

RED SEAL STUDY GUIDE ELECTRICIAN YEAR 2

25 EXAM PREP QUESTIONS
WITH ANSWERS



APPRENTICES | INSTRUCTORS | INSTITUTES

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UNITY CREST SOLUTIONS INC.

INTRODUCTION

Introducing the Red Seal Study Guide – Electrician

Ready to dive into the world of Electrician? Meet your ultimate companion – the Red Seal Study Guide for Plumbers. This practical booklet is your go-to practice tool to conquer your Electrician exam.

Presented in an easy Q&A format, this guide lets you preview the kinds of questions you'll tackle on the real exam day. Consider it a sneak peek into what's coming your way!

Inside its pages, you'll find a treasure trove of Electrician essentials. It's more than just answering questions – it's about truly grasping the basics of Electrician in a way that sticks. Whether you're starting fresh or aiming to refine your skills, this guide has got you covered.

So, get set to challenge yourself, learn in a breeze, and build up your Electrician expertise. With the Red Seal Study Guide, you're all set to take that significant stride toward becoming a certified Electrician.

Ready to get started? For more information, tips, and resources, head over to www.RedSealStudyGuide.ca
Electrician success starts here – dive in!



DISCLAIMER

Study Guide Disclaimer: Important Notice

The Red Seal Study Guide – Electrician is a reference tool meant to enhance your exam preparation. It offers insights into potential question formats. However, it's vital to know that this guide should complement, not replace, official government-issued study materials.

For comprehensive readiness, we recommend using both this guide and official resources provided by relevant authorities. Please note that this guide covers exams across Canadian provinces, but slight content variations might exist.

For your best chance at success, ensure a well-rounded preparation approach that includes official materials.

Good luck on your path to becoming a certified Electrician!

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Let's craft your future together!



- 1. A synchronous motor has 125 volts of excitation and 10 amps of rotor current. What's motor resistance?**

A: 13.4 ohms
B: 11.5
C: 10.1
D: 12.5

- 2. What is the neutral conductor current of a three-wire, 120/240 V circuit with 1200 Watts on phase A and 6000 Watts on phase B?**

A: 25A
B: 10A
C: 30A
D: 40A

- 3. What circuit class does an auxiliary boiler high-temperature cutout need?**

A: Class 1
B: Class 2
C: Class 3
D: Class 4

- 4. A Wheat-stone Bridge measures 1–100,000-ohm resistance correctly.**

A: False
B: True

- 5. What is the approximate wattage of a 28-ohm 240-volt motor?**

A: 2057 watts
B: 1780 watts
C: 1045 watts
D: 3640 watts

See answers on the next page.



1. ☐ A ☐ B ☐ C ☒ D

Note: _____

2. ☐ A ☐ B ☐ C ☒ D

Note: _____

3. ☒ A ☐ B ☐ C ☐ D

Note: _____

4. ☐ A ☒ B ☐ C ☐ D

Note: _____

5. ☒ A ☐ B ☐ C ☐ D

Note: _____



6. What percentage efficiency does a 2.5HP motor that draws 8.8 amps at 230 volts have?

- A: 90
- B: 92
- C: 98
- D: 100

7. Install an IEC-rated starter in a motor control circuit that allows squirrel cage induction motor jogging in either direction. This starter needs which IEC rating?

- A: AC-3
- B: AC-1
- C: AC-2
- D: AC-4

8. What will flow via parallel loads and have several paths?

- A: Watts
- B: Voltage
- C: Current
- D: Electrodes

9. A 30 hp, 208 Volt three-phase motor's full load current?

- A: 80.0 Amps
- B: 88.0 Amps
- C: 68.2 Amps
- D: 70.0 Amps

10. A filter circuit that enables signals over a certain frequency pass is called a:

- A: High pass
- B: Band-pass filter
- C: Low pass
- D: Band-stop filter

See answers on the next page.



6. ☐ A ☒ B ☐ C ☐ D

Note: _____

7. ☐ A ☐ B ☐ C ☒ D

Note: _____

8. ☐ A ☐ B ☒ C ☐ D

Note: _____

9. ☒ A ☐ B ☐ C ☐ D

Note: _____

10. ☒ A ☐ B ☐ C ☐ D

Note: _____



11. Two parallel banks of three batteries in series form a 6-battery bank. Six-volt, 40-amp batteries are included. The output voltage when the batteries are completely charged is.

- A: 6V
- B: 12V
- C: 18V
- D: 6V

12. Use a non-combustible conduit for vertical fiber optic cable raceways.

- A: True
- B: False

13. Combustible structures do not need metal raceways for fire alarm system conductors.

- A: True
- B: False

14. Heating system overrun can be corrected using a mechanical thermostat heat anticipator.

- A: True
- B: False

15. In binary, '0100' is the decimal number.

- A: 3
- B: 4
- C: 2
- D: 5

See answers on the next page.



11. ☐ A ☐ B ☒ C ☐ D

Note: _____

12. ☒ A ☐ B ☐ C ☐ D

Note: _____

13. ☒ A ☐ B ☐ C ☐ D

Note: _____

14. ☒ A ☐ B ☐ C ☐ D

Note: _____

15. ☐ A ☒ B ☐ C ☐ D

Note: _____



16. What instrument detects short circuits?

- A: An ammeter
- B: Voltmeter
- C: Ohmmeter
- D: wattmeter

17. All in-ground pool bonding conductors must be what AWG?

- A: 12
- B: 6
- C: 16
- D: 8

18. The minimum free conductor on an outlet box is?

- A: 300mm
- B: 600mm
- C: 100mm
- D: 150mm

19. The largest solid copper conductor is

- A: 10 AWG
- B: 12 AWG
- C: 14 AWG
- D: 16 AWG

20. Basement joist lowest faces cannot accept nonmetallic-sheathed cable.

- A: True
- B: False

See answers on the next page.



16. ☐ A ☐ B ☒ C ☐ D

Note: _____

17. ☐ A ☒ B ☐ C ☐ D

Note: _____

18. ☐ A ☐ B ☐ C ☒ D

Note: _____

19. ☒ A ☐ B ☐ C ☐ D

Note: _____

20. ☒ A ☐ B ☐ C ☐ D

Note: _____



21. A delta-delta bank of three 6 kVA 1200-120/240 V transformers supplies a 240 V three-phase system. The rated primary phase current?

- A: 5 Amps
- B: 2.89 Amps
- C: 15 Amps
- D: 25 Amps

22. An important electrical system can restore and sustain electrical energy to specified loads in the case of a loss of energy.

- A: True
- B: False

23. The conduit's current carrying capability for over 43 copper conductors is what percentage?

- A: 0.9
- B: 0.5
- C: 0.7
- D: 0.8

24. Central unit repair and maintenance access is not necessary.

- A: True
- B: False

25. Fiber optic cables transfer digital light?

- A: True
- B: False



21. ☒ A ☐ B ☐ C ☐ D

Note: _____

22. ☒ A ☐ B ☐ C ☐ D

Note: _____

23. ☐ A ☒ B ☐ C ☐ D

Note: _____

24. ☐ A ☒ B ☐ C ☐ D

Note: _____

25. ☒ A ☐ B ☐ C ☐ D

Note: _____



- 1). (A) (B) (C) (D)
- 2). (A) (B) (C) (D)
- 3). (A) (B) (C) (D)
- 4). (A) (B) (C) (D)
- 5). (A) (B) (C) (D)
- 6). (A) (B) (C) (D)
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- 16). (A) (B) (C) (D)
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- 20). (A) (B) (C) (D)
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- 22). (A) (B) (C) (D)
- 23). (A) (B) (C) (D)
- 24). (A) (B) (C) (D)
- 25). (A) (B) (C) (D)





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