**Thermal prime movers:** These are the prime movers which use the thermal energy of source to generate power.

Various thermal prime movers are given below:

**I) Fuels (Heat Engines):** These prime movers use various fuels like petrol, diesel, oil, gas to generate mechanical power.

Heat engines are of two types:

1. **External combustion engines:**

Reciprocating steam engines

Steam turbine

Closed cycle gas turbine

1. **Internal combustion engines**:

Reciprocating I.C. engines

Open cycle gas turbine

**II) Nuclear (nuclear power plant):** This prime mover uses the heat energy of atoms by fission or fusion process to develop the mechanical power. It is mainly used in nuclea power plants. Various radioactive elements like uranium, thorium are used for these fission or fusion process in a nuclear reactor.

**III) Geothermal:** In this type of prime mover the heat energy is obtained from a certain depth or the hot part of the earth below earth surface then it is converted into mechanical by proper engine.

**IV) Bio gas:** Bio gas is mainly produced from a garbage or any other waste which is used to produce power by prime mover in a biogas plant.

**V) Solar energy:** The solar energy come to the earth in the form of radiation or electromagnetic waves. This energy trapped in with the help of solar panel made up of semiconductor material. This heat energy is then converted into power.

Click below for books related to thermal prime movers:

1.Kamlesh Purohit

2.S.P. Harsha

3.R.K. Purohit

4.J.K. Gupta

5.R.S Khurmi