

1. Answer the following
  - a. Show the formation of  $\text{Na}_2\text{O}$  and  $\text{MgO}$  by the transfer of electrons.
  - b. Why do ionic compounds have high melting points?
  - c. Write general properties of ionic compounds.
  
2. Answer the following
  - a. What are amphoteric oxides? Give two examples of amphoteric oxides
  - b. Differentiate between metal and non-metal on basis of chemical properties
  
3. Explain
  - a. What is a homologous series? Explain with an example.
  - b. versatile nature of carbon.
  - c. Newland's Law of Octaves
  - d. Limitations of Mendeleev's Classification
  - e. What were the drawbacks of Newland's Law of Octaves
  
4.
  - a. Explain with activity metals are good conductors of electricity
  - b. What happens when copper sulphate crystals are heated?
  - c. Explain Preparation and uses of plaster of Paris
  - d. Explain Chlor-alkali Process and give uses of its products
  - e. Uses of Sodium Hydrogen Carbonate
  
5. Write 4 natural sources of acid and name the acid present in them.