



(CHEMISTRY)

Physical And Chemical Changes

1. Physical Change

It is a temporary change which can be easily reversed and in it, only the physical properties of a substance will change in the composition.

Examples of physical changes

1. Magnetizing an iron bar by means of electricity.
2. Boiling of water into steam.
3. Glowing of an electric bulb.
4. Sublimation of camphor.
5. Bending of glass tube by heating.
6. Melting of wax.

2. Chemical change

These changes result in the formation of new substances. In a chemical change the composition and molecular structure of the substance undergoing change are considered e.g.,

Examples of Chemical Changes

1. Rusting of an iron knife.
2. Burning of a candle.
3. Digestion of food.
4. Burning of wood or charcoal.
5. Decomposition of water into hydrogen and oxygen.
6. Formation of water from hydrogen and oxygen.

3. Objective Questions

1. **Assertion :** When mixture of iron and sulphur is heated, it is a physical change.
Reason : Mixture of iron and sulphur cannot be separated by running a magnet over it.
2. **Assertion :** Cutting of carrot into pieces is a chemical change.
Reason : Pieces of carrot though physically differ from the original carrot but are chemically same.
3. **Assertion :** Sublimation of NH_4Cl is a chemical change.
Reason : Sublimation is a phenomenon in which a solid on heating directly changes into gas without changing to liquid.