NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	When $KClO_3$ is heated it decomposes into KCl and O_2 if some MnO_2 is added the reaction goes much faster because	A. MnO₂ decomposes to give O₂ B. MnO₂ provides heat by reacting C. Better contact is provided by MnO₂ D. MnO₂ acts as a catalyst
2	The halide which is not hydrolysed is	A. SiCl₄ B. SiF₄ C. CCl₄ D. PbCl₄
3	Which of the following value of ΔHf° represent that the product is least stable?	A. -94.0 kcal mol⁻¹ B. -231.6 kcal mol⁻¹ C. +21.4 kcal mol⁻¹ D. +64.8 kcal mol⁻¹
4	Which of the following transition metal ions will have definite value of magnetic moment?	A. Sc³⁺ B. Ti³⁺ C. Cu⁺ D. Zn²⁺
5	Hess's law deals with	A. Changes in heat or reaction B. Rate of reaction C. Equilibrium constant D. Influence of pressure on volume of a gas
6	The valence orbital configuration of an element with atomic number 23 is	A. 3d⁵ B. 3d³, 4s² C. 3d³,4s¹,4p¹ D. 3d²,4s²,4p¹
7	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
8	The kinetic theory of gases predicts that total kinetic energy of a gaseous assembly depends on	A. Pressure of the gas B. Temperature of the gas C. Volume of the gas D. Pressure temperature and volume of the gas
9	Ozone is not	A. An allotrope B. A powerful oxidizing agent C. Paramagnetic D. A bent molecule

10	Potassium is kept in	A. Water B. Ammonia C. alcohol D. Kerosene E.
11	Which one is not a pollutant normally?	A. Hydrocarbons B. Carbon dioxide C. Carbon monoxide D. Sulphur dioxide
12	The percentage of nitrogen in urea is	A. 46 B. 60 C. 70 D. 80
13	Potassium crystallizes with a	A. Orthogonal lattice B. Cubic lattice C. Triclinic D. Ortho rhombic lattice
14	The unit of rate constant for a zero order reaction is	A. Liter sec⁻¹ B. Liter mol⁻¹sec⁻¹ C. Mol liter⁻¹sec⁻¹ D. Mol sec⁻¹
15	The number of oxygen atoms in 4.4 g of CO_2 is approximately	A. 1.2 x 10²³ B. 6 x 10²² C. 6 x 10²³ D. 12 x 10²³
16	Magnesium keeps on burning in	A. N₂ B. CO₂ C. N₂O D. N₂ as well as CO₂
17	A solution of sodium sulphate was electrolysed using some inert electrodes.The products at the electrodes are	A. O₂, H₂ B. O₂, Na C. O₂, SO₂ D. O₂, S₂O²-₈
18	Cannizzaro reaction is not given by	A. Trimethyl acetaldehyde B. Acetaldehyde C. Benzaldehyde D. Formaldehyde
19	Covalent compounds are soluble in	A. Polar solvents B. Non-polar solvents C. Concentrated acids D. All solvents
20	Sea weeds are important source of	A. Iron B. Chlorine C. Iodine D. Bromine