

## NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	On heating acetaldehyde with ammonical silver nitrate solution we get	A. $\text{CH}_3\text{OH}$ B. Silver acetate C. $\text{HCHO}$ D. Silver mirror
2	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
3	With increasing principle quantum number the energy difference between adjacent energy levels in H atom	A. Decreases B. Increases C. Remains constant D. Decreases for low value of Z and increases for higher value of Z.
4	In which molecule carbon atom is $\text{sp}^2$ hybridized	A. $\text{CH}_4$ B. $\text{C}_2\text{H}_4$ C. $\text{C}_2\text{H}_2$ D. None of the above
5	Which of the following with aqueous KOH will give acetaldehyde?	A. 1,2-Dichloroethane B. 1,1-Dichloroethane C. Chloroacetic acid D. Ethyl chloride
6	The number of oxygen atoms in 4.4 g of $\text{CO}_2$ is approximately	A. $1.2 \times 10^{23}$ B. $6 \times 10^{22}$ C. $6 \times 10^{23}$ D. $12 \times 10^{23}$
7	Ethanol containing some methanol is called	A. Absolute spirit B. Rectified spirit C. Power alcohol D. Methylated spirit
8	A current of 9.65 ampere flowing for 10 minutes deposits 3.0 g of the metal which is monovalent the atomic mass of the metal is	A. 10 B. 50 C. 30 D. 96.5
9	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
10	Which of the following is different from the other three oxides?	A. $\text{MgO}$ B. $\text{SnO}$ C. $\text{ZnO}$ D. $\text{Cr}_2\text{O}_3$
11	The weight of 11.2 liters of $\text{CO}_2$ at S.T.P. would be	A. 88 g B. 44 g C. 32 g D. 22 g
12	Which has maximum protein content?	A. Ground nut B. Cow milk C. Egg D. Wheat
13	Phosphide ion has the electronic structure similar to that of	A. Nitride ion B. Fluoride ion C. Sodium ion D. Chloride ion
14	The movement of solvent molecules through a semipermeable membrane is called	A. Electrolysis B. Electrophoresis C. Osmosis

15 In a crystal  $a \neq b \neq c$ ,  $a = \gamma = 90^\circ$  and  $\beta \neq 90^\circ$ , it is

- A. Monoclinic
- B. Rhombic
- C. Trigonal
- D. Tetragonal

16 Acetic anhydride is obtained from acetyl chloride by the reaction of

- A.  $P_{2}O_{5}$
- B.  $H_2O$
- C.  $CH_3COONa$
- D.  $CH_3COCH_3$

17 Bragg's law is given by equation

- A.  $n \lambda = 2 d \sin \theta$
- B.  $n \lambda = 2 d \sin \theta$
- C.  $2n\lambda = d \sin \theta$
- D.  $n\lambda = 1/2 d \sin \theta$

18 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

19 Which of the following process is used to separate insoluble particles from liquids?

- A. Separation
- B. Filtration
- C. Crystallization
- D. Condensation

20 Which one is not a pollutant normally?

- A. Hydrocarbons
- B. Carbon dioxide
- C. Carbon monoxide
- D. Sulphur dioxide