**Final Term**

**Grade- 7 Section- A & D**

**Lesson- 23 (Conduction and Convection)**

**1.Define Conduction.**

**Ans.** Conduction- Conduction is the flow of thermal energy through matter from places of higher temperature to places of lower temperature without the movement of the matter as a whole.

**2. Differentiate good conductor and bad conductor.**

Ans. Good conductors – Materials that allow heat to pass through them quickly are good conductors. For example, aluminium, iron and copper.

Bad conductors (insulators)- Materials that do not allow heat to pass through them are bad conductors. For example, water, air, wood, fur etc.

**3. Explain how heat is transferred by conduction.**

Ans. When a material is heated, the particles move faster and pass on their motion to other particles all along the material. In metals, there are free electrons. When a metal is heated, these free electrons speed up as they move randomly within the metal, colliding with the atoms in cooler parts, making them vibrate, so passing on their energy and raising the temperature of these parts. Thus, thermal energy is rapidly transferred in metals.

**4. Define convection.**

Ans. Convection is the flow of heat through fluids from places of higher temperature to places of lower temperature by the movement of fluids itself.