

<b>CHEMISTRY-11</b>	<b>Chapter#07(Complete) Test-1</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 30</b>	<b>Marks Obtained:</b>	
Time Allowed: 60 Min.			

Maximum Marks: 06 **(OBJECTIVE TYPE)** Time Allowed: 10 Min.

**NOTE:** Tick The Correct Option:

- If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air:
  - Remains constant
  - Increases
  - Decreases
  - Remains unchanged
- Which is not a state function?
  - Enthalpy
  - Work
  - Pressure
  - Temperature
- Standard enthalpies are measured at:
  - 273 K
  - 298 K
  - 373 K
  - All
- For the reaction:  $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ , the change in enthalpy is called:
  - Heat of reaction
  - Heat of neutralization
  - Heat of formation
  - Heat of combustion
- The pressure of oxygen inside the bomb calorimeter is:
  - 100 atm
  - 50 atm
  - 25 atm
  - 20 atm
- The Born-Haber cycle is the best application of \_\_\_\_\_ law.
  - Boyle's
  - Dalton's
  - Hess's
  - Graham's

Maximum Marks: 24 **(SUBJECTIVE TYPE)** Time Allowed: 50 Min.

### SECTION-I

**Q.2: Give brief answers to the following questions: (16)**

- What is a spontaneous reaction? Give examples.
- Define system and surroundings with suitable example.
- Define internal energy of the system.
- What is meant by pressure volume work?
- Define enthalpy.
- Why is it necessary to mention the physical states of reactants and products in a thermochemical reaction?
- Define enthalpy of combustion with example.
- Why can the enthalpy of formation of  $\text{CCl}_4$  not be measured directly?

### SECTION-II

**NOTE:** Attempt All Questions: (08)

**Q.3: What is first law of thermodynamics? Prove that  $\Delta E = q_v$ .**

**Q.4: State and explain Hess's law of constant heat summation with an examples.**