

1. What is the relative rate of effusion of CO and CO₂?
- A. CO is 1.25 times faster than CO₂ B. CO is 3.75 times faster than CO₂
- C. CO is 1.25 times faster than CO D. Both diffuse at the same rate

Answer: Option A

2. Which of these gases diffuse more quickly than oxygen?
- A. H₂S B. NO
- C. Cl₂ D. N₂O

Answer: Option B

3. Which of the following is not considered as an intermolecular force between molecules?
- A. Coordinate covalent bonds B. Hydrogen bonds
- C. Debye forces D. London dispersion forces

Answer: Option A

4. The weakest (in strength) of the following intermolecular forces is
- A. Hydrogen bonding B. Vander Waals force
- C. Forces among the polar molecules D. Ionic bond

Answer: Option B

5. Ideal gasses have all the following characteristics except.
- A. Absence of intermolecular forces B. Collisions among the molecules of an ideal gas are perfectly elastic
- C. The molecules occupy no space D. All of the above are correct

Answer: Option C

6. Which of the following statements is true about plasma

- A. It may be the first state of matter B. It is not a phase transition
C. It is a conductor of electricity D. All of the above

Answer: Option D

7. Which statement is correct

- A. $PV_m \propto T$ B. $P \propto CT$
C. $PM \propto dT$ D. all above

Answer: Option D

8. Under what conditions the gases deviate from the ideal behavior?

- A. High temperature B. Low temperature
C. High pressure D. b and c

Answer: Option D

9. Which one has the lowest density at room temperature?

- A. Ne B. N₂
C. NH₃ D. CO

Answer: Option C

10. The introduction of Kelvin scale in thermometry is according to

- A. Boyles law B. Charles law
C. Daltons law D. Grahams law

Answer: Option B