

MDCAT Chemistry Chapter 7 Chemical Equilibrium Online Test

Sr	Questions	Answers Choice
1	The measurement of enthalpy change at standard conditions means that we should manage the measurement at	A. 24°C at 1 atm B. 25°C at 1 atm C. 0C° at 1 atm D. 100C° 1 atm
2	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
3	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
4	Total heat content of a system is called	A. Internal energy B. Entropy C. Enthalpy D. All of these
5	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
6	Which of the following has positive value of enthalpy	A. Neutralisation B. Atomization C. combustion D. All of the above
7	Enthalpy of a reaction can be measured by	A. Glass calorimeter B. Barometer C. Manometer D. Thermometer
8	The enthalpy of formation of a compound is	A. Positive B. Either positive or negative C. Negative D. None
9	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. $q=m \times v \times \Delta T$
10	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
11	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
12	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. $\Delta H = \Delta E + nRT$
13	During an exothermic or endothermic reaction which one of the following formula is used to calculate the amount of heat evolved or absorbed	A. $\Delta H = \Delta E + PV$ B. $\Delta E = q + w$ C. $\Delta p = \Delta H$ D. $q = m \times s \times \Delta T$
14	Enthalpy of neutralization (ΔH°_n) per mole of $H_2SO_4 / Ba(OH)_2$ is	A. +57.4 kJmol ⁻¹ B. -114.8 kJmol ⁻¹ C. -57.4 kJmol ⁻¹ D. 57.4 kJmol ⁻¹

D. -57.4 kJmol^{-1}

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| 15 | 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. $2000/4.2\text{J}$
C. $-2000/4.2\text{j}$
D. -8400J |
| 16 | In order to determine ΔH (latt) of ionic compound which is correct relationship | A. $\Delta H \text{ latt.} = \Delta H_f - \Delta H_x$
B. $\Delta H \text{ latt.} = \Delta H_a + \Delta H_v$
C. $\Delta H \text{ latt.} = \Delta H_f + \Delta H_x$
D. $\Delta H \text{ latt.} = \Delta H_f - \Delta H \text{ sol.}$ |
| 17 | Calorie is equivalent to | A. 0.4184J
B. 4.184J
C. 418.4J
D. 40.18J |
| 18 | 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 |
| 19 | The lattice energy of NaCl is | A. 787 j/ mole
B. 790 kj/mol
C. 780 kj/ mol
D. -787 kl/ mole |
| 20 | Neutralization of acid-base is | A. Spontaneous
B. Exothermic
C. Non spontaneous
D. Both "a" and "c" |