

ECAT Chemistry MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	In electrolytic cells, the chemical changes may be :	A. Either spontaneous or non-spontaneous B. Always spontaneous C. Always non-spontaneous D. More spontaneous and less non-spontaneous.
2	If liquids A and B form an ideal solution	A. The enthalpy of mixing is zero B. The entropy of mixing is zero C. The free energy of mixing is zero D. The free energy as well as the entropy of mixing are each zero
3	Which of the following liquid pairs shown a positive deviation from Raoult's law	A. $\text{CH}_3\text{COOH} + \text{CH}_3\text{Cl}$ B. $\text{C}_6\text{H}_6 + \text{CH}_3\text{OH}$ C. $\text{H}_2\text{O} + \text{HCl}$ D. $\text{H}_2\text{O} + \text{HNO}_3$
4	In the chemical combination of sodium and hydrogen to form NaH:	A. Hydrogen atom gains an electron. B. Sodium atom gains an electron. C. Both the atoms share the electron.
5	Which of the following statement is incorrect about SHE(Standard hydrogen electrode):	A. Reduction potential of Cu^{2+} is smaller than H^+ ions when it is coupled with copper electrode. B. gas is passed in it at 1 atm pressure. C. Its oxidation potential and reduction potential is zero. D. It is made of platinum wire dipped in HCl solution
6		A. Alkyl B. Alkyl nitrile C. Cyanogens D. Amine
7	Atmosphere of big/metropolitan cities is polluted most by	A. Automobile exhausts B. Pesticide residue C. Household waste D. Radio-active fall out
8	Cement plaster is made by mixing plaster of paris with	A. glue or oil B. gypsum C. glycol D. alum or borax
9	Chlorophyll contains in it:	A. Li B. Na C. Mg D. Ca
10	If an endothermic reaction is allowed to take place very rapidly in the air, the temperature of the surrounding air:	A. Remains constant. B. Increase. C. Decreases. D. Remain unchanged.
11	3 moles of ethanol react with one mole of phosphorus tribromide to form 3 moles of bromoethane and one mole of X. Which of the following is X?	A. H_3PO_4 B. H_3PO_2 C. HPO_3 D. H_3PO_3
12	The major portion of natural gas is	A. Ethane B. Propane C. Butane D. Methane
13	Which carbohydrates is an essential constituent of plant cells?	A. Starch B. Cellulose C. ...

		C. Sucrose D. Vitamins
14	Chromium (VI) is highly toxic and can cause	A. Blindness B. Cancer C. Liver problems D. Blood problems
15	The geometrical shape of a transition complex is related to the state of hybridizing of the central atom. What is trigonal bipyramidal	A. sp^3 B. dsp^2 C. dsp^3 D. d^2sp^3
16	By applying Hess's law, we can calculate	A. ΔH B. ΔS C. ΔF D. K
17	The rate of reaction determined at a given time is called	A. Average rate B. Instantaneous rate C. Specific rate D. Overall rate
18	The sp^2 hybrid orbitals are oriented in space at one angle	A. 180° B. 109.5° C. 100° D. 120°
19	Hydrogen bonding is present in one of the following pairs:	A. NH_3 B. H_2O C. HF D. All of above
20	The strongest forces are	A. Debye forces B. London dispersion forces C. Dipole-dipole attraction D. Hydrogen