

<b>CHEMISTRY-11</b>	<b>Chapter#07(Complete-Smart Syllabus) Test-1</b>		
	Name:	Class:	ID:
Date: / /	<b>Marks Total: 25</b>	<b>Marks Obtained:</b>	
Time Allowed: 40 Min.			

Maximum Marks: 09

**(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
- Calorie is equivalent to:
  - 0.4184 J
  - 41.84 J
  - 4.184 J
  - 418.4 J
- Which is not a state function?
  - Energy
  - Heat
  - Temperature
  - Volume
- A state function is a \_\_\_\_\_ property of the system.
  - Colligative
  - Additive
  - Microscopic
  - Macroscopic
- Energy is transferred between the system and the surroundings in the form of:
  - Temperature
  - Heat
  - Work
  - Both 'b' & 'c'
- For gases, at constant pressure:
  - $\Delta H = \Delta E$
  - $\Delta H > \Delta E$
  - $\Delta H < \Delta E$
  - $\Delta H \cong \Delta E$
- When one mole of  $H_2$  reacts with half mole  $O_{2(g)}$  to form one mole gaseous water  $H_2O_{(g)}$ , the enthalpy change is:
  - 242.2 kJ
  - 285.8 kJ
  - 484 kJ
  - +285.8 kJ
- The heat required to raise the temperature of one gram of a substance through  $1^\circ C$  or 1 K is called:
  - Specific heat
  - Heat capacity
  - Molar specific heat
  - All
- Which enthalpy change cannot be measured directly?
  - Enthalpy of formation of  $CO_2$
  - Enthalpy of combustion of  $CO$
  - Enthalpy of formation of  $CO$
  - Both 'b' & 'c'

Maximum Marks: 16

**(SUBJECTIVE TYPE)**

Time Allowed: 30 Min.

**SECTION-I**

- Q.2: Give brief answers to the following questions: (12)**
- Define system and surroundings with suitable example.
  - Define internal energy of the system.
  - State first law of thermodynamics and give its mathematical form.
  - Differentiate between enthalpy change and internal energy change.
  - What is meant by standard enthalpy of neutralization?
  - Why can the enthalpy of formation of  $CO$  not be measured directly?

**SECTION-II**

**NOTE:** Attempt All Questions:

(04)

- Q.3: State and explain Hess's law of constant heat summation with an examples.**