

## Chemistry Fsc Part 1 Chapter 7 Online Test

Sr	Questions	Answers Choice
1	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air	A. Remains constant B. Increase C. Decrease D. Increase a bit
2	In endothermic reactions, the heat content of the	A. Products is more than that of reactants B. Reactants is more than that of products C. Both a and b D. Reactant and products is equal
3	Calorie is equivalent to	A. 0.4184 J B. 41.84 J C. 4.184 J D. 418.4 J
4	The change in heat energy of a chemical reaction at constant temperature and pressure is called	A. Enthalpy change B. Bond energy C. Heat of sublimation D. Internal energy change
5	Which of the following statement is contrary to the first law of thermodynamics	A. An equivalent amount of heart energy can neither be created nor destroyed B. One form of energy can be transferred into an equivalent amount of other kinds of energy C. In an adiabatic process, the work done is independent of its path D. Continuous production of mechanical work without supplying an equivalent is amount of heat possible
6	For a given process, the heat change at constant pressure ( $q_p$ ) and at constant volume ( $q_v$ ) are related to each other as	A. $q_p = q_v$ B. $q_p < q_v$ C. $q_p > q_v$ D. $q_p = q_v / 2$
7	Question Image	A. Heat of reaction B. Heat of sublimation C. Heat of neutralization D. Heat of combustion
8	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. Hess's law C. Joule's principle D. Law of combustion
9	A material or a collection of materials which is under study is called	A. State function B. Degree and joule C. Degree and ergs D. Calorie and joule
10	Most of the reaction which give stable products are	A. Exothermic B. Endothermic C. Isothermal D. None of these
11	What happens to the enthalpy change when the coefficients of a chemical equation are doubled	A. It doubles B. It becomes half C. It does not change D. It cannot be predicted
12	At constant volume of a system remains constant and the heat is absorbed by the system, then amount of heat absorbed is called	A. Enthalpy change of the system B. Internal energy change of the system C. Total enthalpy of the system D. Total internal energy of the system
13	Question Image	A. Joule $\text{Cm}^3 \text{degree}^{-1}$

14	The S.I. units for the molar heat capacity are	B. $\text{Joule deg}^{-1}\text{atm}^{-1}$ C. $\text{Joule deg}^{-1}\text{mol}^{-1}$ D. $\text{Joule deg}^{-1}\text{kg}^{-1}$
15	The net change in a chemical reaction is same whether it takes place directly or indirectly is	A. Henry's law B. Charles's C. Hess's law D. Graham's law
16	One of the following statements about Born-Haber cycle is correct. Which is that statement	A. Born-Haber cycle is different from Hess's law B. The energy change in a cyclic process is not zero C. The lattice energy of the crystalline substances can be calculated easily D. Heat of formation of the product and the lattice energy of the substance can be calculated simultaneously
17	Whenever a reaction is endothermic, then it means that	A. Heat is transferred from surrounding to the system B. Heat is transferred system to the surrounding C. Heat content of the product is greater than that of reactants D. Heat content of the reactants is greater than the products
18	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air.	A. Remains constant B. Increase C. Decrease D. Remain unchanged
19	In endothermic reactions, the heat content of the.	A. Products is more than that of reactants. B. Reactants is more than that of products C. Both a and b D. Reactants and products are equal
20	For a given process, the heat changes of constant pressure and at constant volume are related to each other as.	A. $q_p = q_v$ B. $q_p < q_v$ C. $q_p > q_v$ D. None of these
21	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. Hess's law C. Joule's principle D. Law of conservation of energy
22	The change in heat energy of a chemical reaction at constant temperature and pressure is called.	A. Enthalpy change B. Bond energy C. Heat of sublimation D. Internal energy change
23	The pressure of oxygen inside the bomb calorimeter is.	A. 100 atm B. 50 atm C. 25 atm D. 20 atm
24	The Born-Haber cycle is the best application of law.	A. Boyle's B. Dalton's C. Hess's D. Graham's
25	The optimum temperature for the synthesis of $\text{NH}_3$ by Haber's process is.	A. $200^\circ\text{C}$ B. $300^\circ\text{C}$ C. $400^\circ\text{C}$ D. $500^\circ\text{C}$
26	A chemical change always involves	A. Absorption of heat B. Evolution of heat C. Either absorption or evolution of heat D. The liberation of heat and light energy
27	Which one of the following processes is endothermic	A. condensation of steam B. Freezing of water C. electrolysis of water D. None of these
		A. No change in temperature B. Heat absorbed

28	the value of $\Delta H$ and $\Delta E$ for liquids and solids is almost same because.	B. Heat absorbed C. No change in volume D. Heat evolved
29	Which of the following value of heat of formation indicates that the product is least stable.	A. -94 KJ B. -231.6 KJ C. +21.4 KJ D. +70 KJ
30	Spontaneous processes are mostly	A. Reversible B. Irreversible C. Not irreversible D. None of these
31	Which process is endothermic and spontaneous	A. Neutralization of NaOH with HCl B. Formation of $\text{NH}_3$ from $\text{H}_2$ and $\text{N}_2$ C. Formation of $\text{H}_2\text{O}$ from $\text{H}_2$ and $\text{O}_2$ D. Evaporation of sea water
32	The sum of all kinds of energies of atoms, ions or molecules of a system is known as.	A. Kinetic energy B. Potential energy C. Internal energy D. Solar energy
33	Which substance have $\Delta E = \Delta H$ and no pressure - volume work.	A. Liquids only B. Solids only C. Gases only D. Liquids and solids
34	Which is not is state function	A. Enthalpy B. Entropy C. Pressure D. work
35	Standard enthalpy of combustion of carbon is -394 kJ mol <sup>-1</sup> than, which is the standard enthalpy of formation of $\text{CO}_2$	A. +394 kJ B. -394 kJ C. 0 kJ D. +197 kJ
36	The standard heat of formation is measured at 1 atmosphere and	A. 0 °C B. 100 °C C. 293 °C D. 25 °C
37	Standard enthalpy change when one mole of compound is formed from their elements at standard state is.	A. Heat of formation B. Standard heat of formation C. Heat of combustion D. Standard Heat of neutralization
38	The heat contents of the system of known as.	A. Entropy B. Enthalpy C. Work D. Free energy
39	The enthalpy of combustion is	A. Positive B. Negative C. Either positive or negative D. No correlation
40	Which one of the following enthalpies is always an exothermic process.	A. Enthalpy of atomization B. Enthalpy of neutralization C. Enthalpy of ionization D. Enthalpy of dissociation
41	Born Haber cycle is used to determine the	A. Lattice energy B. Enthalpy of formation C. Enthalpy of ionization D. Enthalpy of dissociation