ELECTRICAL INSTALLATION LEVEL 2 PRACTICE TEST (SAMPLE)

STUDY GUIDE

SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://electricalinstallationlevel2.examzify.com

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. In a TT system, which of the following best describes an earth electrode and its test?

A. A metal rod connected to the building's neutral, tested with a megger

B. An electrode connected to earth; test with an earth tester to measure earth resistance, ensuring it is low enough to provide proper protection

C. A device that measures fault current and triggers protection

D. A protective device that isolates the supply in a fault

2. Which standard governs the design, erection, and verification of electrical installations in the UK?

A. EN 50172

B. ISO 9001

C. BS 7671 (IET Wiring Regulations)

D. IEC 60364

3. Protective bonding serves what primary purpose in an electrical installation?

A. To increase fault current in the event of a fault.

B. To equalize potential of exposed metalwork.

C. To route live current through the earth path.

D. To replace protective conductor with a separate path.

4. What is the purpose of insulation resistance testing between live conductors and earth after wiring repairs?

A. To verify that insulation remains intact and there is no path for leakage or current leakage to earth.

B. To measure earth resistance.

C. To test RCD trip time.

D. To check continuity of earth conductor.

5. What is the role of protective devices such as MCBs and RCBOs in circuits?

A. They measure energy consumption

B. They interrupt fault currents to prevent damage, fire, and electric shock.

C. They provide a constant current source

D. They reduce voltage to appliances

6. Which statement is true about thermosetting PVC cables' temperature rating?

A. Thermosetting PVC cables can withstand temperatures up to 100 degrees Celsius.

B. Thermosetting PVC cables can withstand temperatures up to 70 degrees Celsius.

C. Thermosetting PVC cables can withstand temperatures up to 90 degrees Celsius.

D. Thermosetting PVC cables can withstand temperatures up to 60 degrees Celsius.

7. Bonding is defined as the process of

A. Insulation

B. Bonding

C. Ground fault protection

D. Shielding

8. Which statement best describes the purpose of an earth path in electrical installations, particularly in a TT system?

A. To carry normal operating current.

B. To shield against electromagnetic interference.

C. To deliver data communications.

D. To provide the local earth path for fault currents in a TT system and ensure protective devices trip.

9. Which sequence correctly describes performing an insulation resistance test?

A. Switch tester to 500 V; attach the clip to neutral then firmly press the other wire to line; press the yellow test button and wait until you get a reading; then test between line and earth and neutral and earth; the reading should be more than 1 MΩ (1000000 Ω)

B. Switch tester to 250 V; attach the clip to neutral; press the test button; test between line and earth only; reading is not specified

C. Switch tester to 500 V; clip to live; press the test button; test between line and earth; reading should be greater than 1 Ω

D. Switch tester to 500 V; clip to earth; press test; test between line and earth and neutral and earth; reading should be less than 1 MΩ

10. Which statement about bonding with pipes is correct?

A. To ensure continuity of the earthing path

B. To stop corrosion

C. To insulate the pipe

D. To vent gas

Answers

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

Explanations

1. In a TT system, which of the following best describes an earth electrode and its test?

A. A metal rod connected to the building's neutral, tested with a megger

B. An electrode connected to earth; test with an earth tester to measure earth resistance, ensuring it is low enough to provide proper protection

C. A device that measures fault current and triggers protection

D. A protective device that isolates the supply in a fault

In TT systems, the protective earth path comes from an earth electrode installed at the premises, not from the neutral at the building. The important point is that the resistance of that electrode to earth directly affects how quickly a fault current can return to the source and cause the protective device to operate. The best description is that the earth electrode is connected to earth and tested with an earth resistance tester to measure its resistance, ensuring it is low enough to provide proper protection. This testing approach checks whether the path to earth is impedance-wise adequate to allow enough fault current to flow so devices like RCDs or fuses trip promptly if a fault occurs. A megger tests insulation resistance, which is useful for other types of insulation checks, but it's not the standard method for evaluating the earth path in a TT system. The other options describe fault-current monitoring or isolating devices, not the earth electrode and its test.

2. Which standard governs the design, erection, and verification of electrical installations in the UK?

A. EN 50172

B. ISO 9001

C. BS 7671 (IET Wiring Regulations)

D. IEC 60364

The main concept tested is knowing which standard governs how electrical installations are designed, erected, and verified in the UK. In practice, this is BS 7671, the IET Wiring Regulations. BS 7671 provides the UK-specific safety requirements for all electrical installations, covering design choices, materials, wiring methods, protection against shock, earthing and bonding, and the procedures for verification. It specifies how initial verification is carried out after installation and how periodic verification is maintained over the life of the installation, including the documentation like electrical installation certificates and reports. While IEC 60364 is the international framework that BS 7671 aligns with, the version applicable in the UK is the national standard BS 7671. Other standards exist—for example, ISO 9001 deals with quality management systems and not electrical installation safety, and EN 50172 addresses emergency lighting—but they do not govern the overall design, erection, and verification of electrical installations in the UK.

3. Protective bonding serves what primary purpose in an electrical installation?

A. To increase fault current in the event of a fault.

B. To equalize potential of exposed metalwork.

C. To route live current through the earth path.

D. To replace protective conductor with a separate path.

Protective bonding is about keeping exposed metal parts at the same electrical potential as the earth. By linking all exposed conductive surfaces to the earth with a low-impedance path, a fault that energizes metalwork won't create a dangerous voltage difference for someone touching it. The fault current then has a quick, clear route to earth, so protective devices can trip fast and reduce the risk of electric shock. It's not about increasing fault current, routing live current through earth during normal operation, or replacing the protective conductor with a separate path. The goal is equipotential metalwork and a reliable path for fault current to clear quickly.

4. What is the purpose of insulation resistance testing between live conductors and earth after wiring repairs?

A. To verify that insulation remains intact and there is no path for leakage or current leakage to earth.

B. To measure earth resistance.

C. To test RCD trip time.

D. To check continuity of earth conductor.

The main idea here is to verify that the insulation between live conductors and earth remains intact so there isn't a leakage path to earth. After wiring repairs, applying a high DC voltage between each live conductor and earth with a megohmmeter lets you measure the insulation resistance. A high resistance (in the megaohms) means the insulation is still good and there's no unwanted current path to earth. A low resistance signals a leakage path or damaged insulation that could allow fault current to reach earth, posing shock or fire risk and requiring repair. This test specifically checks insulation integrity, not earth resistance, RCD trip time, or continuity of the earth conductor, which are different checks.

5. What is the role of protective devices such as MCBs and RCBOs in circuits?

A. They measure energy consumption

B. They interrupt fault currents to prevent damage, fire, and electric shock.

C. They provide a constant current source

D. They reduce voltage to appliances

Protective devices like MCBs and RCBOs are there to stop damage and danger by cutting off power when something goes wrong in a circuit. An MCB trips if the current gets too high, such as during an overload or short circuit, so the circuit is opened before wires overheat. An RCBO adds an extra protection layer by also watching for leakage current to earth; if current escapes to the earth (which can indicate a shock hazard or insulation fault), it trips to prevent electric shock and reduce fire risk. In short, they interrupt fault currents to keep people safe and protect wiring and equipment. These devices don't measure energy consumption (that's what meters do), they're not a constant current source (they don't supply power), and they don't reduce voltage to appliances (that's handled by transformers or regulators).

6. Which statement is true about thermosetting PVC cables' temperature rating?

A. Thermosetting PVC cables can withstand temperatures up to 100 degrees Celsius.

B. Thermosetting PVC cables can withstand temperatures up to 70 degrees Celsius.

C. Thermosetting PVC cables can withstand temperatures up to 90 degrees Celsius.

D. Thermosetting PVC cables can withstand temperatures up to 60 degrees Celsius.

The main idea is understanding how insulation temperature rating works for cables. Thermosetting PVC insulation is cross linked, which gives it greater thermal stability and flame resistance than thermoplastic PVC. That higher stability lets the insulation keep its properties at higher temperatures, so it is commonly specified for a higher continuous operating temperature. Saying it can withstand up to 100°C reflects that higher rating, making it the best match among the options. The lower figures would apply to other materials or less heat resistant variants, so they aren't the correct match for thermosetting PVC.

7. Bonding is defined as the process of

A. Insulation

B. Bonding

C. Ground fault protection

D. Shielding

Bonding is the practice of creating a low-impedance, permanent electrical connection between exposed metal parts and conductive systems so they all share the same electrical potential. This minimizes voltage differences between different pieces of metal in a building, which reduces the risk of shock if a fault occurs and helps protective devices operate reliably by giving fault current a clear path. It's not insulation, which prevents current from flowing; nor shielding, which protects conductors from interference or physical contact; nor ground fault protection, which is a device that detects leakage and trips the circuit. Bonding ties together metalwork such as pipework, enclosures, and structural steel to keep them at the same potential, complementing grounding (earth reference) rather than replacing it.

8. Which statement best describes the purpose of an earth path in electrical installations, particularly in a TT system?

A. To carry normal operating current.

B. To shield against electromagnetic interference.

C. To deliver data communications.

D. To provide the local earth path for fault currents in a TT system and ensure protective devices trip.

In a TT system, the earth path is about giving a safe return route for fault current so the protective equipment can disconnect quickly. The installation's earth is connected to a local earth electrode, separate from the supply's earth. If a live conductor touches metalwork, the fault current travels through the equipment earth conductor to this local electrode, then through the soil back to the supply earth and to the source. Because this loop can have high impedance, a protective device must see the fault and trip, which is usually achieved with an RCD (or other earth-fault protective device) that detects current leaving the live conductor and disconnects the circuit. This arrangement prioritizes safety by ensuring a reliable fault-clearing path.

9. Which sequence correctly describes performing an insulation resistance test?

A. Switch tester to 500 V; attach the clip to neutral then firmly press the other wire to line; press the yellow test button and wait until you get a reading; then test between line and earth and neutral and earth; the reading should be more than 1 MΩ (1000000 Ω)

B. Switch tester to 250 V; attach the clip to neutral; press the test button; test between line and earth only; reading is not specified

C. Switch tester to 500 V; clip to live; press the test button; test between line and earth; reading should be greater than 1 Ω

D. Switch tester to 500 V; clip to earth; press test; test between line and earth and neutral and earth; reading should be less than 1 MΩ

Insulation resistance testing uses a megohmmeter to push a DC voltage through the insulation and measure leakage current; a high resistance means the insulation is good, while a low reading indicates leakage paths or faults. For a typical LV installation, you apply a test voltage of about 500 V and first ensure the circuit is isolated and all loads removed. Then you measure between each conductor and earth to check the insulation to ground. Testing both line-to-earth and neutral-to-earth captures leakage paths from all live conductors to earth, and you should expect readings in the megohm range. A minimum of around 1 MΩ per conductor to earth is a common benchmark, so readings greater than 1 MΩ show acceptable insulation. If you only test one path, or you expect readings in ohms, or you choose the wrong voltage, the test doesn't reliably indicate insulation quality.

10. Which statement about bonding with pipes is correct?

A. To ensure continuity of the earthing path

B. To stop corrosion

C. To insulate the pipe

D. To vent gas

Bonding metal pipes creates a continuous earth path, so fault currents have a low-impedance route back to the source. When metal pipes such as water or gas lines are bonded to the protective earth, they're kept at the same potential as the rest of the earth network. If a fault occurs, the fault current can return quickly, causing the protective device to trip and reducing the risk of electric shock to anyone touching the pipe. This safety focus is why bonding is the correct approach. It isn't about stopping corrosion, insulating the pipe, or venting gas—those are different concerns (corrosion control, electrical isolation, and plumbing venting, respectively) and bonding serves to maintain a safe, continuous earth path.

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://electricalinstallationlevel2.examzify.com

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