

# ***REVERSE OSMOSIS***

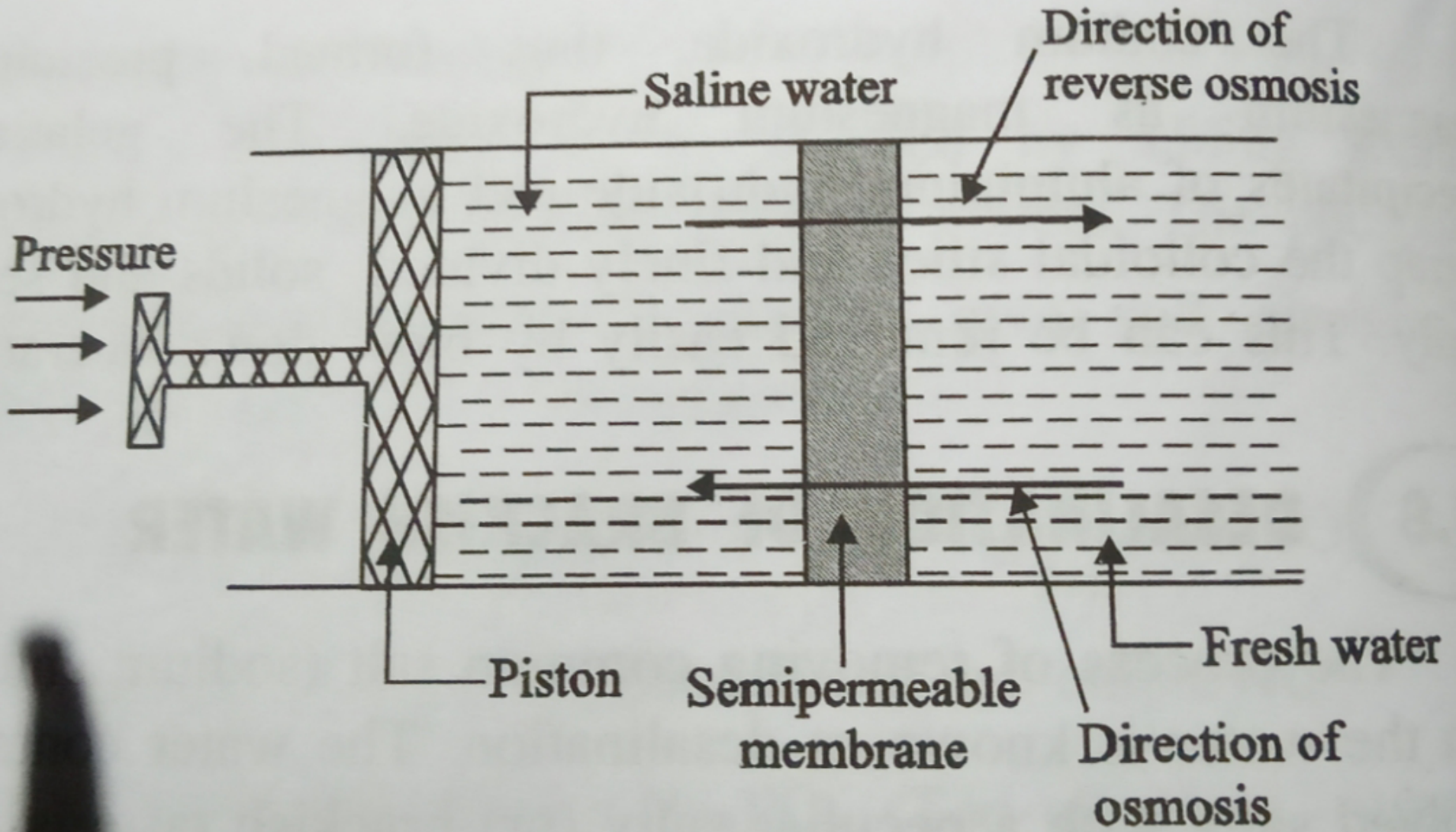
**When two solutions of different concentrations are separated by a semi-permeable membrane,**

**solvent flows from a region of lower concentration to higher concentration.**

**This process is called Osmosis.**

**The driving force of this phenomenon is called osmotic pressure.**

**If a hydrostatic pressure is applied on the higher concentration side. The solvent flow is reversed. i.e., solvent flows from higher concentration to lower concentration. This process is called Reverse osmosis.**



**In this process, the pure water is separated from salt water.**

**This process is also known as super filtration.**

**The membranes used are cellulose acetate, cellulose butyrate, etc...,**

## **Advantages :-**

- 1. The life time of the membrane is high and it can be replaced by few minutes.**
- 2. It removes ionic as well as non-ionic colloidal impurities.**
- 3. Due to low cost , this process is used for converting sea water into drinking water.**