CHAPTER: 4

HEAT

NOTES:

- A reliable measure of hotness of an object is its temperature.
- > Thermometer is a device to measure the temperature.
- ➤ Clinical thermometer measures body temperature only.
- ➤ Laboratory thermometer measures temperature ranging from 10 °C to 110 °C.
- Normal body temperature of a human is 37 ° C.
- ➤ Heat flows from a body at a higher temperature to a body at lower temperature.
- Mode of transfer of heat:
 - i. Conduction: By direct contact E g. Heat conduction in solid medium like metal
 - ii. Convection: By actual motion of matter E g. In gas and liquid like water
 - iii. Radiation: Does not require any medium E g .Heat from the sunshine
- ➤ CONDUCTION: The process of transfer of heat from the hotter end to the colder end of an object is known as conduction.
- ➤ CONVECTION: The process of transfer of heat by the movement of fluid (liquid or gas) between areas of different temperatures is called convection.
- ➤ RADIATION: Radiation is the method of heat transfer that does not rely upon any contact between the heat source and the heated object.
- ➤ The materials which allow heat to pass through them easily are called conductors whereas the materials which do not allow heat to pass through them easily are called insulators.
- ➤ It is more comfortable to wear white and light coloured clothes in summer whereas dark coloured clothes in winter.
- ➤ Woollen clothes keep us warm in the winter.

