

Name \_\_\_\_\_

**MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.**

- 1) The heater core uses \_\_\_\_\_ to produce heat. 1) \_\_\_\_\_  
A) Engine coolant  
B) An electric heating element  
C) 42 volt battery current  
D) Friction
- 2) The customer concern is poor heater operation, and the top radiator hose and both heater hoses are at 160°F. Technician A says this problem is caused by a plugged heater core. Technician B says the thermostat must be stuck open. Which technician is correct? 2) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 3) Heater function diagnosis should start with \_\_\_\_\_. 3) \_\_\_\_\_  
A) Thermostat testing  
B) Coolant condition and level  
C) Heater belt tension  
D) Hose clamp torque
- 4) Technician A says that a stuck open thermostat can cause poor heater operation. Technician B says low coolant level can cause poor heater operation. Which technician is correct? 4) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 5) The heating element is designed to warm the seat and/or back of the seat to about \_\_\_\_\_. 5) \_\_\_\_\_  
A) 50°F (10°C)  
B) 70°F (21°C)  
C) 90°F (32°C)  
D) 100°F (38°C)
- 6) A scan tool can be used when diagnosing heater problems. The tool can check for all of these EXCEPT \_\_\_\_\_. 6) \_\_\_\_\_  
A) DTCs  
B) Correct engine temperature  
C) Coolant flow rate  
D) Actuator functions

- 7) Heat is transferred from the hot coolant flowing through the \_\_\_\_\_ to warm the air flowing through the fins of the heater core. 7) \_\_\_\_\_
- A) Water tubes
  - B) Hoses
  - C) Radiator
  - D) Blower motor
- 8) An electrically cooled seat operates by forcing air over \_\_\_\_\_ to cool the seat. 8) \_\_\_\_\_
- A) An electronic device
  - B) The heater core
  - C) An auxiliary A/C cooler
  - D) An A/C line
- 9) After the water pump was replaced and the cooling system refilled with coolant, the heater stopped providing warm air. Which of these is the MOST LIKELY cause? 9) \_\_\_\_\_
- A) The wrong concentration of antifreeze was installed
  - B) An air pocket is trapped in the heater core
  - C) A defective heater control valve
  - D) A slipping water pump drive belt
- 10) A customer complains that the heated steering wheel is not working. Which of these could be the cause? 10) \_\_\_\_\_
- A) Loose horn buttons
  - B) Vehicle inside temperature above 32°C
  - C) A 0.150 volt drop on the ground wire
  - D) None of these

## Answer Key

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1) A

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2) D

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3) B

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4) C

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5) D

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6) C

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7) A

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8) A

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9) B

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10) B

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