NCCER Introduction to the National Electrical Code (26105-20) Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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. **Which class of hazardous areas is described as having ignitable fibers or dust in the air, not in quantities to form ignitable mixtures?**

   A. Class II

   B. Class I

   C. Class III

   D. Class IV

2. **NEC article 400 covers the use and installation of flexible cords and cables, including the trade name, type letter, wire size, number of conductors, conductor installation, outer covering, and use of each type.**

   A. 400

   B. 410

   C. 440

   D. 420

3. **Which statement about the NEC's structure is true?**

   A. It is organized into nine chapters

   B. It is organized into eight chapters

   C. It is organized into ten chapters

   D. It is organized into seven chapters

4. **Which annex contains the torque tables from UL 468A-B?**

   A. Annex E

   B. Annex F

   C. Annex G

   D. Annex I

5. **Which informative annex contains the conduit fill tables for multiple conductors of the same size and type within the accepted raceways?**

   A. Annex A

   B. Annex B

   C. Annex C

   D. Annex D

6. Which annex provides information on critical operations power systems?

A. Annex E

B. Annex G

C. Annex F

D. Annex H

7. Which article covers the use and installation of flexible cords and cables including the trade name, type letter, wire size, etc.?

A. 250

B. 110

C. 501

D. 400

8. ____ publishes a list of NRTLs.

A. OSHA

B. NFPA

C. ANSI

D. UL

9. Which annex provides information on critical operations power systems?

A. Annex E

B. Annex F

C. Annex G

D. Annex H

10. Which annex is for informational purposes; it covers supervisory control and data acquisition (SCADA) systems?

A. Annex E

B. Annex F

C. Annex G

D. Annex H

Answers

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

Explanations

1. Which class of hazardous areas is described as having ignitable fibers or dust in the air, not in quantities to form ignitable mixtures?

A. Class II

B. Class I

C. Class III

D. Class IV

The concept being tested is how hazardous locations are classified by material type and whether ignition is possible in air. Class II covers ignitable dusts, which can form ignitable mixtures in air when present in the right amounts. Class III, on the other hand, covers ignitable fibers or flyings, where these fibers may be present but are not normally in the air in quantities large enough to form an ignitable mixture. The description—ignitable fibers or dust in the air, not in quantities to form ignitable mixtures—points to the fiber aspect, and the emphasis on not forming a combustible air mixture means it fits Class III best. If dust were present in sufficient quantity to form an ignitable mixture, that would be Class II.

2. NEC article 400 covers the use and installation of flexible cords and cables, including the trade name, type letter, wire size, number of conductors, conductor installation, outer covering, and use of each type.

A. 400

B. 410

C. 440

D. 420

Flexible cords and cables are governed by a single NEC article that lays out how they're identified, sized, installed, and used, including information like trade name, type letter, wire size, number of conductors, conductor installation, and outer covering. This article focuses on portable and flexible conductors such as extension cords, lamp cords, and appliance cords, and sets the rules for their proper use, protection, strain relief, and termination. That's why this article is the correct choice: it specifically covers flexible cords and cables and the various designators and classifications associated with them. Other articles address different topics—lighting equipment, cord-and-plug-connected appliances, or equipment like air-conditioning systems—so they aren't the section that deals with flexible cords and cables.

3. Which statement about the NEC's structure is true?

A. It is organized into nine chapters

B. It is organized into eight chapters

C. It is organized into ten chapters

D. It is organized into seven chapters

The NEC is organized into nine chapters. This layout groups rules by broad topic areas so you can find requirements quickly—definitions and scope set the terms, followed by chapters on wiring and protection, wiring methods and materials, equipment for general use, and chapters for special occupancies and equipment. Chapter 9 is the Tables chapter, providing the ampacity, conductor sizing, and other reference data you use to apply the rules in the other chapters. The nine-chapter structure is the standard organization you'll encounter in current editions, which is why this statement is true. The other numbers would miss or duplicate areas of the code and don't match how the NEC is arranged.

4. Which annex contains the torque tables from UL 468A-B?

A. Annex E

B. Annex F

C. Annex G

D. Annex I

Torque tables for UL 468A-B are listed in Annex I. In UL standards, important supplementary data such as torque values are organized into annexes, and Annex I is the place where these torque specifications are compiled. This makes Annex I the reliable reference for determining the proper torque to apply to connectors and splices, which helps ensure a secure electrical connection and prevent damage from over- or under-tightening. The other annexes cover different topics or data and do not contain the torque tables, so they aren't the correct source for this information.

5. Which informative annex contains the conduit fill tables for multiple conductors of the same size and type within the accepted raceways?

A. Annex A

B. Annex B

C. Annex C

D. Annex D

Conduit fill tells you how much space inside a raceway the conductors occupy, so you don't crowd the conduit and ensure heat dissipation and ease of pulling. When you have multiple conductors of the same size and type in a single raceway, you use the fill tables to know how many conductors are allowed for that raceway and conductor size. Those specific tables are in the informative annex dedicated to conduit fill—Annex C. It provides, for each raceway type and size, the maximum number of conductors of a given size/type that can be installed while staying within the allowed fill. This helps you quickly check compliance and plan runs. The other annexes cover different topics and aren't the source of these conduit-fill tables.

6. Which annex provides information on critical operations power systems?

A. Annex E

B. Annex G

C. Annex F

D. Annex H

The concept here is where the NEC provides dedicated guidance on power systems that must remain energized to keep critical functions operating. The annex that houses information on critical operations power systems is the one specifically focused on that topic, and it includes definitions, scope, and recommended practices for essential loads, standby power sources, automatic transfer switches, and related testing and coordination. This makes it the most relevant source for understanding how to plan, install, and verify power for critical operations. The other annexes cover different subjects and do not provide this targeted guidance, so they aren't the right reference for this topic.

7. Which article covers the use and installation of flexible cords and cables including the trade name, type letter, wire size, etc.?

A. 250

B. 110

C. 501

D. 400

Flexible cords and cables are addressed in Article 400. This article governs the use and installation of flexible cords and cables and specifies how cords are identified, including the trade name, the type designation (the construction type), and the conductor size, so you can select a cord that matches the device's requirements and the environment. It also lays out where cords can be used, how they must be protected from damage, and how they should be terminated and secured, with the important reminder that cords are for connecting equipment and temporary situations, not for fixed wiring in walls or permanent installations. Other parts of the Code cover grounding and bonding, general installation requirements, or hazardous locations, but they don't regulate flexible cords and cables the way Article 400 does.

8. ____ publishes a list of NRTLs.

A. OSHA

B. NFPA

C. ANSI

D. UL

OSHA publishes the list of NRTLs as part of its Nationally Recognized Testing Laboratory program. OSHA evaluates and recognizes testing laboratories to perform safety testing and certification on electrical equipment and other products. Once a lab meets the program's requirements, it appears on OSHA's official NRTL list, which manufacturers and inspectors use to verify that products have been tested by an OSHA-recognized lab. Other organizations don't publish this list: NFPA develops safety codes, ANSI accredits labs and oversees standards programs, and UL is itself a testing laboratory that may be listed by OSHA as an NRTL, not the publisher of the list.

9. Which annex provides information on critical operations power systems?

A. Annex E

B. Annex F

C. Annex G

D. Annex H

Annexes in the NEC provide supplementary guidance that supports how the code is applied in real-world designs. For critical operations power systems—the systems that must stay energized to support safety and essential operations during outages—there is a dedicated annex that gathers guidance, typical configurations, and considerations for reliability, transfer methods, and ongoing testing and maintenance. This makes Annex F the best reference for this topic, since it specifically concentrates on critical operation power systems and offers the practical information designers use when planning emergency and essential electrical services. The other annexes focus on different subjects, so they don't fit this particular question.

10. Which annex is for informational purposes; it covers supervisory control and data acquisition (SCADA) systems?

A. Annex E

B. Annex F

C. Annex G

D. Annex H

Annexes in the NEC are informational resources that supplement the code and are not enforceable unless a jurisdiction adopts them. The one that focuses specifically on supervisory control and data acquisition systems is Annex G. It provides guidance and context for SCADA concepts as they relate to electrical installations, helping you understand how these systems fit with the code without adding new mandatory requirements. The other annexes deal with different topics, so they aren't the right reference for SCADA.

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://nccer2610520.examzify.com

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