STUDY GUIDE AUTOMOTIVE SERVICE TECHNICIAN





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UNITY CREST SOLUTIONS INC.

Introducing the Red Seal Study Guide – Automotive Service Technician.

Ready to dive into the world of Automotive Service Technician? Meet your ultimate

companion – the Red Seal Study Guide for Automotive Service Technician. This practical booklet is your go-to practice tool to conquer your Automotive Service Technician 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 Automotive Service Technician essentials. It's more than just answering questions — it's about truly grasping the basics of Automotive Service Technician 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 Automotive Service Technician expertise. With the Red Seal Study Guide, you're all set to take that

significant stride toward becoming a certified Automotive Service Technician.

Ready to get started? For more information, tips, and resources, head over to www.RedSealStudyGuide.ca



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Study Guide Disclaimer: Important Notice

The Red Seal Study Guide – Automotive Service Technician 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 Automotive Service Technician!

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



Multiple Choice Questions (MCQs)
1. A four-stroke engine fires once every crankshaft revolution.
A: Every two B: Approximately every half C: Every four D: Three
2. Speed sensor, such as a wheel speed sensor:
A: Magnetic Pulser B: Voltage-divider circuit C: Battery galvanic D: Variable resistor
3. All the following can incapacitate all bimetallic gauges except the:
A: Grounding fuse B: Transmitting unit C: Printed circuit D: IVR wiring
4. Newer vehicles with electrically heated side mirrors employ technology comparable to electric rear window defoggers.
A: True B: False
5. To test a negative backpressure EGR system, the diaphragm should move as the engine accelerates.

See answers on the next page.

A: Upward B: Downward



1.	A Note		©	D					
2.									
۷.			© 						
3.			©						
4.	(A) Note	B	©	0					
5.			©						

6. Excessive valve stem height is typically fixed by:

- A: Valve replacement
- B: Grinding material from the valve tip
- C: Valve seat grinding
- D: Valve seat replacement
- 7. A technician thinks the EGR valve is closed. Which of these indicates a closed EGR valve?
- A: Spark idles
- B: Rough
- C: Slowing
- D: Engine surge
- 8. Diesel engine cranks but won't start. Electronic Control Module (ECM) will not communicate with the diagnostic instrument during diagnosis. Which cause is most likely?
- A: Failed engine speed/timing sensor
- B: Failed data link connection
- C: Bad diagnostic software
- D: LOW ECM supply voltage
- 9. Natural gas vehicle storage tanks must sustain a minimum pressure of what?
- A: 25 000 kPa
- B: 10 000 kPa
- C: 30 000 kPa
- D: 20 000 kPa
- 10. What conditions can cause the brake pedal to fade?
- A: Wheel cylinder
- B: Piston seized
- C: Leakage past master cylinder cups
- D: Over machined brake drum

See answers on the next page.



6.	A Note		©	D							
7.			©								
8.			©								
9.	(A) Note	B	©	D							
10.			©								

A: 2000 B: 1200 C: 3000 D: 500
12. In automatic transmissions, adjust bands with screw-type adjusters by backing off the lock nut by at least turns.
A: 4-5 B: 6-7 C: 2-3 D: 7-8
13. Avoid using a pull-up switch with a controller to control other loads
A: True B: False
14. Which transistor-controlled device may need a heat sink?
A: An open-door indicator B: Seat belt indicator C: Ignition coil D: Dashboard
15. Margin should be at leastmost valves
A: 3 mm (1/8 in) B: 1.50 mm (1/16 in.) C: 0.75 mm (1/32 in.) D: 0.38 mm (1/64 in.)

11. What is the psi burst pressure for air conditioner hoses?

See answers on the next page.

11.	A Note	_	©	(D)						
12.			©	D						
13.			©	D						
14.		B	©	D						
15.			©	D						

A: 50mv -70mv B: 0.05v -0.07v C: 0.5v -0.7v D: 5v -7v
17. Connecting rods are resized by polishing the separating surfaces and honing the bore. This is impossible with most rods.
A: Forged steel B: Press-fit C: Powdered metal D: Fully floating
18. A battery drain can be detected by connecting an ammeter to the battery (-) terminal and ground connection.
A: + Battery terminal B: Ground cable, battery negative C: Battery negative, alternator D: + and – Battery terminals
19. Diesel fuel injection pumps use to commence and halt injections quickly.
A: Helix B: Fuel gallery C: Control rack D: Supply valve
20. Increase pinion bearing preload by shim thickness.
A: Fall B: Rise

See answers on the next page.

16. Silicon semiconductor voltage drop:

16.	A Note:	B		(D)						
17.			©							
18.			©							
19.	_	B	©	D						
20.			©							

21. Power steering assist is weak just at the initial start-up of the day. The likely cause is:

- A: The directional loose fan belt leaks
- B: Leakage at the Controlling valve
- C: Pressure relief valve clogged
- D: Low fluid

22. Which characterizes an oxygen reduction catalyst?

- A: Aids in oxygen connection
- B: Nitrogen carbon particle separation
- C: Unstable reorganization
- D: Nitrogen-oxygen molecular separation

23. What does a Zener diode do at breakdown voltage (avalanche point)?

- A: Let reverse current flow
- B: Stop forward or reverse current
- C: Halt reversing the current
- D: Get damaged by current overload

24. The axle grease-soaked rear brake linings still have a lining. How should these brakes be serviced?

- A: Do a hot, soapy wash and dry
- B: Clean and reuse with authorized cleaner
- C: Brake lining replacement
- D: Replace brake linings and fix leaks

25. Electronically controlled 4-speed automatic transaxles "shock" while changing from "N" to "D." Which requires off-vehicle repair?

- A: Forward clutch
- B: A/T fluid temperature sensor
- C: Line pressure test
- D: Control valve assembly



21.			©							_
22.			©							_ _ _
23.			©							_ _ _
24.	_	B	©	D						_ _ _
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- 1). (A) (B) (C) (D)
- 6). (A) (B) (C) (D)
- 11). (A) (B) (C) (D)

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- 18). (A) (B) (C) (D)
- 23). (A) (B) (C) (D)
- 19). A B C D
- 24). A B C D
- 20). A B C D
- 25). (A) (B) (C) (D)

