

## MDCAT Chemistry Chapter 7 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	Total heat content of a system is called	A. Internal energy B. Entropy C. Enthalpy D. All of these
2	The heat of reaction depends upon	A. Temperature of the reactants B. Physical states of the reactants and the products C. Both A) and B) D. Path of the reaction and the temperature
3	If a reaction involves only solids and liquids, which of the following is true?	A. $\Delta H = \Delta E$ B. $\Delta H = \Delta E$ C. $\Delta H > \Delta E$ D. $\Delta H = \Delta E + nRT$
4	Hess's law is analogous to	A. Law of heat summation B. law of increasing entropy C. Law of heat exchange D. 1st law of thermodynamics
5	Most of the reactions which give stable products are	A. Endothermic B. Exothermic C. Isothermal D. Non of these
6	How much heat is absorbed by 100 g of water when its temperature decreases from 25°C to 5°C? (heat capacity is 4.2 J/gK)	A. 84,000J B. 2000/4.2J C. -2000/4.2j D. -8400J
7	Enthalpy of a system can be calculated by which of following relationship	A. $q = \Delta E$ B. $q = m \times S \times \Delta T$ C. $q = pv$ D. $q = m \times v \times \Delta T$
8	One Joule is equivalent to	A. 4.184 cal. B. 0.4184cal. C. 1/2 cal. D. 1/4.184 cal
9	A system absorbs 100 kJ heat and performs 50 kJ work on the surroundings. The increase in internal energy of the system is	A. 50kJ B. 100 kJ C. 150kJ D. 5000 kJ
10	What is correct about heat of combustion	A. It is applicable to gaseous substances only B. It is always negative C. It is always positive D. It is positive in some cases while negative in other
11	Choose from the followings the correct statement about Born Haber cycle	A. Born Haber cycle is different from Hess's law B. The energy changes in a cyclic process is not zero C. The lattice energy of crystalline substances can be calculated easily D. None
12	If internal energy of the system is increased	A. Change in state of the system may occur B. Temperature of the system may rise C. Chemical reaction may take place D. All of these
13	Calorie is equivalent to	A. 0.4184J B. 4.184J C. 418.4J D. 40.18J
		A. Evaporation

14	The exothermic process is	<p>B. Sublimation  C. Respiration  D. Boiling</p>
15	Whenever a reaction is endothermic, then it means that	<p>A. Heat is transferred system to the surrounding  B. Heat is transferred from surrounding to the system  C. Heat content of the products is less than that of reactants  D. Heat content of the reactants is greater than the products</p>
16	Which of the following processes has always. $\Delta H = -ve$	<p>A. Formation of compound  B. Dilution of a solution  C. Dissolution of ionic compound  D. Combustion</p>
17	The enthalpy change $\Delta H$ of a process is given by the relation	<p>A. <math>\Delta H = \Delta E + P\Delta V</math>  B. <math>\Delta H = \Delta E + W</math>  C. <math>\Delta H = \Delta E - \Delta nRT</math>  D. <math>\Delta E = \Delta H + P\Delta V</math></p>
18	$\Delta H^\circ$ represent the enthalpy change at	<p>A. <math>0^\circ\text{C}</math> and 1 atm pressure  B. <math>25^\circ\text{C}</math> and 1 atm  C. <math>0\text{K}</math> and 1 atm pressure  D. <math>25^\circ\text{C}</math> and 2 atm pressure</p>
19	The enthalpy change for the reaction $\text{C}_2\text{H}_2 + 5/2 \text{O}_2 \rightarrow 2\text{CO}_2 + \text{H}_2\text{O}$ is known as enthalpy of	<p>A. Formation of <math>\text{CO}_2</math>  B. Fusion of <math>\text{C}_2\text{H}_4</math>  C. Combustion of <math>\text{C}_2\text{H}_2</math>  D. Vaporization of <math>\text{C}_2\text{H}_2</math></p>
20	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air will	<p>A. Remains constant  B. Increase  C. Decrease  D. Either increase or decrease  E. One Joule is equivalent to</p>