

*Automotive Heating and Air Conditioning, 9th Edition*

**Quiz 10B**

NAME \_\_\_\_\_

1. Two technicians are discussing the coolant flow through a heater core. Technician A says that heated coolant enters the heater inlet hose close to the engine thermostat. Technician B says the coolant from the heater core returns to the water pump outlet. Which technician is correct?  
A) Technician A only  
B) Technician B only  
C) Both technicians A and B  
D) Neither technician A nor B  
1. \_\_\_\_\_
  
2. An electrically cooled seat operates by forcing air over \_\_\_\_\_ to cool the seat.  
A) an electronic device  
B) the heater core  
C) an auxiliary A/C cooler  
D) an A/C line  
2. \_\_\_\_\_
  
3. 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?  
A) Technician A only  
B) Technician B only  
C) Both technicians A and B  
D) Neither technician A nor B  
3. \_\_\_\_\_
  
4. A typical vehicle heater works by \_\_\_\_\_.  
A) electrically controlling the thermostat  
B) making the A/C system operate in reverse using the evaporator as the heater  
C) heat transfers from the coolant, to the fins, and to the air passing through the core  
D) using hot coolant from the engine to heat the evaporator  
4. \_\_\_\_\_
  
5. The water pump drive belt should be checked for \_\_\_\_\_.  
A) proper tension  
B) condition  
C) wear using a gauge  
D) All of the above  
5. \_\_\_\_\_
  
6. Technician A says that faulty heater operation can be caused by a faulty engine cooling system. Technician B says that a complaint of insufficient heat can be caused by someone not filling a cooling system properly. Which technician is correct?  
A) Technician A only  
B) Technician B only  
C) Both technicians A and B  
D) Neither technician A nor B  
6. \_\_\_\_\_

7. Coolant is hottest in which area? 7. \_\_\_\_\_
- A) Bottom of the radiator
  - B) Near the thermostat
  - C) At the overflow container
  - D) Near the outlet of the water pump
8. The heater core uses \_\_\_\_\_ to produce heat. 8. \_\_\_\_\_
- A) engine coolant
  - B) an electric heating element
  - C) 42 volt battery current
  - D) friction
9. How does a thermoelectric device (TED) work? 9. \_\_\_\_\_
- A) Uses an electric current passed through coolant
  - B) A type of resistance heating
  - C) When electrical current flows through the module, one side is heated and the other side is cooled
  - D) Using a temperature-controlled thermostat in the cooling system to control coolant temperature
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

Testname: AHAC9\_10B

1. A  
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2. A  
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3. C  
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4. C  
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5. D  
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6. C  
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7. B  
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8. A  
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9. C  
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