

Chemistry General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Water (H ₂ O) is liquid while hydrogen sulphide (H ₂ S) is a gas because	A. Water has higher molecular weight B. Hydrogen sulphide is a weak acid C. Sulphur has high electronegativity than oxygen D. Water molecules associate through hydrogen bonding.
2	The rate of reaction between A and B increases by a factor of 100 when the concentration with respect to A is increased 10 folds the order of reaction w.r.t A is	A. 10 B. 1 C. 4 D. 2
3	Most common reactions of benzene and its derivatives are	A. Electrophilic addition reactions B. Electrophilic substitution reactions. C. Nucleophilic addition reactions D. Nucleophilic substitution reactions
4	The molal elevation constant is the ratio of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solute D. Mole fraction of solvent
5	Which has the largest radius?	A. CO ³⁺ B. Mn ³⁺ C. Fe ³⁺ D. Cr ³⁺
6	Which one of the following compounds does not exist?	A. NCl ₅ B. AsF ₅ C. SbCl ₅ D. PF ₅
7	Natural fertilizer from plants and animals provide nitrogen	A. 1.5 kg B. 3.0 kg C. 4.5 kg D. 6 kg
8	Portland cement is manufactured by using	A. Limestone, clay and sand B. Limestone, gypsum and sand C. Limestone, gypsum and alumina D. Limestone, clay and gypsum
9	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
10	Among alkali metal salts, the lithium salts are the poorest conductors of electricity in aqueous solution because of	A. Easy diffusion of Li ⁺ ions B. Lower ability of Li ⁺ ions to polarize water molecules C. Lowest charge to radius ratio D. Higher degree of hydration of Li ⁺ ions.
11	2 g oxygen contains number of atoms equal to that in	A. 0.5 g of hydrogen B. 4 g of sulphur C. 7 g of nitrogen D. 2.3 g of sodium
12	Evaporation of water is	A. An exothermic change B. An endothermic change C. A process where no heat changes occur D. A process accompanied by chemical
13	According to MO Theory the species O ₂ ⁺ possesses	A. Bond order of 2.5 B. Three unpaired electrons C. Diamagnetic character D. Stability lower than O ₂

14	Which of the following is different from the other three oxides?	<p>A. MgO B. SnO C. ZnO D. Cr_2O_3</p>
15	The unit of rate constant for a zero order reaction is	<p>A. Liter sec^{-1} B. $\text{Liter mol}^{-1}\text{sec}^{-1}$ C. $\text{Mol liter}^{-1}\text{sec}^{-1}$ D. Mol sec^{-1}</p>
16	A chemical reaction A \rightleftharpoons B is said to be in equilibrium when	<p>A. Complete conversion of A to B has taken place B. Conversion of A to B is only 50% complete C. Only 10% conversion of A to B has taken place D. The rate of transformation of A to B is just equal to rate of transformation of B to A in the system</p>
17	Which one of the following elements occurs free in nature?	<p>A. N B. P C. As D. Sb</p>
18	Acetic anhydride is obtained from acetyl chloride by the reaction of	<p>A. P_2O_5 B. H_2SO_4 C. CH_3COONa D. CH_3COCH_3</p>
19	Which of the following species participate in sulphonation of benzene ring?	<p>A. H_2SO_4 B. HSO_3^- C. SO_3 D. SO_2</p>
20	Which of the following statement is correct if the intermolecular forces in liquids A, B and C are in the order $A < B < C$?	<p>A. B evaporates more readily than A B. B evaporates less readily than C C. A and B evaporates at the same rate D. A evaporates more readily than C</p>