

RED SEAL STUDY GUIDE REFRIGERATOR & AC MECHANIC YEAR 4

**25 EXAM PREP QUESTIONS
WITH ANSWERS**



APPRENTICES | INSTRUCTORS | INSTITUTES

RedSealStudyGuide.ca

UNITY CREST SOLUTIONS INC.

INTRODUCTION

Introducing the Red Seal Study Guide – Refrigerator & AC Mechanic.

Ready to dive into the world of Refrigerator & AC Mechanic? Meet your ultimate companion – the Red Seal Study Guide for Refrigerator & AC Mechanic. This practical booklet is your go-to practice tool to conquer your Refrigerator & AC Mechanic 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 Refrigerator & AC Mechanic essentials. It's more than just answering questions – it's about truly grasping the basics of Refrigerator & AC Mechanic 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 Refrigerator & AC Mechanic expertise. With the Red Seal Study Guide, you're all set to take that significant stride toward becoming a certified Refrigerator & AC Mechanic.

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



DISCLAIMER

Study Guide Disclaimer: Important Notice

The Red Seal Study Guide – Refrigerator & AC Mechanic 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 Refrigerator & AC Mechanic!

For more information, tips, and resources,
head over to www.RedSealStudyGuide.ca
Let's craft your future together!



1. A 6-pole 1800rpm generator generates which current?

- A: 90-cycle frequency
- B: 100-cycle frequency
- C: 140 cycles' frequency
- D: 50-cycle frequency

2. Water wall boiler blowdown is preferable when?

- A: When lightly steaming
- B: Off the line
- C: During hefty loads
- D: When scaling is observed

3. A technician checks a single-phase electric heater for 50 amps. The supply voltage is 240V AC. About how many BTUs does the furnace produce?

- A: 16.382 BTUs
- B: 38,240 BTUs
- C: 64,520 BTUs
- D: 40,956 BTUs

4. Which is wateriest?

- A: Saturated
- B: Wet steam
- C: Hot steam
- D: Dry steam

5. In residential buildings, roof windows are designed for sloped or horizontal installation to give daylighting and ventilation. They can be fixed or moveable.

- A: Skylight
- B: Sash window
- C: Roof vent window
- D: Air vent

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. Does reduced suction gas superheat reduce compressor efficiency?

- A: True
- B: False

7. Carnot engines are 80% efficient. If the Carnot Cycle direction is reversed, what is the C.O.P. value?

- A: 0.25
- B 1.25
- C 1.0
- D 0.5

8. When a steam system services an outdoor location with a low temperature. The designer must prevent freezing.

- A: 39 degrees F
- B: 25 degrees F
- C: 35 degrees F
- D: 10 degrees F

9. Vapor compression refrigerator cycle

- A: Reverse Rankine
- B: Reversed Carnot
- C: Carnot
- D: Rankine

10. A light-letting region of an external wall is called.

- A: Deprecation
- B: Penetration
- C: Indication
- D: Fenestration

See answers on the next page.



6. ☐ A ☒ B

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. Three resistors form a parallel circuit: 24-ohm R1 60-ohm R2 40-ohm R3 The total resistance of the circuit is what?

- A: 124 Ohms
- B: 224 Ohms
- C: 12 Ohms
- D: 24 Ohms

12. Which file roughness grade is?

- A: Bad, rough, bastard
- B: Fine, second-cut bastard
- C: Slimy, rough Bastard
- D: Smooth, nice

13. Butane has a specific gravity of

- A: 1.5
- B: 0.4
- C: 0.6
- D: 2.0

14. How should a broken armored cable be repaired?

- A: Pass-Through A PVC Conduit
- B: Chop Off 3m On Both Sides and Join
- C: Pass-Through A Conduit
- D: Peel and Twist the Cable

15. Do crankcase heaters heat oil?

- A: True
- B: False

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

Note: _____



16. How can thermocouple extension wire be identified from ordinary thermocouple wire?

- A: The thickness
- B: Types of metal
- C: External sheath color
- D: Special wire insulation markings

17. The psychrometric graphic shows humidification as

- A: Vertical curve
- B: Horizontal line
- C: Inclined
- D: Diagonal line

18. Which is the basic resistance unit?

- A: Amp
- B: Ohm
- C: Watt
- D: Farad

19. How much resistance is needed in a 240-volt circuit to limit output to 480 watts?

- A: 120 Ohms
- B: 60 Ohms
- C: 720 Ohms
- D: 240 Ohms

20. At least enough refrigerant charge should be stored in accumulators.

- A: 25%
- B: 75%
- C: 50%
- D: 10%

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. The most likely place for an open drive compressor to leak refrigerant?

- A: Discharge service
- B: Valve suction
- C: Valve plate
- D: Shaft seal

22. Group I: methylene chloride?

- A: True
- B: False

23. Plastic-stored POE oils will:

- A: Become alkaline
- B: Absorb moisture from plastic
- C: Separate
- D: Acidify

24. Have pressure vessels exceeding 3ft cubed but under 10ft cubed no relieving device?

- A: True
- B: False

25. Where is a "king" valve?

- A: At the compressor inlet
- B: At the receiver inlet
- C: At the receiver outlet
- D: At the compressor outlet



21. ☐ A ☐ B ☐ C ☒ D

Note: _____

22. ☒ A ☐ B

Note: _____

23. ☐ A ☒ B ☐ C ☐ D

Note: _____

24. ☐ A ☒ B

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)
- 7). (A) (B) (C) (D)
- 8). (A) (B) (C) (D)
- 9). (A) (B) (C) (D)
- 10). (A) (B) (C) (D)
- 11). (A) (B) (C) (D)
- 12). (A) (B) (C) (D)
- 13). (A) (B) (C) (D)
- 14). (A) (B) (C) (D)
- 15). (A) (B) (C) (D)
- 16). (A) (B) (C) (D)
- 17). (A) (B) (C) (D)
- 18). (A) (B) (C) (D)
- 19). (A) (B) (C) (D)
- 20). (A) (B) (C) (D)
- 21). (A) (B) (C) (D)
- 22). (A) (B) (C) (D)
- 23). (A) (B) (C) (D)
- 24). (A) (B) (C) (D)
- 25). (A) (B) (C) (D)





Kris & Bobby Publications.