

Chemistry General Science Test Hard Mode

Sr	Questions	Answers Choice
1	The equilibrium constant in a reversible chemical reaction at a given temperature	A. Depends on the initial concentration of the reactants B. Depends on the concentration of one of the products at equilibrium C. Does not depend on the initial concentrations of reactants D. Is not characteristic of the reaction
2	The relative rates of diffusion of a gas (Mol. wt. = 98) as compared to hydrogen will be	A. 1/7 B. 1/5 C. 1/4 D. 1
3	All the naturally occurring processes proceed spontaneously in a direction which lead to	A. Decrease of entropy B. Increase of enthalpy C. Increase of free energy D. Decrease of free energy
4	Fluorine does not show positive oxidation states due to the absence of	A. d-orbitals B. s-orbitals C. p-orbitals D. None
5	An endothermic reaction is one in which	A. Heat is converted into electricity B. Heat is absorbed C. Heat is evolved D. Heat is converted into mechanical work
6	Which of the following statements is most appropriate about effective nuclear charge? It depends upon	A. The shielding constant B. The atomic number C. The charge on the nucleus D. Both the nuclear charge and the shielding constant
7	Setting of cement is an	A. Exothermic reaction B. Endothermic reaction C. Neither exothermic nor endothermic D. None
8	A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent the atomic mass of the metal is	A. 10 B. 50 C. 30 D. 96.5
9	Which metal is protected by a layer of its own oxide?	A. Al B. Ag C. Au D. Fe
10	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
11	With increasing principle quantum number the energy difference between adjacent energy levels in H atom	A. Decreases B. Increases C. Remains constant D. Decreases for low value of Z and increases for higher value of Z.
12	A zero order reaction is one whose rate is independent of	A. Temperature of the reaction B. The concentration of the reactants C. The concentration of the products D. The material of the vessel in which the reaction is carried out
13	The osmotic pressure of solution increases if	A. Temperature is decreased B. Solution constant is increased C. Number of solute molecules are increased D. Volume is increased
		A. CH ₂ = CHCl B. ClCH = CHCl C. CH ₂ = CCl ₂ D. CCl ₂ = CCl ₂

14	The addition of HBr is easiest with	C. $\text{CH}_3 - \text{CH} = \text{CH}_2$ D. $(\text{CH}_3)_2\text{C} = \text{CH}_2$
15	Which one of the following elements occurs free in nature?	A. N B. P C. As D. Sb
16	If the solvent is inflammable for heating purpose we use	A. Ice bath B. Water bath C. Wire gauze D. Thermostat
17	Carbon atom holding halogen in aryl halides is	A. sp^2 -hybridised B. sp^3 C. sp D. sp^3d -hybridised
18	A cell constant is generally found by measuring the conductivity of aqueous solution of	A. BaCl_2 B. KCl C. NaCl D. MgCl_2
19	Which is the most volatile compound?	A. HI B. HCl C. HBr D. HF
20	When sulphur is boiled with Na_2SO_3 solution the compound formed is	A. Sodium sulphides B. Sodium sulphates C. Sodium persulphate D. Sodium thiosulphate