

## Chemistry General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Which species represents the electrophile in aromatic nitrotaion?	A. NO <sup>+</sup> <sub>2</sub> B. NO <sup>-</sup> <sub>2</sub> C. NO <sub>2</sub> D. NO <sub>2</sub>
2	In a crystal $a \neq b \neq c$ , $\alpha = \gamma = 90^\circ$ and $\beta \neq 90^\circ$ , it is	A. Monoclinic B. Rhombic C. Trigonal D. Tetragonal
3	The effect of increasing the pressure on the following equilibrium $2A + 3B \rightleftharpoons 3A + 2B$ is	A. Forward reaction is favoured B. Backward reaction is favoured C. No effect D. None of the above
4	On heating acetaldehyde with ammonical silver nitrate solution we get	A. CH <sub>3</sub> COOH B. Silver acetate C. HCHO D. Silver mirror
5	Which of the following transition metal ions will have definite value of magnetic moment?	A. Sc <sup>3+</sup> B. Ti <sup>3+</sup> C. Cu <sup>+</sup> D. Zn <sup>2+</sup>
6	Which of the following mineral does not contain Al?	A. Cryolite B. Mica C. Feldspar D. Fluorspar
7	Which of the following method is most appropriate for the manufacture of methane?	A. By reduction of CH <sub>2</sub> CL <sub>2</sub> B. Wurtz reaction C. Liquification of natural gas D. None of these
8	Sodium thiosulfate is used in photography because of its	A. Oxidizing behaviour B. Reducing behaviour C. Complexing behaviour D. Photochemical behaviour
9	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
10	Which of the following statement is correct if the intermolecular forces in liquids A, B and C are in the order $A < B < C$ ?	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
11	Which of the substances Na, Hg, S Pt and graphic can be used as electrodes in electrolytic cells having aqueous solution?	A. Na,Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only
12	The rate of a reaction can be increased in general by all the factors except by	A. Using a catalyst B. Increasing temperature C. Increasing the activation energy

D. Increasing the conc. of reactants

13	Which of the following has linear shape?	A. $SP$ B. $SP^2$ C. $SP^3$ D. None of the above
14	The reference calomel electrode is made from which of the following?	A. $ZnCl_2$ B. $CuSO_4$ C. $Hg_2Cl_2$ D. $HgCl_2$
15	Which inorganic precipitate acts as semipermeable membrane?	A. Calcium sulphate B. Barium oxalate C. Nickel phosphate D. Copper ferrocyanide
16	Saturated solution of NaCl on heating becomes	A. Super saturated B. Unsaturated C. Remains saturated D. None
17	An exothermic reaction is one in which the reacting substances	A. Have more energy than the products B. Have less energy than the products C. Have the same energy as the products D. Are at a higher temperature than the products
18	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.
19	Formic acid is obtained when	A. Calcium acetate is heated with conc. $H_2SO_4$ B. Calcium formate is heated with calcium acetate C. Glycerol is heated with oxalic acid D. Acetaldehyde is oxidized with $K_2CrO_7$ and $H_2SO_4$
20	The spectrum of helium is expected to be similar to that of	A. H B. $Li^+$ C. Na D. $He^+$