

<b>CHEMISTRY-11</b>	<b>Chapter#03 (Complete) Test-1B</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 30</b>	<b>Marks Obtained:</b>	
Time Allowed: 50 Min.			

Maximum Marks: 06

**(OBJECTIVE TYPE)**

Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- Pressure remaining constant at which temperature the volume of a gas will become twice of what it is at 0°C:
  - 546°C
  - 200°C
  - 546 K
  - 273 K
- The molar volume of CO<sub>2</sub> is maximum at:
  - STP
  - 127°C and 1 atm
  - 0°C and 2 atm
  - 273°C and 2 atm
- The SI unit of pressure is expressed in:
  - Nm<sup>-1</sup>
  - Nm<sup>-2</sup>
  - Nm<sup>-3</sup>
  - mm Hg
- The volume of every gas will become theoretically zero at:
  - 0°C
  - 273 K
  - 273 K
  - 273°C
- The property of the gas which is inversely proportional to temperature:
  - Pressure
  - Volume
  - Density
  - Molar mass
- The compressibility factor is:
  - $\frac{PV}{RT}$
  - $\frac{PV}{T}$
  - $\frac{PM}{dRT}$
  - $\frac{PV}{nRT}$

Maximum Marks: 24

**(SUBJECTIVE TYPE)**

Time Allowed: 40 Min.

**SECTION-I**

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

**(16)**

- Why are liquids less common than other forms of matter?
- Throw some light on the factor 1/273 in Charles's law.
- Prove that  $d = PM/RT$ .
- State Avogadro's law.
- State Graham's law of diffusion. Give its mathematical expression.
- Define and explain Joule Thomson effect.
- Water vapours don't behave ideally at 273 K, explain.
- Give important uses of plasma.

**SECTION-II**

**NOTE:** Attempt All Questions:

**(08)**

**Q.3: Explain Boyle's law and Avogadro's law on the basis of KMT.**

**Q.4: Calculate the density of CH<sub>4</sub>(g) at 0°C and 1 atmospheric pressure. What will happen to the density if (a) temperature is increased to 27°C, (b) the pressure is increased to 2 atmospheres at 0°C.**