RAVI MATHS TUITION & TEST PAPERS , WHATSAPP 8056206308

12TH CBSE CHEMISTRY MCQS TEST

12th Standard

Chemistry

Multiple Choice Question 30 x 1 = 30

1) Brass is

(a) Solid solution (b) Liquid solution (c) Gas solution (d) All of these

2) 200 mL of water is added to 500mL of 0.2 M solution. What is the molarity of the dilluted solution ?

(a) 0.5010 M (b) 0.2897 M (c) 0.7093 M (d) 0.1428 M

3) In which mode of expression, the concentration of solution remains independent of temperature ?

(a) Molarity (b) Normality (c) Formality (d) Molality

4) Increasing the temperature of an aqueous solution will cause

(a) Decrease in molality (b) decrease in molarity (c) decrease in mole fraction (d) decrease in % w/w

5) Which one of the following gases has the lowest value of the Henry's law constant ?

(a) N_2 (b) He (c) H_2 (d) CO_2

6) An aqueous solution of methanol in water has vapour pressure

(a) equal to that of water (b) equal to that of methanol (c) more than that of water (d) less than that of water

7) 12.0g of urea is dissolved in 1 litre of water and 68.4g sucrose is dissolved in 1 litre of water. The relative lowering of vapour pressure of urea solution is

(a) greater than sucrose solution (b) less than sucrose solution (c) double that of sucrose solution

(d) equal to that of sucrose solution

8) Formation of a solution from two components can be considered as
(i) pure solvent $\longrightarrow$ seperated solvent molecules, ΔH_1
(ii) pure solute $\longrightarrow$ seperated solute molecules,ΔH_2
(iii) separated solvent and solute molecules $\longrightarrow$ solution,ΔH_3
Solution so formed will be ideal if.

(a) $\Delta H_{soln} = \Delta H_1 + \Delta H_2 + \Delta H_3$ (b) $\Delta H_{soln} = \Delta H_1 + \Delta H_2 - \Delta H_3$ (c) $\Delta H_{soln} = \Delta H_1 - \Delta H_2 - \Delta H_3$
(d) $\Delta H_{soln} = \Delta H_3 - \Delta H_1 - \Delta H_2$

9) The osmotic pressure of 0.1 M aqueous solution of NaCl is ..... Osmotic pressure of 0.1 M aqueous solution of glucose

(a) equal to (b) less than (c) half of (d) nearly double

10) Maximum amount of a solid solute that can be dissolved in a specified amount of a given liquid solvent does not depend upon _____.

(a) Temperature (b) Nature of solute (c) Pressure (d) Nature of solvent

11) The reaction of hydrogen bromide with propene in absence of peroxide is an example of a/an

(a) free radical addition (b) nucleophilic addition (c) electrophilic substitution (d) electrophilic addition

12) When hydrochloric acid gas is treated with propene in presence of benzoyl peroxide, it gives

(a) 2-Chloropropane (b) Allyl chloride (c) No reaction (d) n-Propyl chloride

13) Addition of HBr gives same product in the presence or absence of peroxide when alkene is

(a) 1-butene (b) 2-methylpropene (c) propene (d) 2-butene

14) The addition of HBr is easiest with

(a) CH_2=CHCl (b) ClCH=CHCl (c) CH_3-CH=CH_2 (d) $(CH_3)_2$C=CH_2

15) A compound is formed by substitution of two chlorine for two hydrogens in propane. The number of possible isomeric compound is

(a) 4 (b) 3 (c) 5 (d) 2

16) Which of the following halogen-exchange reaction will occur?

(a) R-I+NaCl (b) R-F+KCl (c) R-Cl+NaI (d) CH_3 -F+AgBr

17) Fluorobenzene (C_6H_5F) can be synthesised in the laboratory

(a) by heating phenol with HF and KF

(b) From aniline by diazotisation followed by heating the diazonium salt with HBF_4

(c) by direct fluorination of benzene with F_2 gas (d) by reacting bromobenzene with NaF solution

18) Reaction of $C_6H_5CH_2Br$ with aqueous sodium hydroxide follows.....

(a) S_N1 mechanism (b) S_N2 mechanism (c) Any of the above two depending upon the temperature of reaction

(d) Saytzef rule

19) Which is the correct increasing order of boiling points of the following compounds?
1-Iodobutane, 1-Bromobutane,
1-Chlorobutane, Butane

(a) Butane < 1-Chlorobutane < 1-Bromobutane < 1-IOdobutane

(b) 1-Iodobutane < 1-Bromobutane < 1-Chlorobuane < Butane

(c) Butane < 1-Iodobutane < 1-Bromobutane < 1-Chlorobutane

(d) Butane < 1-Chlorobutane < 1-Iodobutane < 1-Bromobutane

20) Which is the correct increasing order of boiling points of the following compounds?
1-Bromoethane, 1-Bromopropane,

(a) Bromobenzene < 1-Bromobutane < 1-Bromopropane < 1-Bromoethane

(b) Bromobenzene < 1-Bromobutane < 1-Bromopropane < 1-Bromobutane

(c) 1-Bromopropane < 1-Bromobutane < 1-Bromoethane < Bromobenzene

(d) 1-Bromoethane < 1-Bromopropane < 1-Bromobutane < Bromobenzene

21) Which of the following is incorrect for glucose?

(a) It contains four > CHOH groups (b) It contains one ketone group (c) It contains one CH_2OH group

(d) It contains one-CHO group

22) Glucose does not react with

(a) Br_2/ H_2O (b) NH_2OH (c) $(CH_3CO)_2O$ (d) $NaHSO_3$

23) When glucose is treated with excess of phenylhydrazine in acetic acid, the product is

(a) glucosazone (b) phenylhydrazone of glucose (c) oxime of glucose (d) glucosamine

24) The number of chiral carbons in β -D (+)- glucose is

(a) five (b) six (c) three (d) four

25) The letter 'D' in D-glucose signifies

(a) configuration at all chiral carbons (b) dextrorotatory (c) that it is a monosaccharide

(d) configuration at the penultimate chiral carbon

26) The term anomer of glucose refers to

(a) isomers of glucose that differ in configuration at carbons one and four (C-1 and C-4)

(b) a mixture of (D)-glucose and (L)-glucose (c) enantiomers of glucose

(d) isomers of glucose that differ in configuration at carbon one (C-1)

27) Which of the following disaccharide gives a ketose and an aldose only on hydrolysis?

(a) Sucrose (b) Maltose (c) Lactose (d) All the three

28) Hydrolysis products of lactose are

(a) glucose and glucose (b) glucose and fructose (c) glucose and galactose (d) none of these

29) Which of the following sets consists only of essential amino acids?

(a) Alanine, tyrosine, cysteine (b) Leucine, lysine, tryptophan (c) Alanine, glutamine, lysine

(d) Leucine, proline, glycine

30) Important constituent of cell wall is

(a) lipid (b) cellulose (c) protein (d) vitamin

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