

HEATING and AIR CONDITIONING

1. The 220-240 volt circuit usually consists of ____wires, ____ hot wire, ____
 - a. 3/1/2
 - b. 4/2/2
 - c. 3/2/1
 - d. 4/3/1

2. The refrigerant rate of flow is controlled by:
 - a. line set
 - b. expansion meter
 - c. compressor
 - d. thermostat

3. When charging on the low side, the refrigerant must be:
 - a. liquid
 - b. vapor
 - c. warm
 - d. cold

4. What is typically used to solder the refrigerant lines:
 - a. gold
 - b. plastic
 - c. silver
 - d. copper

5. _____are the common metering devices in split system heat pumps.
 - a. TXVs
 - b. pistons
 - c. condensers
 - d. filters
 - e. manifold gauges

6. What are two types of leak detectors:
 - a. gas detector & bubble gauge
 - b. gas detector & capillary tube
 - c. leak detector & soap suds
 - d. soap suds & bubble gauge

7. Low voltage thermostats for an apartment home HVAC system operate on:
 - a. 24 volts
 - b. 10 volts
 - c. 12 volts
 - d. 18 volts

8. What can cause an air handler to leak condensation water inside the apartment?
 - a. the coils are frozen
 - b. clogged drain line
 - c. low on freon
 - d. all of the above

9. What is the first step taken to determine if a heating element is bad?
- a. use an ohm meter at the element
 - b. use an ohm meter at the thermostat
 - c. drain system
 - d. check the transformer
10. You suspect that a HVAC fan motor is not working, and you have determined that the motor is receiving power; the next thing to do is:
- a. check the capacitor with ohm meter
 - b. switch the thermostat to auto
 - c. check the motor with ohm meter
 - d. replace a breaker
11. What types of refrigerant are used in a residential HVAC system?
- a. R12
 - b. R22
 - c. R410A
 - d. B & C
12. In order to work on the refrigerant system a person must be.....?
- a. Licensed contractor
 - b. OSHA certified
 - c. EPA certified
 - d. none of the above

Date:

Name:

HVAC ANSWERS

1. C

2. B

3. B

4. C

5. A

6. C

7. A

8. D

9. A

10. A

11. D

12. C