

Name \_\_\_\_\_

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

- 1) Technician A checks ambient temperature as part of an AC performance test. Technician B says that if the AC compressor has not been operating, the high side and low side refrigerant pressure should be equal. Who is correct? 1) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 2) It is 90°F in the shop and the humidity is high. What pressure will be shown on the high side pressure gauge (AC system on)? 2) \_\_\_\_\_  
A) 210 to 290 psi  
B) 10 to 50 psi  
C) 40 to 140 psi  
D) At least 350 psi
- 3) Technician A says that one heater hose should be hot and the other hose cool if the heater is functioning okay. Technician B says that both hoses should be hot to the touch. Which technician is correct? 3) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 4) A clogged \_\_\_\_\_ tube can cause a lack of cooling. 4) \_\_\_\_\_  
A) orifice tube  
B) heater hose  
C) upper radiator hose  
D) condensate drain
- 5) Technician A says a thermostat which opens too soon can cause poor heater operation. Technician B says low coolant level can cause poor heater operation. Which technician is correct? 5) \_\_\_\_\_  
A) Technician A only  
B) Technician B only  
C) Both technicians  
D) Neither technician
- 6) An AC system has had about 0.5 lbs of R-22 refrigerant added. What would this cause? 6) \_\_\_\_\_  
A) No problems, normal AC cooling  
B) Increased cooling  
C) Low high side pressures  
D) Very high high side pressures

- 7) A customer complains that the heater works sometimes, but sometimes only cold air comes out while driving. Technician A says that the water pump is defective. Technician B says that the cooling system could be low on coolant. Which technician is correct? 7) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician
- 8) If both the low side and the high side show low readings, what might be the problem? 8) \_\_\_\_\_
- A) Low refrigerant charge
  - B) Condenser malfunction
  - C) Cooling fan malfunction
  - D) TXV stuck open
- 9) An air conditioning performance check requires a \_\_\_\_\_. 9) \_\_\_\_\_
- A) thermometer and a hydrometer
  - B) thermometer and a vacuum pump
  - C) thermometer and a manifold gauge set
  - D) manifold gauge set and a volt-ohmmeter
- 10) Nothing is seen in the sight glass (R-12 system). Technician A says that the system may be completely empty of refrigerant. Technician B says that the system may be completely charged. Which technician is correct? 10) \_\_\_\_\_
- A) Technician A only
  - B) Technician B only
  - C) Both technicians
  - D) Neither technician