| CHEMISTRY-11 | Chapter#03 - First Half (3.1 to 3.6) Test-1 | | |
|---|---|---|---|
| | Name: | Class: | ID: |
| Date: / / | **Marks Total: 25** | **Marks Obtained:** | |
| Time Allowed: 40 Min. | | | |

Maximum Marks: 09 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

**NOTE: Tick The Correct Option:**

1. **Pressure remaining constant at which temperature the volume of a gas will become twice of what it is at 0°C:**
   (a) 546°C (b) 200°C (c) 546 K (d) 273 K
2. **The order of the rate of diffusion of gasses $NH_3$, $SO_2$, $Cl_2$, and $CO_2$ is:**
   (a) $NH_3 > SO_2 > Cl_2 > CO_2$ (b) $NH_3 > CO_2 > SO_2 > Cl_2$
   (c) $Cl_2 > SO_2 > CO_2 > NH_3$ (d) $NH_3 > CO_2 > Cl_2 > SO_2$
3. **Mass of 22.4 $dm^3$ of $N_2$ at STP is:**
   (a) 28 g (b) 14 g (c) 1.4 g (d) 2.8 g
4. **Escape out of gas molecules one by one through tiny hole is:**
   (a) Diffusion (b) Effusion (c) Osmosis (d) All of these
5. **The pressure exerted by 760 mm long mercury column on an area of 1 $cm^2$ is equal to:**
   (a) 1 atm (b) 760 torr (c) 101325 Pa (d) All
6. **Absolute zero has been derived form:**
   (a) Boyle's law (b) Charles' law (c) Avogadro's law (d) Graham's law
7. **If the temperature and pressure of a gas are doubled, the volume will:**
   (a) Become double (b) Become four times
   (c) Remain same (d) Become half
8. **The partial pressure of $O_2$ inside the lungs is:**
   (a) 760 torr (b) 159 torr (c) 116 torr (d) 117 torr
9. **$CH_4$ diffuses _____ rapidly as compared to $SO_2$:**
   (a) 2 times (b) 4 times (c) 3 times (d) 8 times

Maximum Marks: 16 **(SUBJECTIVE TYPE)** Time Allowed: 30 Min.

## SECTION-I

**Q.2: Give brief answers to the following questions:** **(12)**

i. Why are liquids less common than other forms of matter?
ii. The graph between P and PV is a straight line. Explain why?
iii. Describe different scales of thermometry.
iv. State Avogadro's law.
v. Deep sea divers or scuba divers do not use normal air in breathing, why?
vi. Lighter gases diffuse more rapidly than heavier gases. Give reason.

## SECTION-II

**NOTE: Attempt All Questions:** **(04)**

**Q.3: What is Graham's law of diffusion? Give its experimental verification.**