Name_____

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

1) Which of the following is used in modern automobiles to transfer heat energy?   1) _____
    A) Refrigerant
    B) Engine coolant
    C) Both A and B are correct
    D) Neither A nor B are correct

2) In which component is heat added to the refrigerant?   2) _____
    A) Evaporator
    B) Condenser
    C) Thermostatic expansion valve
    D) None of these is correct

3) A thermal expansion valve has a _____ orifice, whereas an orifice tube uses a _____ orifice   3) _____
    to control refrigerant flow.
    A) digital; analog
    B) drain; fill
    C) open; closed
    D) variable; fixed

4) Which of the following is NOT a subsystem in a modern automotive HVAC system?   4) _____
    A) Condenser
    B) Evaporator
    C) Engine cooling system
    D) All of these are HVAC subsystems

5) Which type of refrigerant hose is used with an R–134a system?   5) _____
    A) Rigid hose
    B) Flexible, porous hose
    C) Barrier hose
    D) Copper type hose

6) Compressing a vapor _____.   6) _____
    A) increases the pressure and decreases the temperature
    B) decreases the pressure and increases the temperature
    C) decreases the pressure and decreases the temperature
    D) increases the pressure and increases the temperature

7) R–1234yf refrigerant is slightly flammable. Because of this, if the evaporator is damaged, it must   7) _____
    be replaced with a(n) _____ evaporator
    A) new
    B) new or used
    C) rebuilt
    D) upgraded

8) What are the state(s) of the refrigerant in the accumulator?   8) _____
   A) Liquid
   B) Vapor
   C) Both A and B
   D) Neither A nor B

9) The three states of matter are _____.   9) _____
   A) solid, liquid, and fluid
   B) solid, vapor, and gas
   C) solid, liquid, and vapor
   D) liquid, vapor, and fluid

10) The compressor operates continuously with which type of system controls?   10) _____
   A) Orifice tube
   B) POA system
   C) EPR system
   D) Both B and C

1) C
   Page Ref: 753
2) A
   Page Ref: 754
3) D
   Page Ref: 754
4) D
   Page Ref: 752-753
5) C
   Page Ref: 762
6) D
   Page Ref: 752
7) A
   Page Ref: 758
8) C
   Page Ref: 762
9) C
   Page Ref: 750
10) D
   Page Ref: 756