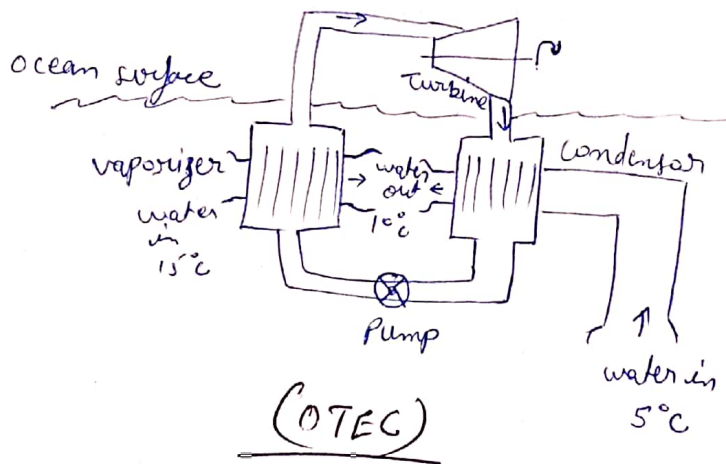


## Question-1 section-4)

### Answer

Basic principles of OTEC plant operation.

- OTEC stands for Ocean Thermal Energy Conversion.
- The working principles of an OTEC plant is that it uses the warm water to heat and vaporize a liquid. And this working fluid develops pressure which forces it to evaporate and the expanding vapour runs through a heat engine like turbine, generator and it is condensed back into a liquid by cold water brought up from depth and the cycle is repeated.



⇒ Open OTEC cycle :-

Open OTEC cycle uses warm surface water directly to make electricity. The ~~wood~~ warm seawater is first pumped into a low-pressure container which caused a ~~lot~~ it to boil. It is condensed into a liquid by exposure to cold temperatures from deep-ocean water.