

ECAT Chemistry MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Its rate law of an equation is written as $\frac{dx}{dt} = k[A][B]$?	A. Reaction is independent of the concentration of A and B. B. Product is decreasing with passage of time. C. Reactant is increasing with passage of time. D. Reactant is increasing with passage of time.
2	Ethanal may be converted into a three-carbon acid in a two-step process. Which compound is the intermediate	A. $\text{CH}_3\text{CO}_2\text{H}$ B. CH_3CN C. $\text{CH}_3\text{CH}_2\text{CN}$ D. $\text{CH}_3\text{CH}(\text{OH})\text{CN}$
3	The following is an alcohol	A. $\text{CH}_3\text{-CH}_2\text{-OH}$ B. $\text{CH}_3\text{-O-CH}_3$ C. CH_3COOH D. All of these
4	Which reaction produces a free radical	A. S_N reaction B. Homolytic fission reaction C. Heterolytic fission reaction D. Addition reaction
5	Planar geometry of molecules is due to	A. sp^3 hybridization B. sp^2 hybridization C. sp hybridization D. p - p overlap
6	One of the following bonds is polar but compound is non-polar	A. H_2O B. NH_3 C. HCl D. CO_2
7	The value of charge on electron is	A. 1.602×10^{19} coulombs B. 1.602×10^{18} coulombs C. 1.602×10^{17} coulombs D. 1.602×10^{16} coulombs
8	Acetic Acid reacts with PCl_5 giving:	A. Acetamid B. Acetyl chloride C. Alcohol D. ether
9	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.
10	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.
11	Boyle's law is represented as :	A. $P \propto \frac{1}{T}$ B. V and $\frac{1}{P}$ C. $P \propto \frac{1}{V}$ D. $P \propto \frac{1}{P}$
12	Heat of vapourization for liquids with strong dipole-dipole forces will have	A. Negligible Values B. Reasonably high values C. Very high values D. None

D. very low values

13	The distillation of coal at high temperature and in absence of air is called	A. Vacuum distillation B. Normal distillation C. Fractional distillation D. Destructive distillation
14	Benzoic acid can be prepared from the oxidation of	A. benzene B. ethyl benzene C. benzoic acid D. toluene
15	Which of the following will have the highest boiling point?	A. Methanal B. Ethanal C. Propanal D. 2-Hexanone
16	For which system does the equilibrium constant, K_C has units of	
17	The steroids of fungi and yeast are called:	A. Vitamin D B. Vitamin D ₂ C. Ergosterol D. Cholestorl
18	How many moles of hydrogen atoms does 3.2 g of methane, CH ₄ , contain?	A. 0.02 B. 0.2 C. 0.4 D. 0.8
19	2-Bromopentane is heated with potassium ethoxide in ethanol . The major product obtained is	A. 2-Ethoxypentane B. Pent-1-ene C. cis-Pent-2-ene D. trans-Pent-2-ene
20	Ethylene reacts with 1% cold alkaline KMnO ₄ to give	A. Oxalic acid B. Acetone C. Ethylene glycol D. Formaldehyde