

NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	Which of the following statements is most appropriate about effective nuclear charge? It depends upon	A. The shielding constant B. The atomic number C. The charge on the nucleus D. Both the nuclear charge and the shielding constant
2	Which of the following alkali metal hydroxides is the strongest base?	A. LiOH B. NaOH C. KOH D. CaOH
3	Which of the following will not change the concentration of ammonia in the equilibrium $N_2(g) + 3H_2(g) \rightleftharpoons 2NH_3(g)$: $\Delta H = -k_j$	A. Increase of pressure B. Increase of temperature C. Decrease of volume D. Addition of catalyst
4	The heats evolved in combustion of rhombic and monoclinic sulphur are - 70960 and -71030 cal mol ⁻¹ respectively what will be heat of conversion of rhombic sulphur to monoclinic?	A. 70960 calories B. 71030 calories C. -70 calories D. +70 calories
5	Which of the following halogens does not form its oxyacids?	A. Fluorine B. Chlorine C. Bromine D. Iodine
6	The equilibrium $Cr_2O_7^{2-} \rightleftharpoons 2CrO_4^{2-}$ is shifted to right in	A. An acidic medium B. A basic medium C. A neutral medium D. It does not exist
7	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
8	Which of the following compounds has the lowest anion to cation size ratio?	A. LiF B. NaF C. CsI D. CsF
9	The dimension of rate constant of a second order reaction involves	A. Neither time nor concentration B. Only time C. Time and concentration D. Time and square of concentration
10	Ozone is not	A. An allotrope B. A powerful oxidizing agent C. Paramagnetic D. A bent molecule
11	1 mole of CH ₄ contains	A. 6.02×10^{23} atoms of H B. 4 g-atom of hydrogen C. 1.81×10^{23} molecules of CH ₄ D. 3.0 g of carbon
12	Wt. of 112 ml of oxygen at NTP on liquefaction would be	A. 0.32 g B. 0.64 g C. 0.16 g D. 0.96 g
13	In a reversible chemical reaction having two reactants in equilibrium if the concentration of the reactants are doubled then the equilibrium constant will	A. Also be doubled B. Be halved C. Become one fourth D. Remains the same
14	Saturated solution of NaCl on heating becomes	A. Super saturated B. Unsaturated C. Remains saturated D. None

15	The symbol of the element whose atoms have the outer most electronic configuration $2s^2$ $2p^3$ is	B. Li C. P D. Na
16	Hydrolytic conversion of sucrose into glucose and fructose is known as	A. Induction B. Inversion C. Insertion D. Inhibition
17	The digestion of fats in the intestines is aided by	A. Diffusion B. Protection C. Peptization D. Emulsification
18	Which of the following belongs to the halogen family?	A. Francium B. Polonium C. Radium D. Astatine
19	When sulphur is boiled with Na_2SO_3 solution the compound formed is	A. Sodium sulphides B. Sodium sulphates C. Sodium persulphate D. Sodium thiosulphate
20	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