

EX-III

1) a) 1. Diamond

2. Graphite

3. Coal

b) Diamond is used as gem

c) 1. Copper

2. Aluminium as these ~~these~~ are good conductors of electricity.

d) 1. Gold

2. Silver as these are shining, lustrous and ductile.

e) Plastic is used as insulator as it is bad conductor of electricity.

2) a) Iron: To make machines, tools and building material.

b) Brass: To make water-taps and utensils.

c) Coal: Coal is used as fuel also used in thermal power plants to produce electricity.

3) a) Steel is good conductor of heat to cook food, pan is made of steel where as wood is insulator of heat and to hold, handle is made up of wood.

b) Graphite leaves mark on the paper and makes it black.

c) Argon is inert gas and protects the element of bulb from oxidation and burning. Hence it increases bulb's life.

- 4) a) Copper and aluminium are good conductors of heat and electricity. They can be drawn into wires and beaten into sheets. Therefore, they are used to make electric wires.
- b) Metals are ductile, i.e., they can be drawn or stretched into thin wires. They are malleable, i.e., they can be beaten into thin sheets.

Objective type questions

- a) Atomicity refers to the number of atoms in the molecule of an element.
- b) The most abundant element in the earth's crust is oxygen.
- c) A metal which is a liquid at room temperature is mercury.
- d) The most abundant element in the atmosphere is nitrogen.
- e) A metal which is a poor conductor of electricity is tungsten.
- f) A diatomic gaseous element is oxygen.
- g) A liquid non-metal is bromine.

2) ans) Column A

- a) Metals
- b) Molecules
- c) Non-metals
- d) Noble gases

Column B

- (iii) Lustrous
- (iv) smallest unit of compound
- (ii) Brittle
- (i) Non-reactive

3) a) A compound is made up of just one kind of atom.
ans) False

Correct - A compound is made up of two or more elements in a fixed proportion by mass.

b) Metals reflect light and are good conductors of electricity.
ans) True

c) Metals can be polished.
ans) True

d) Elements are made up of compounds.
ans) False

Correct: Elements are made up of atoms.

e) All elements are artificially prepared.
ans) False
Correct: All elements are made up of a limited number of basic substances.

f) Molecules can exist independently.
ans) True

g) Molecules combine to form atoms.
ans) False

Correct: Atoms combine to form molecules.

h) Noble gases are highly reactive.
ans) False

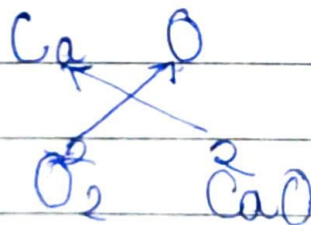
Correct: Noble gases are non-reactive.

i) Ozone is a triatomic molecule.
ans) True

Ex-II

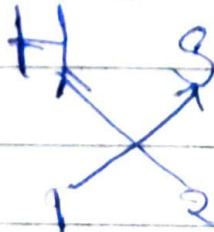
7) Formulae of Calcium oxide is CaO.

Because,



ii) Formulae of Hydrogen sulphide is H_2S .

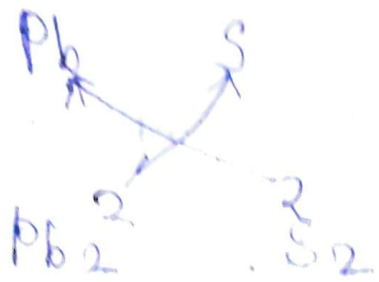
Because,



iii) Formulae of Carbon Monoxide is CO.

iv) Formulae of Lead Sulphide is PbS.

Because,



Here the subscript number is same.

a) Solid

Ex:- Calcium hydroxide, Glucose

b) Liquid

Ex:- Water, Hydrochloric acid, Sulphuric acid

c) Gaseous

Ex:- Carbon dioxide, Carbon monoxide, Ammonia

Extra

Formulae of:

i) Iron oxide - FeO

ii) Calcium oxide - CaO

iii) Sodium oxide - Na₂O

iv) Zinc chloride - ~~NA~~ ZnCl₂