A thermodynamic process is the transformation of a system from one state to another. There are four types of thermodynamic processes: isothermal, adiabatic, isobaric, and isochoric.

a. Isothermal Process:

An isothermal process is a process that takes place at constant temperature. During an isothermal process, the internal energy of the system remains constant, and any heat added to the system is used to do work.

b. Adiabatic Process:

An adiabatic process is a process that takes place without any heat transfer. During an adiabatic process, the internal energy of the system changes due to the work done on or by the system.

c. Isobaric Process:

An isobaric process is a process that takes place at constant pressure. During an isobaric process, the heat added to the system is used to increase the internal energy of the system.

d. Isochoric Process:

An isochoric process is a process that takes place at constant volume. During process, the internal energy of the system changes due to the work one or by the system. Jotes

4. Thermodynamic Cycles:

A thermodynamic cycle is a series Other that returns a system to its nodynamic pro initial state. There are Pmi eycles: power cycles and refrigeration cycles

a. Power Cycles:

A power cycle is a thermodynamic cycle that produces net work as its output. Examples of power cycles include the Carnot cycle, the Rankine cycle, and the Brayton cycle.

b. Refrigeration Cycles:

A refrigeration cycle is a thermodynamic cycle that transfers heat from a cold region