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| CHEMISTRY-11 | Chapter#07-Second Half (7.4.1 – 7.5.1) 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:

- For the reaction: $\text{NaOH} + \text{HCl} \longrightarrow \text{NaCl} + \text{H}_2\text{O}$ the change in enthalpy is called:
 - Heat of reaction
 - Heat of formation
 - Heat of neutralization
 - Heat of combustion
- Standard enthalpies are measured at:
 - 273 K
 - 298 K
 - 373 K
 - All
- For the reaction: $\text{H}^+ + \text{OH}^- \longrightarrow \text{H}_2\text{O}$, the change in enthalpy is called heat of:
 - Reaction
 - Combustion
 - Solution
 - Neutralization
- The Born-Haber cycle is the best application of _____ law.
 - Boyle's
 - Dalton's
 - Hess's
 - Graham's
- Which one may be both endothermic and exothermic?
 - ΔH_n°
 - ΔH_{at}°
 - ΔH_c°
 - ΔH_{sol}°
- Which salt will raise the temperature of the solution when dissolved in water?
 - Na_2CO_3
 - NaCl
 - NH_4Cl
 - All
- Which will release greater amount of heat on combustion?
 - Two molecules of $\text{C}_2\text{H}_5\text{OH}$
 - Five moles of CO_2
 - Three moles of CH_4
 - All equal
- 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 J K^{-1}
 - $4.2 \text{ kJK}^{-1}\text{g}^{-1}$
- Which one is the enthalpy of atomization of bromine?
 - 108 kJ mol^{-1}
 - 112 kJ mol^{-1}
 - 121 kJ mol^{-1}
 - 218 kJ mol^{-1}

Maximum Marks: 16

(SUBJECTIVE TYPE)

Time Allowed: 30 Min.

SECTION-I

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

- Define enthalpy of reaction, can it be negative? Why?
- Define standard enthalpy of formation.
- Enthalpy of neutralization is merely the heat of formation of one mole of liquid water. Comment. OR Enthalpy of neutralization for any strong acid with a strong base is almost the same, explain.
- Why can the enthalpy of formation of CCl_4 not be measured directly?
- Why can the enthalpy of formation of CO not be measured directly?
- Define Born-Haber cycle and lattice energy.

SECTION-II

NOTE: Attempt All Questions:

(04)

Q.3: Describe the measurement of enthalpy of reaction by bomb calorimeter.