NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	The movement of solvent molecules through a semipermeable membrane is called	A. Electrolysis B. Electrophoresis C. Osmosis D. Cataphoresis
2	The freezing point of 1 molal NaCl solution assuming NaCl to be 100% dissociated in water in	A. -1.86°C B. -3.72°C C. +1.86°C D. +3.72°C
3	The vapour density of a gas is 11.2 The volume occupied by 11.2 g of this gas at N.T.P is	A. 22.4 liters B. 11.2 liters C. 1 liter D. 2.24 liters
4	When quantity of electricity passed is one faraday then the mass deposited at the electrode is equal to	A. One gm. atomic weight B. One gm. Equivalent weight C. Electrochemical equivalent D. None of the above
5	The last orbit of argon would have electrons	A. 8 B. 18 C. 2 D. 6
6	Calcium acetate when dry distilled gives	A. Formaldehyde B. Acetaldehyde C. Acetone D. Acetic anhydride
7	The reaction/method that does not give an alkane is	A. Catalytic hydrogenation of alkanes B. Wurtz reaction C. Hydrolysis of alkyl magnesium bromide D. Dehydrohalogenation of an alkyl halid.
8	If a salt bridge is removed between the two half cells the voltage	A. Drops to zero B. Does not change C. Increases gradually D. Increases rapidly
9	Pollutant of automobile exhausts that affects nervous system/produces mental diseases is	A. Mercury B. Lead C. Nitrogen oxide D. Sulphur oxide
10	Isopropyl alcohol on oxidation forms	A. Acetone B. Ether C. Ethylene D. Acetaldehyde
11	Formic acid is obtained when	A. Calcium acetate is heated with conc.H₂SO₄ B. Calcium formate is heated with calcium acetate C. Glycerol is heated with oxalic acid D. Acetaldehyde is oxidized with K₂CrO₇and H₂SO₄
12	Tollen's reagent is	A. Ammonical cuprous chloride B. Ammonical cuprous oxide C. Ammonical silver bromide D. Ammonical silver nitrate
13	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.

14	Rusting of iron is catalysed by	A. Fe B. O₂ C. Zn D. H⁺
15	The number of unpaired electrons in the P-subshell of oxygen atom	A. 1 B. 2 C. 3 D. 4
16	One mole of a gas refers to	A. The number of molecules in one litre of gas B. The number of molecules in one gram of gas C. The number of molecules contained in 12 grams of ¹²C isotope D. The number of molecules in 22.4 liters of a gas at S.T.P.
17	How many moles of Helium gas occupy 22.4 L at $0^{o}C$ at 1 atm.Pressure?	A. 0.11 B. 0.90 C. 1.0 D. 1.11
18	Bromine is obtained on a commercial scale from	A. Caliche B. Carnallite C. Common satl D. Cryolite
19	Setting of cement is an	A. Exothermic reaction B. Endothermic reaction C. Neither exothermic nor endothermic D. None
20	At 500 K the equilibrium constant for reaction cis-$C_2H_2Cl_2$ trans-$C_2H_2Cl_2$ is 0.6. At the same temperature the equilibrium constant for the reaction trans-$C_2H_2Cl_2$ cis-$C_2H_2Cl_2$ will be	A. 0.60 B. 1.67 C. 0.66 D. 2.6