

NAT I Medical Chemistry

Sr	Questions	Answers Choice
1	The carbon atoms in calcium carbide are held by	A. Ionic bonds B. 2 sigma bonds C. 2 covalent one co-ordinate bond D. 2 π and one σ bond
2	The treatment of benzene with isobutene in the presence of sulphuric acid give	A. Isobutyl benzene B. Tert-Butyl benzene C. n-Butyl benzene D. no reaction
3	Which of the following value of ΔH_f° represent that the product is least stable?	A. -94.0 kcal mol ⁻¹ B. -231.6 kcal mol ⁻¹ C. +21.4 kcal mol ⁻¹ D. +64.8 kcal mol⁻¹
4	The structure of XeF ₆	A. Distorted octahedral B. Pyramidal C. Tetrahedral D. None of the above
5	At room temperature formaldehyde is	A. Gas B. Liquid C. Solid D. None of the above
6	The symbol of the element whose atoms have the outer most electronic configuration 2s ² 2p ³ is	A. N B. Li C. P D. Na
7	Which of the following is acidic?	A. SO₃ B. N ₂ O C. BeO D. HgO
8	In a crystal $a \neq b \neq c$, $\alpha = \gamma = 90^\circ$ and $\beta \neq 90^\circ$, it is	A. Monoclinic B. Rhombic C. Trigonal D. Tetragonal
9	Reaction of ethylamine with chloroform in alcoholic KOH produces	A. CH ₃ OH B. CH ₃ NC C. C₂H₅NC D. C ₂ H ₅ CN
10	Hybridization explain the----- of orbitals	A. Type of Bonding B. Shapes C. Shape and Type of bonding D. None of above
11	Cyclone collector is used for minimizing	A. Radioactive pollution B. Air pollution C. Noise pollution D. Water pollution
12	On heating acetaldehyde with ammonical silver nitrate solution we get	A. CH ₃ OH B. Silver acetate C. HCHO D. Silver mirror
13	At 500 K the equilibrium constant for reaction cis-C ₂ H ₂ Cl ₂ trans-C ₂ H ₂ Cl ₂ is 0.6. At the same temperature the equilibrium constant for the reaction trans-C ₂ H ₂ Cl ₂ cis-C ₂ H ₂ Cl ₂ will be	A. 0.60 B. 1.67 C. 0.66 D. 2.6
14	Calcium acetate when dry distilled gives	A. Formaldehyde B. Acetaldehyde C. Acetone

		D. Acetic anhydride
15	In the manufacture of iron from haematite, limestone is added to act as.	A. Flux B. A reducing C. Slag D. An oxidizing agent.
16	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
17	The addition of HBr is easiest with	A. $\text{CH}_2 = \text{CHCl}$ B. $\text{ClCH} = \text{CHCl}$ C. $\text{CH}_3 - \text{CH} = \text{CH}_2$ D. $(\text{CH}_3)_2\text{C} = \text{CH}_2$
18	The unit of rate constant for a zero order reaction is	A. Liter sec^{-1} B. $\text{Liter mol}^{-1} \text{sec}^{-1}$ C. $\text{Mol liter}^{-1} \text{sec}^{-1}$ D. Mol sec^{-1}
19	Carbon monoxide is pollutant as it	A. Inactivates nerves B. Inhibits glycolysis C. Combines with oxygen D. Combines with hemoglobin
20	A certain liberate 0.5 g of hydrogen in 2 h. How many grams of copper can be liberated by the same current flowing for the same time in a copper sulphate solution?	A. 12.7 gm B. 15.9 gm C. 31.8 gm D. 63.5 gm