

<b>CHEMISTRY-11</b>	<b>Chapter#03 (Complete) Test-2</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 40</b>	<b>Marks Obtained:</b>	
Time Allowed: 70 Min.			

Maximum Marks: 08

**(OBJECTIVE TYPE)**

Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- 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
- Equal masses of  $\text{CH}_4$  and oxygen are mixed in an empty container at  $25^\circ\text{C}$ . The fraction of total pressure exerted by oxygen is:
 

(a)  $\frac{1}{3}$                       (b)  $\frac{8}{9}$                       (c)  $\frac{1}{9}$                       (d)  $\frac{16}{17}$
- If 'a' and 'b' are zero for certain gas, then gas is:
 

(a) Ideal                      (b) Non-ideal  
(c) Real                      (d) May be any diatomic gas
- The temperature of natural plasma is about:
 

(a)  $20,000^\circ\text{C}$               (b)  $10,000^\circ\text{C}$               (c)  $5000^\circ\text{C}$               (d)  $1000^\circ\text{C}$
- When a graph is plotted between pressure on x-axis and PV on y-axis, a straight line parallel to \_\_\_\_\_ is obtained.
 

(a) x- axis                      (b) y- axis                      (c) z-axis                      (d) None
- If the temperature, pressure and the quantity of gas are doubled, the volume will become:
 

(a) Same                      (b) Double                      (c) Four times              (d) Eight times
- Which is the correct expression for kinetic equation?
 

(a)  $PV = \frac{1}{3} Mn\overline{C^2}$     (b)  $PV = \frac{1}{3} mNc^2$     (c)  $PV = \frac{1}{3} MNc^2$     (d)  $PV = \frac{1}{3} mn\overline{C^2}$
- Plasma constitutes about \_\_\_\_\_ of the visible universe.
 

(a) 90%                      (b) 95%                      (c) 98%                      (d) More than 99%

Maximum Marks: 32

**(SUBJECTIVE TYPE)**

Time Allowed: 60 Min.

**SECTION-I**

- Q.2: Give brief answers to the following questions: (20)**
- What is one atmosphere pressure?
  - What happens to the positions of isotherms, when they are plotted at higher temperatures?

- iii. Define absolute Zero.
- iv. What is R? What is its physical significance?
- v. State Avogadro's law.
- vi. How does Dalton's law explain the process of respiration?
- vii. Derive Boyle's law from KMT.
- viii. How is the critical temperature an essential criterion to be considered for the liquefaction of gasses?
- ix.  $\text{SO}_2$  is comparatively non-ideal at 273 K but behaves ideally at 373 K.
- x. What is natural and artificial plasma? OR What are the types of plasma?

## SECTION-II

**NOTE:** Attempt All Questions:

(12)

Q.3: State Boyle's law. Give its experimental verification.

Q.4: Explain Boyle's law and Avogadro's law on the basis of KMT.

Q.5: How volume and pressure were corrected by Van der Waals?