

MDCAT Chemistry Chapter 7 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	Which of the following processes has always. $\Delta H = -ve$	A. Formation of compound B. Dilution of a solution C. Dissolution of ionic compound D. Combustion
2	For an endothermic reaction, enthalpy of reactants	A. Is smaller than that of the products B. Is greater than that of the products C. Must be greater or smaller than that of the products D. Is equal to that of the products
3	The lattice energy of NaCl is	A. 787 j/ mole B. 790 kj/mol C. 780 kJ/ mol D. -787 kl / mole
4	$\Delta H = \Delta E$ is true for which of the following reaction	A. $K + H_2O \rightarrow KOH + H_2$ B. $N_2 + 3H_2 \rightarrow 2NH_3$ C. $AlCl_3 + 3NaOH \rightarrow Al(OH)_3 + 3NaCl$ D. $4Na + O_2 \rightarrow 2Na_2O$
5	Enthalpy of neutralization of strong acids and strong bases have same values because	A. Neutralization leads to the formation of salt and water B. Acids always give rise to H^+ and bases always furnish OH^- C. Strong acids and bases are ionic substances D. The net change involves the combination of H and OH ions to form water
6	One kilo calorie is equal to	A. 4.184J B. 1000J C. 4184J D. 1kJ
7	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air will	A. Remains constant B. Increase C. Decrease D. Either increase or decrease E. One Joule is equivalent to
8	Which of the following enthalpy change always have a negative value	A. ΔH_f B. ΔH_{sol} C. ΔH_c D. ΔH_{at}
9	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J
10	Neutralization of acid-base is	A. Spontaneous B. Exothermic C. Non spontaneous D. Both "a" and "c"
11	The net heat change in a chemical reaction is the 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 law D. Law of conservation of energy
12	The value of ΔV being very small. The term $P\Delta V$ can be neglected for process involving	A. Liquid and gas B. Solids and gases C. Liquid and solid D. None of these
13	One of the best applications of Hess's law to calculate the lattice energy of ionic compound is	A. Measurement of enthalpy change in a calorimeter B. Studying of first law of thermodynamics C. Measurement of a heat of formation of a compound D. Born-Haber cycle

14	During an exothermic or endothermic reaction which one of the following formula is used to calculate the amount of heat evolved or absorbed	<p>A. $\Delta H = \Delta E + PV$ B. $\Delta E = q + w$ C. $\Delta p = \Delta H$ D. $q = m \times s \times \Delta T$</p>
15	Enthalpy of a system can be calculated by which of following relationship	<p>A. $q = \Delta E$ B. $q = m \times S \times \Delta T$ C. $q = pv$ D. $q = m \times v \times \Delta T$</p>
16	What is not correct about ΔH_f	<p>A. It is always negative B. Its value gives an idea about the relative stability of reactants and the products. C. Its value can be greater or less than zero D. Value depends upon nature of bonds</p>
17	Total heat content of a system is called	<p>A. Internal energy B. Entropy C. Enthalpy D. All of these</p>
18	Born-Haber cycle is an application of	<p>A. Hess's law B. 1st law of thermodynamics C. Avogadro's law D. 1st law of thermochemistry</p>
19	Hess's law is analogous to	<p>A. Law of heat summation B. law of increasing entropy C. Law of heat exchange D. 1st law of thermodynamics</p>
20	Enthalpy of formation of one mole of ionic compound from gaseous ion under standard condition is called	<p>A. Gibb's energy B. Gibb's energy C. Bond energy D. Lattice energy</p>