Automotive Technology 6th Edition Chapter 66 - Heating and Air-Conditioning System Diagnosis Quiz 66A		
Name		
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.		
1) If the performance test shows less than 45° F at the center vent, the AC is working normally. A) True	1)	
B) False		
2) 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	2)	
cooling system could be low on coolant. Which technician is correct?		
A) Technician A only B) Technician B only		
C) Both technicians D) Neither technician		
3) The first step in the diagnostic procedure when attempting to solve an HVAC customer problem	3)	
is	<u> </u>	
A) visual inspection		
B) check for diagnostic trouble codes		
C) check for technical service bulletins		
D) verify customer concern		
4) What should the pressures of the low-side and high-side A/C system read on a gauge set with the engine off?	4)	
A) The high side should be about 20% lower than the high-side pressure. B) The same		
C) The high side should be about 200 PSI with the engine off.		
D) The low side should be at or near 0 PSI with the engine off.		
5) An AC system has had about 0.5 lbs of R-22 refrigerant added. What would this cause?	5)	
A) No problems, normal AC cooling		
B) Increased cooling		
C) Low high side pressures		
D) Very high high side pressures		
6) Technician A says that evaporator leaks can be detected by installing dye into the system and	6)	
looking for yellowish-green dye stains. Technician B says that a leak at the evaporator can be		
detected by removing the blower motor resistor pack and inserting an electronic leak detector		
probe into the air stream. Which technician is correct?		
A) Technician A only		
B) Technician B only		
C) Both technicians		
D) Neither technician		

7) Technician A says AC system lines and hoses that are cold have lower refrigerant pressure than	7)
warmer lines and hoses. Technician B says frost on a system component usually indicates a	
refrigerant leak in that area. Which technician is correct?	
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) The ambient temperature is 70° F and the humidity is low. What should the high side gauge	9)
pressure be (AC system on)?	
A) 140 to 190 psi	
B) 10 to 50 psi	
C) 300 to 350 psi	
D) Not enough information to tell	
10) What must the technician do before checking an air conditioning system for refrigerant leaks	10)
using a black light?	
A) Evacuate the system	
B) Install dye in the system	
C) Overcharge the system by 10 oz.	
D) Turn the system off and allow the pressure to equalize	

Answer Key

Testname: AT6_66A

- 1) A Page Ref: 792
- 2) B Page Ref: 791
- 3) D Page Ref: 789
- 4) B Page Ref: 792
- 5) D Page Ref: 793
- 6) C Page Ref: 796
- 7) A Page Ref: 794-795
- 8) A Page Ref: 793
- 9) A Page Ref: 793
- 10) B Page Ref: 796