

ECAT Chemistry MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Which of the following is obtained when Fe reacts with dil. HNO_3 ?	A. N_2O B. NO C. NO_2 D. None of these
2	The value of activation energy E_a of a reaction can be determined from the value of slope of the straight line obtained by plotting a graph between $1/T$ and $\log k$. the value of E_a is equal to	A. Slope B. $1/\text{Slope}$ C. Slope $\times R$ D. Slope $\times 2.303 R$
3	Select from the following which one is alcohol?	A. $\text{CH}_3\text{-CH}_2\text{-OH}$ B. $\text{CH}_3\text{-O-CH}_2\text{-CH}_3$ C. CH_3COOH D. $\text{CH}_3\text{-CH}_2\text{-CH}_2\text{-Br}$
4	Hydrocarbons contain	A. C and S only B. C and H only C. C, H, and O only D. C, H, O and N only
5	Acetamide and NaOBr/OH^- produce	A. Ethanamine B. Methanamide C. CH_3CN D. NH_3
6	The element which has a simple cubic lattice in solid state is	A. Se B. Te C. Po D. None of these
7	Which is used in arc welding and cutting?	A. He B. Ne C. Ar D. Kr
8	In the electrolysis of fused bauxite ($\text{Al}_2\text{O}_3 \cdot 2\text{H}_2\text{O}$) with fused Cryolite (Na_3AlF_6) using carbon rods as anode. The product obtained at cathode is	A. Na metal B. F_2 gas C. Al metal D. O_2 gas
9	Alkyl benzenes are readily oxidized by acidified	A. KMnO_4 B. K_2CO_3 C. MnO_4^- D. H_2SO_4
10	Product of concentration of ions raised to the power equal to the co-efficient of ions in balanced equation for saturated solution of a salt is called	A. Ionic product B. Equilibrium constant C. K_w D. Solubility product (K_{sp})
11	How many isomers are possible for $\text{C}_2\text{H}_2\text{Cl}_2$	A. 3 B. 1 C. 2 D. 4
12	A solution of glucose in methanol in water has vapor pressure :	A. Equal that of water. B. Equal to that of methanol. C. More than that of water. D. Less than that of water.
13	Equal volumes of ethylene glycol (molar mass = 62) and water (molar mass = 18) are mixed. The depression in freezing point of water is (given K_f of water = $1.86 \text{ K mol}^{-1}\text{kg}$ and specific gravity of ethylene glycol is 1.11)	A. 0.003 B. 3.33 C. 0.333 D. 33.3
14	The driving force for making a bond is	A. To attain noble gas electronic configuration B. To make ionic compounds C. To make different compounds

D. To make gaseous substances

15 A molecule in which sp^2 hybrid orbitals are used by the central atom in forming covalent bonds in

- A. He_2
- B. SO_2
- C. PCl_5
- D. N_2

16 Which of the following will affect the rate :

- A. First step of reaction.
- B. Last step of reaction.
- C. Rate determining step.
- D. Fastest step.

17 Homogenous catalysis is that in which catalyst and reactants are in same phase. Which one of the following reaction is a homogenous catalysis

18 Acetone is oxidized with

- A. Tollen's reagent
- B. Fehling solution
- C. Acidic dichromate solution
- D. Benedicts solution

19 When electron jumps from $n_2 = 2, 3, 4, 5, \dots$ orbit to $n_1 = 1$ orbit in the hydrogen atom, the radiations emitted give the spectral lines

- A. Lyman series
- B. Balmer series
- C. Paschen series
- D. Brackett series

20 The proteins which are derived by conjugated proteins are called as

- A. Simple protein
- B. Complex protein
- C. Derived protein
- D. None