

DELHI PUBLIC SCHOOL, JAMMU.

ASSIGNMENT FOR PERIODIC TEST-I

(2017-2018)

SUB: CHEMISTRY

CLASS: 12TH

VERY SHORT ANSWERS TYPE QUESTIONS

1. Why does table salt, NaCl, sometimes appear yellow in colour?
2. Write the structure of N,N-Dimethylbenzamine?
3. Write the Nernst equation for Daniel cell?
4. Give the reaction of preparation of phenol from cumene?
5. Dipole moment of phenol is smaller than methanol. Why?
6. Calculate the electrode potential of H-electrode in contact with solution having p H as 10?

SHORT ANSWERS TYPE QUESTIONS

1. Why Cl⁻ forms o- and m- directing products in electrophilic substitution reaction?
2. Write the isomers of compound having formula C₄H₉Br?
3. Why Grignard's reagent should be prepared under anhydrous condition?
4. Why is solubility of haloalkanes in water very low?
5. Draw the resonating structures of phenoxide ion?
6. Explain using Henry's law why soda water bottle at room temperature fizzes on opening?
7. Explain how rusting of iron is envisaged as setting up of an electrochemical cell?
8. Henry's law constant for CO₂ gas in water is 1.67×10^8 Paat 298 K. Calculate the quantity of CO₂ in 500 ml of soda water when packed under 2.5 atm CO₂ pressure at 298 K?
9. An element with molar mass 2.7×10^{-2} kg/mol forms a cubic unit cell with edge length 405 pm. If density is 2.7×10^3 kg/m³, what is the nature of unit cell?

Long answer type questions

1. Write the reaction:
 - a) Riemer Tieman reaction
 - b) Kolb's reaction
2. Write the reactions:
 - a) Coupling reaction
 - b) Hoffmann's bromamide reaction

c)Gabriel phthalimide synthesis

d)Wurtz reaction

e)Williamson's synthesis?

3.Explain SN1 mechanism and also explain the factors governing SN1 mechanism in haloalkanes and haloarenes?

TOPICS: 1.Solid state
2.Solutions
3.Electrochemistry
4.Haloalkanes and haloarenes
5.Alcohols, phenols and ethers
6.Functional group containing Nitrogen.