NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	Octane number is zero for	A. n-Heptane B. Isooctane C. n-Hexane D. Isoheptane
2	Which of the following alcohols cannot be produced by treatment of aldehydes or ketones with $NaBH_4$ or $LiAlH_4$?	A. 1-Propanol B. 2-Propanol C. 2-Methyl-2-propanol D. Ethanol
3	Which of the following method is most appropriate for the manufacture of methane?	A. By reduction of CH2CL2 B. Wurtz reaction C. Liquification of natural gas D. None of these
4	1 mole of CH_4 contains	A. 6.02 x 10²³ atoms of H B. 4 g-atom of hydrogen C. 1.81 x 1023 molecules of CH₄ D. 3.0 g of carbon
5	Which of the following has least mass?	A. 2 gram atom of nitrogen B. 3 x 10²³ atoms of C C. 1 mole of S D. 7.0 g of Ag.
6	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
7	Sodium thiosulfate is used in photography because of its	A. Oxidizing behaviour B. Reducing behaviour C. Complexing behaviour D. Photochemical behaviour
8	Addition of iron filling to $CuSO_4$ solution caused precipitation of Cu awing to the	A. Reduction of Cu²⁺ B. Oxidation of Cu²⁺ C. Reduction of Fe D. Reduction of Fe³⁺
9	The following has zero valency	A. Na B. Be C. Al D. Kr
10	In which of the following elements +1 oxidation state is more stable than +3	A. B B. Al C. Ga D. Ti
11	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 recatants D. Is not characteristic of the reaction
		A. Sp²-hybridesed

12	Carbon atom holding halogen in aryl halides is	B. Sp³-hybridesed C. Sp-hybridesed D. Sp³d -hybridesed
13	Water (H2O) is liquid while hydrogen sulphide (H_2S) 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.
14	The number of atoms in 0.0004 g of magnesium is close to	A. 24 B. 2 x 10²⁰ C. 10²⁰ D. 6.02 x 10²³
15	The reference calomel electrode is made from which of the following?	A. ZnCl₂ B. CuSO₄ C. Hg₂Cl₂ D. HgCl₂
16	The alkali metal which is liquid at 15°C is	A. K B. Cs C. Na D. None
17	The movement of solvent molecules through a semipermeable membrane is called	A. Electrolysis B. Electrophoresis C. Osmosis D. Cataphoresis
18	Propyne on hydrolysis in presence of H_2SO_4 and $HgSO_4$ gives	A. Acetaldehyde B. Actone C. Formaldehyde D. None
19	The disaccharide present in milk is	A. Sucrose B. Maltose C. Lactose D. Cellobiose
20	During the folding of filter paper the apex form angle of about	A. 80^o B. 60^o C. 180^o D. 90^o