

RED SEAL STUDY GUIDE REFRIGERATOR & AC MECHANIC YEAR 1

**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. High air velocity in oil firing causes?

- A: Flame to spark
- B: High Combustion
- C: Highest Rating
- D: All the above

2. How much is one PSI?

- A: 7-inch water column
- B: 47-inch water column
- C: 14.7-inch water column
- D: 27.7-inch water column

3. What zone valve would White Rogers use?

- A: Diaphragm
- B: Heat-activated
- C: Motorized
- D: Thermoelectric

4. Gas boiler purging when?

- A: Turning off
- B: Starting
- C: Operating
- D: After a prolonged shutdown

5. Set a high-pressure cut-out on an air-cooled condenser in an R-410A system to about.

- A: 305 psig
- B: 375 psig
- C: 610 psig
- D: 417 psig

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. Gas heaters must meet local codes for gas type, volume, and line pressure.

- A: Increase
- B: Build-up
- C: Drop
- D: Relief

7. “The total pressure of a confined mixture of gases is the sum of its pressures”. This is called.

- A: Charles’s law
- B: Boyle’s law
- C: Dalton’s law
- D: Murphy’s law

8. The refrigeration cycle controls refrigerant flow by:

- A: Evaporator
- B: Condenser
- C: Compressor
- D: Expansion valve

9. Aim for the following h.p. per ton when rating refrigeration systems (excluding CO?).

- A: 0.5–0.8 h.p./ton refrigeration
- B: 1–2 h.p. per ton refrigeration
- C: 2– 5 h.p. per ton refrigeration
- D: 0.1–0.5 h.p./ton refrigeration

10. Which refrigerant is particularly poisonous and flammable?

- A: R-12
- B: Ammonia
- C: Carbon dioxide
- D: Sulphur dioxide

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. If you have a compressor burn, should you test your oil for acid?

- A: True
- B: False

12. Duct heaters use 364 VAC and 39.8 A. The heater's wattage?

- A: 29
- B: 14,487
- C: 4,725
- D: 356

13. Galvanization is done from?

- A: Zinc
- B: Tin
- C: Copper
- D: Brass

14. Hot gas lines hold compressor refrigeration?

- A: True
- B: False

15. Air-conditioning airplanes use the cycle

- A: The reverse Joule cycles
- B: Inverted Brayton bike
- C: Inverted Carnot cycle
- D: Otto cycle reversed

See answers on the next page.



11. ☒ A ☐ B

Note: _____

12. ☐ A ☒ B ☐ C ☐ D

Note: _____

13. ☒ A ☐ B ☐ C ☐ D

Note: _____

14. ☐ A ☒ B

Note: _____

15. ☐ A ☒ B ☐ C ☐ D

Note: _____



16. Name three forms of insulation.

- A: Fiber, wool, aluminum
- B: Foam, fiber, reflecting
- C: Gypsum, boards, batts
- D: Fiber, reflecting batts

17. Centrifugal pump motors are most loaded when valves are?

- A: Openly
- B: Throttled
- C: Closed
- D: Partially open

18. A 30-pound cylinder of recycled R-410A refrigerant was stored overnight at 70 F. Approximately what should the cylinder pressure be?

- A: 96.8 psig
- B: 201 psig
- C: 317 psig
- D: 118 psig

19. The energy used to generate electricity is?

- A: Chemical
- B: Friction
- C: Mechanical
- D: Thermal

20. Time delay fuses prevent nuisance blowing during starting when the inrush current exceeds the usual running current.

- 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

Note: _____



21. NH mass flow ratio? Compared to Freon-12 for the same refrigeration load and temperature restrictions,

- A: 1:1
- B: 1:9
- C: 1:3
- D: 9:1

22. Check how many electrode installation dimensions.

- A: One
- B: Two
- C: Three
- D: Five

23. Not a state regulatory agency?

- A: Licensing agencies
- B: Health department
- C: Commissions
- D: OSHA

24. A refrigerating system has a normal suction pressure of 10 kg/cm gauge and a condensing pressure of 67 kg/cm. Used refrigerant is

- A: Carbon dioxide
- B: Brine
- C: Ammonia
- D: Freon

25. The primary coil of a transformer has 1200 turns and the secondary coil has 120. What is the output voltage of 240 volts?

- A: 480V
- B: 24V
- C: 120KV
- D: 240V



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)
- 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.