**SAMPLE PAPER 2013**

**SUB: CHEMISTRY**

**CLASS- XII**

TIME :3 Hr M.M 70

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* GENERAL INSTRUCTIONS----- ( ACCORDING TO BOARD)

Q-1 Out of c and co which is better reducing agent for ZnO?

Q-2 what is the role of NaCN in froth floation method?

Q-3 what is F centre?

Q-4 what are antioxidants?

Q-5 why AgBr shows both frenkel and schottky defect?

Q-6 Name the initiator used in free radical polymerization.

Q-7 What is the effect of tem on adsorption?

Q-8 what are monomer units of nylon6,6

Q-9 Differentiate b/w ----(1)bactericidal & bacteriostatic antibiotic drugs

 (2) Disinfectant &antiseptic

Q-10 What is the difference b/w schottky and frenkel defect?

Q-11 What is the chemical reaction of------(a) lead storage battery (b) Ni/Cd battery

Q-12 [a] Arrange the following in increasing value of Kb—C6H5NH2,C2H5NH2,(C2H5NH)2,NH3

 [b] Arrange the following in increasing order of B.P C2H5OH,C2H5NH2, (CH3)2NH

Q-13 Write the mechanism of formation of ethane from ethanol.

Q-14 What is lanthanod contraction ?write its concequences.

Q-15 What is ELLINGHAM DIAGRAM explain with diagram.

Q-16 Give Reason –1.Acylation of aniline is necessary before nitration.

 2.Why o-nitrophenol is more volatile than p-nitrophenol?

Q-17 Draw the structure of ----1.amylopectin 2. Maltose

Q-18 [a] What is instantaneous rate of reaction?

[b] The conversion of molecule X to Y follows second order kinetics. If concentration of X increased to three times how will it affect the rate of formation.

Q-19 In thermal power station shahjahanpur coal is bernt to produce steam for electricity. The smoke produce gets precipited in the chemnies having precipitator

 Answer the following 1.why is the smoke passed through precipitator ?

 2. How does coal ash affect atomosphere?

 3. Which value is promoted through the use of electrostatic precipitator

Q-20 Define the following terms

 [a] Zwitter ion [b] peptide bond [c] broad spectrum antibiotics

Q- 21 calculate the cell potential of [1] Zn/Zn++//Cu++/Cu, [2]Cr/Cr+++(0.1M)//Fe++(0.01M)/Fe

 Given that E0Cr+++/Cr=-0.75v, Eo Fe++/Fe=-0.45v

 E0Zn/zn++=0.76v, Eo Cu++/Cu=-0.34v

Q-22 complete the following

1. NH3+Cl2(EXCESS)---------→
2. SIO2+HF ---------→
3. H3PO3  ---------→

Q-23 [a]With the help of V.B.T explain the magnetic character & shape of NI( CN)4

 [b] Write the I.U.P.A.C name of [Cr(NH3)(H2O)3]Cl2

Q-24 Draw the structure of (a) chromate ion (b) manganate ion (c) XeO2F2

Q-25 Carry out following conversions

1. Prop-1-ene to propan-2-ol
2. Methanamine to ethanamine
3. Chlorobenzene to D.D.T

Q-26 Answer the following questions

1. Why soda water bottle fizzes out on opening the cap
2. How sea water is purified
3. What is raoults law

Q-27 1.EXPLAIN WITH CHEMICAL REACTION

1. Rosenmund reduction
2. Carbyl amine reaction..
3. Hoffmann’s reaction

2.Distinguish b/w following pairs

A. Phenol & benzoic acid

B.propan-2-ol propan -1-ol

Q-28 [A] Determine the amount of CaCl2(i=2.47) dissolved in 2.5 litre of water such that its osmotic pressure is 0.75atm at 27OC

 [B] Write chemical reaction occurring in [1] Bessemer converter

 [2]Blast furnace

Q-29 An organic compound ‘A’ on treatment with aqueous solution of ammonia and heating forms compound ‘B’ which on heating with Br2 and KOH forms a compound ‘C’ of molecular formula C6H7N.

Write structure of &I.U.P.A.C names of A, B, & C. Write chemical reactions involved.

Q-30 Arrange the following according to given instructions

[A] HCLO4,HCLO3,HCLO2,HCLO (INCREASING ACIDIC STRENGTH)

[B]F2, Cl2, Br2, I2 (INCREASING BOND DISSOCIATION ENERGY)

[C]NH3, PH3, AsH3, SbH3, BiH3 INCREASING BASIC CHARACTER)

[d]HF, HCl , HBr HI ( INCREASING ACIDC ARACTER)

[E]H2O , H2S , H2Se ,H2Te ( THERMAL STABILITY)

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