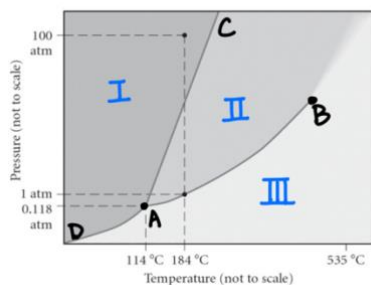


12. Which of the following statements is False?



- A. The triple point of this substance occurs at a temperature of 114°C.
- B. At 20 atm of pressure and 80°C, this substance exists as a solid.
- C. Line AC is where solid and liquid are in equilibrium.
- D. At 1 atm of pressure and temperature goes from 80°C to 350°C, the phase changes of the substance is sublimation, followed by evaporation.
- E. Point B is defined as critical point.

13. Identify the compound that does not have hydrogen bonding

- A) $(\text{CH}_3)_3\text{N}$
- B) H_2O
- C) CH_3OH
- D) HF
- E) CH_3NH_2

14. Gold crystallizes in a face-centered cubic structure. What is the edge length of the unit cell if the atomic radius of gold is 144 pm?

- A) 204 pm
- B) 288 pm
- C) 333 pm
- D) 407 pm
- E) 72 pm