

## MDCAT Chemistry Chapter 7 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	Whenever a reaction is endothermic, then it means that	<p>A. Heat is transferred system to the surrounding</p> <p>B. Heat is transferred from surrounding to the system</p> <p>C. Heat content of the products is less than that of reactants</p> <p>D. Heat content of the reactants is greater than the products</p>
2	One Joule is equivalent to	<p>A. 4.184 cal.</p> <p>B. 0.4184cal.</p> <p>C. 1/2 cal.</p> <p>D. 1/4.184 cal</p>
3	What is correct about heat of combustion	<p>A. It is applicable to gaseous substances only</p> <p>B. It is always negative</p> <p>C. It is always positive</p> <p>D. It is positive in some cases while negative in other</p>
4	The enthalpy of formation of a compound is	<p>A. Positive</p> <p>B. Either positive or negative</p> <p>C. Negative</p> <p>D. None</p>
5	Which of the following has positive value of enthalpy	<p>A. Neutralisation</p> <p>B. Atomization</p> <p>C. combustion</p> <p>D. All of the above</p>
6	The enthalpy change for the reaction $C_2H_2 + 5/2 O_2 \rightarrow 2CO_2 + H_2O$ is known as enthalpy of	<p>A. Fomation of <math>CO_2</math></p> <p>B. Fusion of <math>C_2H_4</math></p> <p>C. Combustion of <math>C_2H_4</math></p> <p>D. Vaporization of <math>C_2H_2</math></p>
7	According to Hess's law, the enthalpy change for a reaction	<p>A. Depends on path</p> <p>B. Independent of the path</p> <p>C. The sum of <math>\Delta E</math> and <math>\Delta H</math></p> <p>D. None of these</p>
8	For an endothermic reaction, enthalpy of reactants	<p>A. Is smaller than that of the products</p> <p>B. Is greater than that of the products</p> <p>C. Must be greater or smaller than that of the products</p> <p>D. Is equal to that of the products</p>
9	Enthalpy of formation of one mole of ionic compound form gaseous ion under standard condition is called	<p>A. Gibb's energy</p> <p>B. Gibb's energy</p> <p>C. Bond energy</p> <p>D. Lattice energy</p>
10	Hess's law is analogous to	<p>A. Law of heat summation</p> <p>B. law of increasing entropy</p> <p>C. Law of heat exchange</p> <p>D. Ist law of thermodynamics</p>
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	<p>A. Henry's law</p> <p>B. Hess's law</p> <p>C. joule's law</p> <p>D. Law of conservation of energy</p>
12	The value of $\Delta V$ being very small. The term $P\Delta V$ can be neglected for process involving	<p>A. Liquid and gas</p> <p>B. Solids and gases</p> <p>C. Liquid and solid</p> <p>D. None of these</p>
13	The change in enthalpy when one mole of a substance is dissolved in a specified quantity of solvent at a given temperature is called	<p>A. Heat of reaction</p> <p>B. Heat of solvation</p> <p>C. Heat of combustion</p> <p>D. Heat of solvent</p>
14	A system absorbs 100 kJ heat and performs 50 kJ work on the surroundings. The increase in internal energy of the system is	<p>A. 50kJ</p> <p>B. 100 kJ</p> <p>C. 150kJ</p> <p>D. -----</p>

		D. 5000 kJ
15	Total heat content of a system is called	A. Internal energy B. Entropy C. Enthalpy D. All of these
16	The values of $\Delta H$ for the process $I(g) + e^{-1} \rightarrow I^{-1}(g)$ is:	A. $>0$ B. $<0$ C. 0 D. None
17	Enthalpy of a reaction can be measured by	A. Glass calorimeter B. Barometer C. Manometer D. Thermometer
18	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
19	The enthalpies of all elements in their standard states are	A. Unity B. always +ve C. always -ve D. zero
20	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J