

CHEMISTRY-11	Chapter#07-First Half (7.0.0 - 7.4.0) 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:

- Calorie is equivalent to:
 (a) 0.4184 J (b) 41.84 J (c) 4.184 J (d) 418.4 J
- For a given process, the heat changes at constant pressure (q_p) and at constant volume (q_v) are related to each other as:
 (a) $q_p = q_v$ (b) $q_p < q_v$ (c) $q_p > q_v$ (d) $q_p = \frac{q_v}{2}$
- Which is not a state function?
 (a) Energy (b) Heat (c) Temperature (d) Volume
- When the temperature of the system increases or the system heats up, the reaction is:
 (a) Exothermic (b) Endothermic (c) Both 'a' & 'b' (d) None
- Thermochemistry is based on:
 (a) Law of conservation of mass (b) First law of thermochemistry
 (c) Law of definite proportions (d) First law of thermodynamics
- A state function is a _____ property of the system.
 (a) Colligative (b) Additive (c) Microscopic (d) Macroscopic
- The form of energy which is exchanged between the system and the surroundings due to temperature difference is called:
 (a) Heat (b) Work (c) Entropy (d) Free energy
- When work is done by the system on the surroundings, then 'W' takes _____ sign.
 (a) Positive (b) Negative (c) No (d) Any
- At constant pressure, for solids and liquids:
 (a) $\Delta H = \Delta E$ (b) $\Delta H > \Delta E$ (c) $\Delta H < \Delta E$ (d) $\Delta H \cong \Delta E$

Maximum Marks: 16

(SUBJECTIVE TYPE)

Time Allowed: 30 Min.

SECTION-I

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

- Differentiate between exothermic and endothermic reactions.
- Define system and surroundings with suitable example.
- Define internal energy of the system.
- What is meant by pressure volume work?
- State first law of thermodynamics and give its mathematical form.
- Differentiate between enthalpy change and internal energy change.

SECTION-II

NOTE: Attempt All Questions:

(04)

Q.3: Define enthalpy and prove that $q_p = \Delta H$