjustment factor is applied to 4 pieces of 12/2 MC cable supplying 240-volt single-phase loads?
- A. 50 percent
 - B. 60 percent
 - C. 70 percent
 - D. 80 percent
8. What is the feeder demand load for four 14kW residential ranges?
- A. 15.7 kilowatts
 - B. 16.7 kilowatts
 - C. 18.7 kilowatts
 - D. 20.7 kilowatts
9. What constitutes a violation when installing receptacles in a residential dwelling?
- A. Installing them too close to water sources
 - B. Failing to install tamper-resistant receptacles in child-accessible areas
 - C. Using non-standard receptacle types
 - D. Overloading the circuits with too many outlets
10. In regards to flexible cords, which situation is permissible?
- A. Used for permanent installation
 - B. Used with appliances temporarily
 - C. Used with wiring embedded in buildings
 - D. Used for supporting fixtures

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is the definition of electronic computer processing equipment?

- A. Utilization equipment
- B. Installation equipment
- C. Commercial equipment
- D. Power equipment

The definition of electronic computer processing equipment falls under the category of utilization equipment. This type of equipment is specifically designed to perform a task for the user, such as computing or processing data. Utilization equipment typically refers to devices that consume electrical energy to perform a specific function, making it a crucial category within electrical terminology. In this context, electronic computer processing equipment is intended to process information electronically, distinguishing it from other categories like installation equipment, which is used for setting up or supporting electrical systems, or commercial equipment, which refers to machinery used in business operations but not exclusive to processing tasks. Power equipment, meanwhile, usually pertains to tools and devices designed to provide mechanical energy rather than information processing. Therefore, classifying electronic computer processing equipment as utilization equipment accurately reflects its primary purpose and function.

2. What is the maximum permitted cord- and plug-connected load to a 15-ampere receptacle?

- A. 10 amperes
- B. 12 amperes
- C. 15 amperes
- D. 8 amperes

The maximum permitted cord- and plug-connected load to a 15-ampere receptacle is determined by safety standards, particularly to prevent overheating and potential fire hazards. According to the National Electrical Code (NEC), the general rule is to use a maximum of 80% of the circuit's total capacity for continuous loads. For a 15-ampere receptacle, when applying this 80% rule, the calculation would be as follows: $15 \text{ amperes} \times 0.8 = 12 \text{ amperes}$. This means the recommended maximum load that should be connected to a 15-amp circuit for continuous use is 12 amperes. Thus, 12 amperes is considered safe as it allows for some headroom to reduce the risk of overheating the receptacle or the wiring associated with it. Using the full 15 amperes continuously could lead to overheating issues and is not advisable practice for safe electrical installations. Therefore, the appropriate answer is 12 amperes, reflecting the guideline provided by the NEC.

3. Which Code article specifies the minimum requirements for service conductors feeding a 400-ampere service?

A. Article 230

B. Article 310

C. Article 240

D. Article 220

Article 230 of the National Electrical Code (NEC) specifically addresses service conductors, which includes the requirements for the conductors feeding various sizes of services, including a 400-ampere service. This article outlines important parameters such as conductor size, insulation types, and installation methods to ensure a safe and reliable electrical service. Understanding this article is crucial for electrical professionals because it provides the foundational guidelines necessary for compliance with safety standards during installation and maintenance of electrical systems. It ensures that the conductors used can handle the current load safely and also addresses the physical aspects of conductor installation, enhancing overall system integrity. Options discussing conductor insulation types or sizes that may pertain to specific applications (like Article 310) or those addressing overcurrent protection and their characteristics (like Article 240) do not focus directly on the requirements for service conductors feeding a specific ampere service. Article 220 deals with load calculations rather than the conductors themselves. Therefore, Article 230 is the appropriate reference for understanding the minimum requirements for service conductors in this context.

4. What is the term used for notes that provide additional information but are not mandatory?

A. Regulatory notes

B. Informational notes

C. Clarifying notes

D. Directive notes

The term used for notes that provide additional information but are not mandatory is referred to as informational notes. These kinds of notes serve to clarify details, provide context, or enhance understanding without imposing any requirements or obligations. In many documents, especially in technical writing or codes, informational notes are crucial for helping the reader grasp the nuances and implications of the material without being part of the regulatory framework. They can assist in decision-making and interpretation but do not carry the weight of enforceable standards, which distinguishes them from mandatory notes or directives. The other options represent different types of notes that usually serve more specific functions. Regulatory notes would typically outline requirements that must be followed, while clarifying notes would focus on expounding particular aspects or terminology. Directive notes imply a level of authority and mandate adherence to specific instructions. Thus, while all these notes serve important roles, it is the informational notes that specifically convey additional but non-mandatory information.

5. How are circuit conductors identified according to the NEC?

- A. By manufacturer design
- B. By color coding or labeling**
- C. By conductor gauge
- D. By installation date

Circuit conductors are identified according to the NEC (National Electrical Code) primarily through color coding or labeling. This method of identification is important for safety and compliance. Color coding allows for quick visual recognition of purpose and current-carrying capabilities of different conductors. For instance, specific colors are designated for grounding (green, bare), neutrals (white or gray), and different phases in three-phase systems (black, red, blue). Labeling further supports identification, particularly in complex installations or where specific functions may not be immediately obvious based on color alone. Using color coding and labeling helps electricians and maintenance personnel quickly and accurately identify conductors, reducing the risk of errors during installation and maintenance. This practice ultimately enhances safety and ensures compliance with electrical codes and standards. Other methods such as representing conductors by their manufacturer, gauge, or installation date do not serve as effective identification methods in the context of safety and code compliance.

6. When passing over roofs, coaxial cables shall have at least _____ ft of clearance from all points on the roof.

- A. 5 feet
- B. 6 feet
- C. 8 feet**
- D. 10 feet

Coaxial cables passing over roofs must maintain a clearance of at least 8 feet from all points on the roof to ensure safety and compliance with industry standards. This requirement is designed to prevent physical interference and damage to the cable, which can lead to signal degradation or loss. Additionally, maintaining this clearance helps avoid potential hazards for maintenance workers and minimizes the risk of environmental wear and tear on the cables from roof movement, such as snow or debris accumulation. Compliance with this standard reflects good practice in maintaining the integrity of the electrical and communication installations.

7. What adjustment factor is applied to 4 pieces of 12/2 MC cable supplying 240-volt single-phase loads?

- A. 50 percent
- B. 60 percent
- C. 70 percent**
- D. 80 percent

In calculating the adjustment factor for conductors like 12/2 MC cable, it is important to refer to the National Electrical Code (NEC), specifically Section 310.15, which provides guidelines on adjusting the conductor ampacities based on the number of conductors that are bundled together. When four conductors are present in a raceway or cable assembly, the NEC specifies that an adjustment factor should be applied to account for the increase in temperature due to the heat generated by the current flowing through these conductors. For four or more conductors, the code indicates that the adjustment factor is 70 percent of the conductor's rated ampacity. Applying this adjustment factor means that if each piece of 12/2 MC cable has a certain ampacity rating (for example, 20 amps for 12 gauge wire at 60°C), the effective capacity would be reduced to 70 percent due to the grouping of multiple cables. This ensures that the installation remains safe and that the conductors do not overheat under load conditions. Hence, when considering the adjustment factor for four pieces of 12/2 MC cable supplying 240-volt single-phase loads, the application of the 70 percent adjustment factor aligns with NEC guidelines, making

8. What is the feeder demand load for four 14kW residential ranges?

- A. 15.7 kilowatts
- B. 16.7 kilowatts
- C. 18.7 kilowatts**
- D. 20.7 kilowatts

To determine the feeder demand load for four 14 kW residential ranges, we can utilize the National Electrical Code (NEC) demand factors for household cooking equipment. Typically, for calculating the feeder demand load, the NEC provides specific demand factors that apply when multiple cooking appliances are installed. When dealing with ranges, the demand is not simply additive because of the maximum probable simultaneous usage. The NEC specifies that when calculating the load for residential ranges, the first range is counted at its full load; subsequent ranges can use a reduced demand factor as not all will typically be used at maximum capacity at the same time. The calculation generally follows these guidelines: - The first range: 14 kW - The second range: 14 kW (but at reduced demand) - The third range: reduced demand - The fourth range: reduced demand. Specifically, if we take into account the common demand factors as per NEC, the demand for ranges can commonly total around 16.7 kW when applying adjustment factors (where the full load of the first units is included, and the subsequent units are down-rated). Thus, in this scenario, applying the demand factors to four 14 kW residential ranges leads us to the conclusion that the feeder demand

9. What constitutes a violation when installing receptacles in a residential dwelling?

- A. Installing them too close to water sources
- B. Failing to install tamper-resistant receptacles in child-accessible areas**
- C. Using non-standard receptacle types
- D. Overloading the circuits with too many outlets

Failing to install tamper-resistant receptacles in child-accessible areas is considered a violation because it directly relates to safety standards aimed at protecting young children from electrical hazards. The National Electrical Code (NEC) mandates that all outlet receptacles in areas where children may have access must be tamper-resistant. This feature helps prevent accidents that can occur when children insert foreign objects into the outlet, significantly reducing the risk of electrical shock. Child safety is a critical concern in residential settings, and the requirement for tamper-resistant receptacles reflects this priority in the regulations governing electrical installations. Compliance with this standard is essential not only for the safety of children but also for the application of proper electrical practices in home construction and renovation.

10. In regards to flexible cords, which situation is permissible?

- A. Used for permanent installation
- B. Used with appliances temporarily**
- C. Used with wiring embedded in buildings
- D. Used for supporting fixtures

Flexible cords are designed to be portable and are generally intended for temporary connections rather than permanent installations. Using them with appliances temporarily is permissible because it aligns with the intended use of flexible cords. This allows for ease of movement and flexibility in powering devices as needed without adhering to permanent wiring methods. The other options involve scenarios where the use of flexible cords would not comply with standard electrical codes and safety practices. For instance, using flexible cords for permanent installations or embedding them in buildings can create risks related to overheating, mechanical damage, and violation of installation standards meant to ensure safety. Additionally, using flexible cords as permanent supports for fixtures goes against their designed purpose, as they are not rated for such applications and could lead to failure or hazards.

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://cojourneyman.examzify.com>

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

SAMPLE