

NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	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
2	The valence orbital configuration of an element with atomic number 23 is	A. 3d ⁵ B. 3d ³ , 4s ² C. 3d ³ , 3d ³ , 4s ¹ , 4p ¹ D. 3d ² , 3d ² , 4s ² , 4s ² , 4p ¹
3	In the equilibrium $N_2 + 3H_2 - 2NH_3 + 22$ kcal the formation of ammonia is favoured by	A. Increasing the pressure B. Increasing the temperature C. Decreasing the pressure D. Adding ammonia
4	Which of the following reagent cannot be used for preparing alkyl chloride from alcohol?	A. HCl + anhyd. ZnCl ₂ B. NaCl C. PCl ₅ D. SOCl ₂
5	Calcium acetate when dry distilled gives	A. Formaldehyde B. Acetaldehyde C. Acetone D. Acetic anhydride
6	In crystal structure of sodium chloride the arrangement of Cl ions is	A. Fee B. Both fee and bcc C. Bee D. None of these
7	Which of the following halogens does not forms its oxyacids?	A. Fluorine B. Chlorine C. Bromine D. lodine
8	1 mole of CH ₄ contains	A. 6.02 x 10 ²³ atoms of HB. 4 g-atom of hydrogen C. 1.81 x 1023 molecules of CH ₄ D. 3.0 g of carbon
9	The relative rate of diffusion of a gas (molecular wright - 128) as compared to oxygen is	A. 2 times B. 1/4 C. 1/8 D. 1/2
10	In which of the following elements +1 oxidation state is more stable than +3	A. B B. Al C. Ga D. Ti
4.4		A. The number of molecules in one litre of gas B. The number of molecules in one gram of gas

11	One mole of a gas refers to	C. The number of molecules contained in 12 grams of ¹² C isotope D. The number of molecules in 22.4 liters of a gas at S.T.P.
12	Salol is prepared from	A. Salicylic acid and phenol B. Salicylic acid and methyl alcohol C. Both D. None
13	All the naturally occurring processes proceed spontaneously in a direction which lead to	A. Decrease of entropy B. Increase of enthalpy C. Increase of free energy D. Decrease of free energy
14	Which is the most volatile compound?	A. HI B. HCI C. HBr D. HF
15	Which of the following value of $\Delta H f^\circ$ represent that the product is least stable?	A94.0 kcal mol ^{-1 B231.6 kcal mol⁻¹ C. +21.4 kcal mol⁻¹ D. +64.8 kcal mol⁻¹ D. +64.8 kcal mol⁻¹}
16	Which of the following units represents largest amount of energy?	A. Calorie B. Joule C. Erg D. Electron vol.
17	Natural fertilizer provides potassium in the form of K_2O (potash)	A. 1.5 kg B. 3 kg C. 4.5 kg D. 6.5 kg
18	The halide which is not hydrolysed is	A. SiCl ₄ B. SiF ₄ C. CCl ₄ D. PbCl ₄
19	Vital force theory was rejected by	A. Berzelius B. Kolbe C. Wholer D. Lavoiser <div></div>
20	The structure of XeF ₆	A. Distorted octahedral B. Pyramidal C. Tetrahedral D. None of the above