

Name: _____

Date: _____

1. Briefly describe WSHP operation in the cooling mode.

2. Briefly describe WSHP operation on the heating mode.

3. List the six types of water source heat pumps.

4. List 4 advantages to using WSHP.

_____ _____
_____ _____

5. List 4 disadvantages of using WSHP systems.

6. Under what circumstances should a WSHP system be protected from potential freeze-up?

7. List 4 types of freeze protection employed on WSHP systems.

_____ _____
_____ _____

8. Which of the following is NOT a common characteristic of WSHP compressors?

- a. Fully hermetic design
- b. Non field-serviceable
- c. Low efficiency
- d. Reliable

9. What is the purpose of a reversing valve and how does it relate to mode changeover in WSHP units?

10. It is better to use a (closed/open) circuit for the loop water when using a coaxial or brazed-plate heat exchanger. _____

11. What is the purpose of the cooling tower in a WSHP system.

12. What is the purpose of a boiler or heat adder in a WSHP system.

13. Briefly describe the cooling and heating operation of a closed-loop geothermal WSHP system.

14. Which of the following is NOT characteristic of geothermal systems. _____

- a. Low efficiency
- b. High comfort levels
- c. Environmentally sound
- d. Low operating costs