(1)

Chapter- 3

METALS AND NONMETALS

WORKSHEET (1)

1. A mineral is known as ore if metal
   (a) Cannot be produced from it
   (b) Can be produced from it
   (c) Can be extracted from it profitably
   (d) Is very costly (1)

2. The earthy impurities associated with mineral used in metallurgy are called
   (a) Slag
   (b) Flux
   (c) Gangue
   (d) Ore (1)

3. A basic lining is given to a furnace by using
   (a) Calcined dolomite
   (b) Copper sulphate
   (c) Haematite
   (d) Silica (1)

4. Malachite is an are of:
   (a) Iron
   (b) Copper
   (c) Mercury
   (d) Zinc (2)

5. Metal always found in free state is:
   (a) Gold
   (b) Silver
   (c) Copper
   (d) Sodium

6. Which Gas is produced when a metal reacts with dilute hydrochloric acid? Write the chemical reaction when iron reacts with dilute H_2SO_4. (2)

7. What would you observe when Zinc is added to a solution of Iron (II) sulphate? Write chemical reaction that taken place. (2)

8. Why do ionic compounds have high melting points?
(2)

9. Why sodium is kept immersed in kerosene oil?
(2)Arrange the following metals in decreasing order of their reactivity:

(1) Cu, Ca, Mg, Na, Zn

(2) You are provided with three metals: sodium, magnesium and copper, Usingonly water as the reactant, how will you identify each of them.

(3) Which metal listed in (I) is most likely to occur in the native state?

10. Which method of concentration afore is preferred in the following cases and why?

(1) The ore has higher density particles mixed with a large bulk of low density impurities.

(2) The ore consists of copper sulphide intermixed with clay particles. Give an example of amalgam.

11. (a) Why is *ZnO* called a amphoteric oxide? Name another amphoteric oxide.

(b) What are alkali's? Give are example of alkali's.

12. You are given is hammer a battery, a bulb, wires and switch.

(a) How could you use them to distinguish between samples of metals and non metals?

(b) Assess the usefulness of these tests to distinguish between metals and non-metals.

13. (a) Name a metal which does not stick to glass?

(b) Name a non-metal which is good conductor of electricity?

(c) Name the metal which is commonly used in thermit welding?

(d) What is deposited at the cathode, a pure or impure metal?

(e) What is the nature of Zinc oxide?