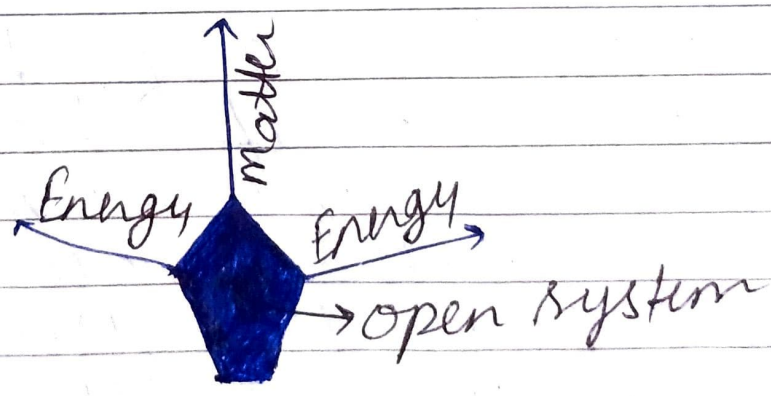


Ques 1:- What do you understand by system? Explain the open and closed system.

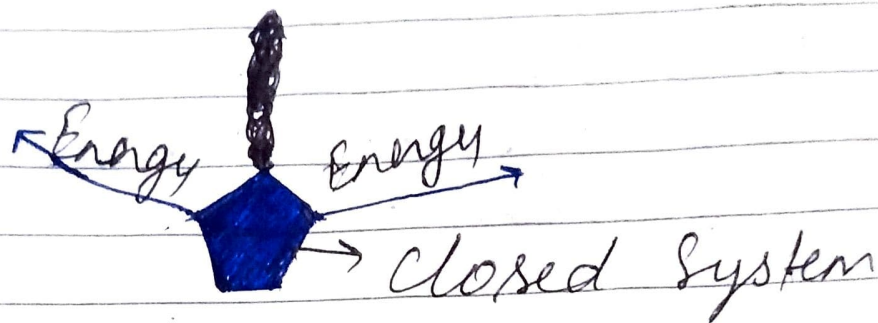
Ans:- System is the part of the universe being studied, while the surrounding are the rest of universe that interacts with the system.

Open System:- It is a system that freely exchange energy and matter with its surroundings.



The blue diagram depicting the transfer of energy and matter is showing how energy and matter can be enter the system AND leave the system.

Closed System :- A closed system is a system that exchanges only energy with its surroundings, not matter.



Ques 2 :- Explain the zeroth law of thermodynamics.

The zeroth law of thermodynamics states that if two bodies are each in thermal equilibrium with each other, then they are all at the same temperature.

For example, consider two separate cups of boiling water. If a thermometer is placed in thermal equilibrium with the first cup of water.