

CHEMISTRY-11	Chapter#07(Complete) Test-2		
	Name:	Class:	ID:
Date: / /	Marks Total: 30	Marks Obtained:	
Time Allowed: 60 Min.			

Maximum Marks: 06

(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
- 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:
 (a) Henry's law (b) Joule's principle
 (c) Hess's law (d) Law of conservation of energy
- A state function which describes together the internal energy and the product of pressure and volume is called:
 (a) Enthalpy (b) Internal energy (c) Work (d) Free energy
- In a Bomb Calorimeter, the reactions are carried out at constant:
 (a) Pressure (b) Temperature (c) Volume (d) Enthalpy
- The enthalpy of formation of NO is:
 (a) -393.7 kJmol⁻¹ (b) -41.6 kJmol⁻¹ (c) -285.58 kJmol⁻¹ (d) +180.51 kJmol⁻¹
- Hess's law is an application of:
 (a) Law of conservation of matter (b) First law of thermodynamics
 (c) Law of conservation of energy (d) Both 'b' & 'c'

Maximum Marks: 24

(SUBJECTIVE TYPE)

Time Allowed: 50 Min.

SECTION-I

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

- Differentiate between exothermic and endothermic reactions.
- Explain that the burning of candle is a spontaneous reaction.
- What is state and state function? Explain with example.
- What are the ways of transferring energy between the system and the surroundings?
- State first law of thermodynamics and give its mathematical form.
- Prove that $\Delta H = q_p$.
- Differentiate between enthalpy change and internal energy change.
- State Hess's law of constant heat summation.

SECTION-II

NOTE: Attempt All Questions:

(08)

Q.3: Explain the term internal energy of a system and also mention how the change in internal energy of a system can occur?

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