

ECAT Chemistry Chapter 7 Thermo Chemistry

Sr	Questions	Answers Choice
1	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
2	By comparing both initial and final states of the system, we can describe the change taking place in the	A. Surrounding B. Both a and c C. System D. None of above
3	Which one of the following is not related to spontaneous process.	A. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">Unidirectional.<sup><o:p></o:p></sup></p></p> B. Real. C. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">Irreversible.<sup><o:p></o:p></sup></p></p> D. Artificial.
4	In endothermic reactions, the heat contents of the:	A. Products equal to the reactants. B. Reactants more than that of products. C. Products more than that of reactants D. Both (b) and (c)
5	A reaction will also be called a spontaneous if :	A. It does no 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 stat with.
6	For a given process, the heat changes at constant volume (q_v) are related to other as:	A. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">q<sub>p</sub>=<sub>v</sub></p><sup><o:p></o:p></sup></p></p> B. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">q<sub>p</sub><sup><o:p></o:p></sup></p></p> C. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">q<sub>p</sub><sup><o:p></o:p></sup></p></p> D. <p style="font-size: 10.5pt; margin: 0;"><p class="MsoNormal">q<sub>p</sub>=q<sub>v</sub>/2</p><sup><o:p></o:p></sup></p></p>
7	Neutralization of a strong acid with a strong abase is:	A. Natural acid base reaction. B. Artificial acid base reaction. C. Spontaneous acid base reaction. D. Both (a) and (c).
8	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.
9	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.
10	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.
11	It is noticed that energy in the from of heat is either evolved or absorbed as a result of a:	A. Physical change. B. Chemical change. C. Biological change. D. None of these

		D. All of above.
12	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
13	The net heat in a chemical reaction is same, whether it is brought about in two or more different ways in one or several steps. It is known as	A. Henry's law B. Joule's principle C. Hess's law D. law of conservation of energy
14	Which of the following statements is contrary to the first law of themodynamics	A. Energy can neither be created nor destroyed B. One form of energy can be transferred into an equivalent amount of other kinds of energy C. In an adiabatic process, the work done is independent of its path D. Continuous production of mechanical work without supplying and equivalent amount of heat is possible
15	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
16	Which one of the following is not related to spontaneous process	A. Unidirectional B. Real C. Irreversible D. Artificial
17	When no work is done by the system	A. The volume of system decreases B. The volume of system increases C. The volume of system does not change D. None of above
18	When a piece of zinc is added to the copper sulfate solution, _____ color of solution disappear.	A. Pink. B. Purple. C. Blue. D. Brown.
19	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air:	A. Remains constant. B. Increase. C. Decreases. D. Remain unchanged.
20	A state function is a	A. Microscopic property B. Macroscopic C. Unique property D. Both a and c