

<b>CHEMISTRY-11</b>	<b>Chapter#07(Complete-Smart Syllabus) Test-2</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:

- In endothermic reaction, the heat content of the:
  - Products is more than that of reactants
  - Reactants is more than that of products
  - Both 'a' & 'b'
  - Reactants and products are equal
- For a given process, the heat changes at constant pressure ( $q_p$ ) and at constant volume ( $q_v$ ) are related to each other as:
  - $q_p = q_v$
  - $q_p < q_v$
  - $q_p > q_v$
  - $q_p = \frac{q_v}{2}$
- For the reaction:  $H^+ + OH^- \longrightarrow H_2O$ , the change in enthalpy is called heat of:
  - Reaction
  - Combustion
  - Solution
  - Neutralization
- We are studying the reaction of Zn with  $CuSO_4$  to form  $ZnSO_4$ . The flask in which the reaction is taking place is:
  - System
  - Surroundings
  - Boundary
  - None
- A di-atomic molecule shows \_\_\_\_\_ motion.
  - Only translational
  - Translational and vibrational
  - Translational, vibrational and rotational
  - None
- 25°C is the standard temperature in:
  - Thermochemistry
  - Thermodynamics
  - Electrochemistry
  - All
- Which salt will raise the temperature of the solution when dissolved in water?
  - $Na_2CO_3$
  - NaCl
  - $NH_4Cl$
  - All
- The specific heat of water is:
  - $4.2 \text{ JK}^{-1} \text{ mol}^{-1}$
  - $4.2 \text{ J K}^{-1} \text{ g}^{-1}$
  - $4.2 \text{ J K}^{-1}$
  - $4.2 \text{ kJK}^{-1} \text{ g}^{-1}$
- Which one is the enthalpy of atomization of bromine?
  - $108 \text{ kJ mol}^{-1}$
  - $112 \text{ kJ mol}^{-1}$
  - $121 \text{ kJ mol}^{-1}$
  - $218 \text{ kJ mol}^{-1}$

Maximum Marks: 16

**(SUBJECTIVE TYPE)**

Time Allowed: 30 Min.

**SECTION-I**

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

- What is state and state function? Explain with example.
- What is meant by pressure volume work?
- Why is it necessary to mention the physical states of reactants and products in a thermochemical reaction?
- What do you mean by enthalpy of atomization?
- Why can the enthalpy of formation of  $CCl_4$  not be measured directly?
- State Hess's law of constant heat summation.

**SECTION-II**

**NOTE:** Attempt All Questions:

(04)

Q.3: State first law of thermodynamics? How does it explain that  $\Delta H = q_p$ .