

## NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	Bragg's law is given by equation	A. $n\lambda = 2d \sin\theta$ B. $n\lambda = 2d \sin\theta$ C. $2n\lambda = d \sin\theta$ D. $n\lambda = 1/2 d \sin\theta$
2	Natural fertilizer provides potassium in the form of $K_2O$ (potash)	A. $1.5 \text{ kg}$ B. $3 \text{ kg}$ C. $4.5 \text{ kg}$ D. $6.5 \text{ kg}$
3	A cell constant is generally found by measuring the conductivity of aqueous solution of	A. $\text{BaCl}_2$ B. $\text{KCl}$ C. $\text{NaCl}$ D. $\text{MgCl}_2$
4	A chemical reaction A B is said to be in equilibrium when	A. Complete conversion of A to B has taken place B. Conversion of A to B is only 50% complete C. Only 10% conversion of A to B has taken place D. The rate of transformation of A to B is just equal to rate of transformation of B to A in the system
5	The digestion of fats in the intestines is aided by	A. Diffusion B. Protection C. Peptization D. Emulsification
6	The freezing point of 1 molal $\text{NaCl}$ solution assuming $\text{NaCl}$ to be 100% dissociated in water in	A. $-1.86^\circ\text{C}$ B. $-3.72^\circ\text{C}$ C. $+1.86^\circ\text{C}$ D. $+3.72^\circ\text{C}$
7	An endothermic reaction is one in which	A. Heat is converted into electricity B. Heat is absorbed C. Heat is evolved D. Heat is converted into mechanical work
8	The percentage of nitrogen in urea is	A. 46 B. 60 C. 70 D. 80
9	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 $^{12}\text{C}$ isotope D. The number of molecules in 22.4 liters of a gas at S.T.P.
10	Which of the following is a colligative property?	A. Melting point B. Osmotic pressure C. Freezing point D. Sublimation temperature
11	Which one of the following elements occurs free in nature?	A. $\text{N}$ B. $\text{P}$ C. $\text{As}$ D. $\text{Sb}$
12	The rate of reaction between A and B increases by a factor of 100 when the concentration of A is increased 10 folds. The order of reaction with respect to A is	A. 10 B. 1 C. 2

with respect to A is increased 10 folds the order of reaction w.r.t A is

- C. 4
- D. 2

13	The percentage of oxygen in NaOH is	A. 40 B. 60 C. 8 D. 10
14	The molal elevation constant is the ratio of the elevation in boiling point to	A. Molarity B. Molality C. Mole fraction of solute D. Mole fraction of solvent
15	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
16	The last orbit of argon would have electrons	A. 8 B. 18 C. 2 D. 6
17	Which of the following metal exhibits more than one oxidation?	A. Na B. Mg C. Fe D. Al
18	In which molecule carbon atom is $sp^2$ hybridized	A. $CH_4$ B. $C_2H_4$ C. $C_2H_2$ D. None of the above
19	Which of the substances Na, Hg, S Pt and graphic can be used as electrodes in electrolytic cells having aqueous solution?	A. Na,Pt and graphite B. Na and Hg C. Pt and graphite only D. Na and S only
20	Red lead is	A. $PbO$ B. $Pb_3O_4$ C. $PbO$ D. $Pb_2O_3$