

<b>CHEMISTRY-11</b>	<b>Chapter#03 - First Half (3.1 to 3.6) Test-2</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 25</b>	<b>Marks Obtained:</b>	
Time Allowed: 40 Min.			

Maximum Marks: 09

**(OBJECTIVE TYPE)**

Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- Number of molecules in one  $\text{dm}^3$  of water is close to:  
 (a)  $\frac{6.02}{22.4} \times 10^{23}$       (b)  $\frac{12.04}{22.4} \times 10^{23}$       (c)  $\frac{18}{22.4} \times 10^{23}$       (d)  $55.6 \times 6.02 \times 10^{23}$
- The molar volume of  $\text{CO}_2$  is maximum at:  
 (a) STP      (b)  $127^\circ\text{C}$  and 1 atm      (c)  $0^\circ\text{C}$  and 2 atm      (d)  $273^\circ\text{C}$  and 2 atm
- Absolute zero is equal to:  
 (a)  $273^\circ\text{C}$       (b)  $-273^\circ\text{C}$       (c)  $0^\circ\text{C}$       (d) 273 K
- Which of the following will have highest rate of diffusion?  
 (a)  $\text{CO}_2$       (b)  $\text{NH}_3$       (c)  $\text{HCl}$       (d)  $\text{SO}_2$
- The form of matter which has indefinite shape but definite volume?  
 (a) Solid      (b) Liquid      (c) Gas      (d) Plasma
- The independent variable in Boyle's law is:  
 (a) Temperature      (b) Volume      (c) Pressure      (d) Quantity of gas
- Which represents the lowest temperature?  
 (a)  $1^\circ\text{F}$       (b)  $1^\circ\text{C}$       (c) 1 K      (d) Both 'b' & 'c'
- The number of moles of  $1 \text{ dm}^3$  of  $\text{H}_2$  at STP:  
 (a)  $2.68 \times 10^{22}$       (b) 1      (c) 0.0446      (d)  $6.02 \times 10^{23}$
- If temperature and pressure of the gas are equally increased, the rate of diffusion will:  
 (a) Also increase      (b) Decrease      (c) Remain same      (d) None

Maximum Marks: 16

**(SUBJECTIVE TYPE)**

Time Allowed: 30 Min.

**SECTION-I**

- Q.2: Give brief answers to the following questions: (12)**
- What is one atmosphere pressure?
  - What do you mean by the term isotherm?
  - Define absolute Zero.
  - Convert: (a)  $-40^\circ\text{F}$  into Centigrade scale. (b)  $40^\circ\text{C}$  into Fahrenheit scale.
  - Calculate the value of R in SI units.
  - Differentiate between diffusion and effusion.

**SECTION-II**

**NOTE:** Attempt All Questions:

(04)

- Q.0: State and explain Dalton's law of partial pressures. Derive its mathematical expression for calculating partial pressure of a gas.**