Revision Notes CHAPTER – 6

Changes Around Us

- Everything around us is undergoing a change.
- Change is a continuos process.
- Some changes can be reversed and some cannot be reversed.
- A change may occur by heating a substance or by mixing it with some other.

COMMON CHANGES TAKING PLACE IN NATURE

- 1. change in position, sun rise an set.
- 2. change in colour, sky at night and day time.
- 3. change in shape., look at the moon.
- 4. change in size, a seed germinate.
- 5. change in temperature, hot summer and cold winter.
- 6. change in state or form, water on cooling and heating.
- 7. rusting of iron.

Types of changes:

- (a) Reversible change: A change in which the initial substance can be obtained back by reversing the action. Example: folding of paper, dissolving sugar in water, etc.
- **(b) Non-irreversible change**: Change in which the initial substance cannot be obtained back by reversing the action. Example: burign of paper, grinding grains etc.
- **(c) Physical change:** Changes in the form of substance but not in chemical identity. No new substance formed. Changes is sometimes reversible. Example: breaking a log of wood.
- **(d) Chemical changes:** Changes in which substance is transformed into new substance. Initial substance is lost. Change is always irreversible. Example: burning a log of wood.

Ways by which changes occur:

- (a) Boiling and Condensation:
- (i) Boiling: The rapid vaporization of a liquid when it is heated to its boiling point.
- (ii) Condensation: The change of water vapor into liquid water on cooling.
- **(b) Heating of metal:** Process in which a **metal** is **heated** to a certain temperature and the cooled in a particular manner to alter its internal structure for obtaining desired degree of physical and mechanical properties such as brittleness, hardness, and softness.
- (c) Freezing and Melting:
- (i) Freezing: The process in which a liquid turns into solid when its temperature is lowered.
- (ii) Melting: The process in which a solid converts to a liquid by applying heat.

(d) using pressure to change things

- Air can be compresse by applying pressure.
- pressure may change the shape of the object.