

CHEMISTRY-11	Chapter#07(Complete-Smart Syllabus) Test-4		
	Name:	Class:	ID:
Date: / /	Marks Total: 40	Marks Obtained:	
Time Allowed: 50 Min.			

Maximum Marks: 10

(OBJECTIVE TYPE)

Time Allowed: 10 Min.

NOTE: Tick The Correct Option:

- The net heat change in a chemical reaction is same, whether it is brought about in two or more different ways in one or several steps. It is known as:
 - Henry's law
 - Joule's principle
 - Hess's law
 - Law of conservation of energy
- A state function which describes together the internal energy and the product of pressure and volume is called:
 - Enthalpy
 - Internal energy
 - Work
 - Free energy
- The pressure of oxygen inside the bomb calorimeter is:
 - 100 atm
 - 50 atm
 - 25 atm
 - 20 atm
- Electrical energy is, actually, a form of:
 - K.E.
 - P.E.
 - Solar energy
 - All
- Pressure-volume work is:
 - PV
 - PΔV
 - PΔV
 - ΔPΔV
- First law of thermodynamics is also called law of conservation of:
 - Mass
 - Energy
 - Momentum
 - Both 'a' & 'b'
- At constant pressure:
 - ΔH = q_v
 - ΔE = q_v
 - ΔH = q_p
 - ΔE = q_p
- Which one may be both endothermic and exothermic?
 - ΔH_n
 - ΔH_{at}
 - ΔH_c
 - ΔH_{sol}
- The enthalpy of atomization of hydrogen is 218 kJmole⁻¹. This is actually the energy required to break the _____ number of bonds in H₂ molecules.
 - N_A
 - 2N_A
 - $\frac{1}{2}$ N_A
 - One
- Which one cannot be measured directly?
 - Enthalpy of formation of NaCl.
 - Lattice energy of NaCl.
 - Enthalpy of atomization of sodium.
 - Enthalpy of atomization of chlorine.

Maximum Marks: 20

(SUBJECTIVE TYPE)

Time Allowed: 40 Min.

SECTION-I

Q.2: Give brief answers to the following questions:

(12)

- Differentiate between heat and temperature.
- Prove that at constant volume, ΔE = q_v.
- What is a thermochemical equation? Give three examples. What information does it convey?
- Enthalpy of neutralization is merely the heat of formation of one mole of liquid water. Comment.
- Define standard enthalpy of solution. Give examples.
- Differentiate between specific heat and heat capacity.

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Define enthalpy and prove that q_p = ΔH

Q.4: Define enthalpy of reaction. How is it measured by glass calorimeter?