

## ECAT Chemistry Chapter 7 Thermo Chemistry

Sr	Questions	Answers Choice
1	In a chemical change, the energy in the form of heat will either be evolved or absorbed and this is called	A. Endothermic B. Heat of products C. Exothermic reaction D. Heat of reaction
2	Which of the following statements is contrary to the first law of thermodynamics?	A. Energy can neither be created nor destroyed. B. One form of energy can be transferred into an equivalent amount of the kinds of energy. C. In a adiabatic process, the work done is independent of its path. D. Continuous production of mechanical work without supplying an equivalent amount of heat is possible.
3	When a piece of zinc is added to the copper sulphate solution, _____ colour of solution disappear	A. Pink B. Purple C. Blue D. Brown
4	For the reaction : $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ the change in enthalpy is called:	A. Heat of reaction. B. Heat of formation. C. Heat of neutralization. D. Heat of combustion.
5	When a system absorbs energy, the sign of delta E is	A. Neither positive nor negative B. Negative C. Positive D. None of above
6	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air	A. remains constant B. increases C. decreases D. remain unchanged
7	Burning of coal and hydrocarbon in air are examples of	A. Non-spontaneous reaction B. Spontaneous reaction C. Natural reaction D. Both b and c
8	The majority of reactions which give stable products are	A. Exothermic B. Isothermal C. Endothermic D. Both a and c
9	Calorie is equivalent to	A. 0.4184 J B. 41.84 J C. 4.184 J D. 418.4 J
10	When a piece of zinc is added to the copper sulfate solution, _____ color of solution disappear.	A. Pink. B. Purple. C. Blue. D. Brown.
11	A reaction will also be called a spontaneous if :	A. It does not need energy to start with. B. It needs energy to carry the whole process. C. It needs energy at the end of reaction. D. It needs energy to start with.
12	The reaction of Zinc with copper sulphate solution is an example of	A. Oxidation reduction reaction B. Spontaneous reaction C. Spontaneous redox reaction D. Non-spontaneous reaction
13	If an endothermic reaction is allowed to take place very rapidly in air, the temperature of the surrounding air	A. Remains constant B. Decreases C. Increases D. Fluctuates rapidly

14	The change in heat energy of a chemical reaction at constant temperature and pressure is called	A. enthalpy change B. heat of sublimation C. bond energy D. internal energy change
15	The change in heat energy of a chemical reaction at constant temperature and pressure is called :	A. Enthalpy change. B. Seat of sublimation. C. Bind energy. D. Internal energy change.
16	A process which takes place on its own without any outside assistance and moves from a non-equilibrium state towards an equilibrium state is termed as	A. Spontaneous process B. Natural process C. Non-spontaneous process D. Both a and b
17	Which one of the following is not related to spontaneous process	A. Unidirectional B. Real C. Irreversible D. Artificial
18	It is noticed that energy in the form of heat is either evolved or absorbed as a result of a:	A. Physical change. B. Chemical change. C. Biological change. D. All of above.
19	Neutralization of a strong acid with a strong base is:	A. Natural acid base reaction. B. Artificial acid base reaction. C. Spontaneous acid base reaction. D. Both (a) and (c).
20	A reaction will also be called a spontaneous if	A. It does not need energy to start with B. It needs energy to carry the whole process C. It needs energy at the end of reaction D. It needs energy to start with