

ECAT Chemistry Chapter 7 Thermo Chemistry

Sr	Questions	Answers Choice
1	When a piece of zinc is added to the copper sulfate solution, _____ color of solution disappear.	A. Pink. B. Purple. C. Blue. D. Brown.
2	One mole of oxygen confined in a cylinder fitted with a piston is an example of	A. Surrounding B. System and surrounding C. System D. State function
3	The reaction of zinc with the copper sulfate solution is an example of.	A. Oxidation reduction reaction. B. Spontaneous reaction. C. Spontaneous redox reaction. D. Non-spontaneous reaction.
4	For a given process, the heat changes at constant volume (q_v) are related to other as:	A. $q_p = q_v + \Delta nRT$ B. $q_p = q_v - \Delta nRT$ C. $q_p = q_v + \Delta nRT$ D. $q_p = q_v - \Delta nRT$
5	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
6	A state function is a	A. Microscopic property B. Macroscopic C. Unique property D. Both a and c
7	The real or imaginary surface separating the system from the surrounding is called	A. Imaginary line B. Boundary C. Real line D. All of above
8	Reaction between Zn and CuSO_4 can be called a system under	A. Surrounding B. Observation C. system D. None of above
9	Which of the following statements is contrary to the first law of thermodynamics?	A. Energy can neither be created no 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.
10	In endothermic reactions, the heat content of the:	A. Products is more than that of reactants. B. Reactants is more than than to products. C. Both (a) and (b). D. Reactants and products are equal.
11	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
12	When a system absorbs energy, the sign of ΔE is	A. Neither positive nor negative B. Negative C. Positive D. None of above
13	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

14	The study of heat changes accompanying a chemical reaction is known as :	A. Thermochemistry. B. Biochemistry. C. Physical chemistry. D. Analytical chemistry.
15	Which one of the following is not related to spontaneous process	A. Unidirectional B. Real C. Irreversible D. Artificial
16	The study of heat changes accompanying a chemical reaction is known as	A. Thermochemistry B. Biochemistry C. Physical chemistry D. Analytical chemistry
17	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).
18	The majority of reactions which give stable products are	A. Exothermic B. Isothermal C. Endothermic D. Both a and c
19	Some Non-spontaneous process can be made to take place by supplying energy to the system from :	A. Internal source. B. Any source. C. External source. D. All of above.
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.