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Q2 Ans:-

Function of Condenser:-

- Condenser is a device which is used to condense vapour into liquid state at a pressure below atmospheric pressure.
- It converts the turbine exhaust steam into pure water.

Classification of Condenser:-

(a) Jet Condenser:-

(i) Low level Jet condenser.
- Parallel flow type.
- Counter flow type.

(ii) High level Jet condenser.

(iii) Ejector jet condenser.

(b) Surface Condenser:-

(i) Central flow type.

(ii) Down flow type.

(iii) Evaporative flow type.

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#> Counterflow or low level Jet Condensers :-

- It is a type of Jet Condensers.
- In Counterflow or low level Jet Condensers, the exhaust steam enters at the bottom, flow upwards and meets the downcoming cooling water.
- The vacuum is created by the air pump, placed at the top of the condenser shell.
- This draws the supply of cooling water, which falls in a large no. of jets, through perforated conical shell plate as shown in fig.
- The falling water is caught in the trays, from which it escapes in a second series of jets and meets the exhaust steam entering at the bottom. The rapid condensation occurs, and the condensate & cooling water descends through a vertical pipe to the condesate pump, which delivers in to the hot well.
- The working diagram of Counterflow or low level Jet condenser is below :-

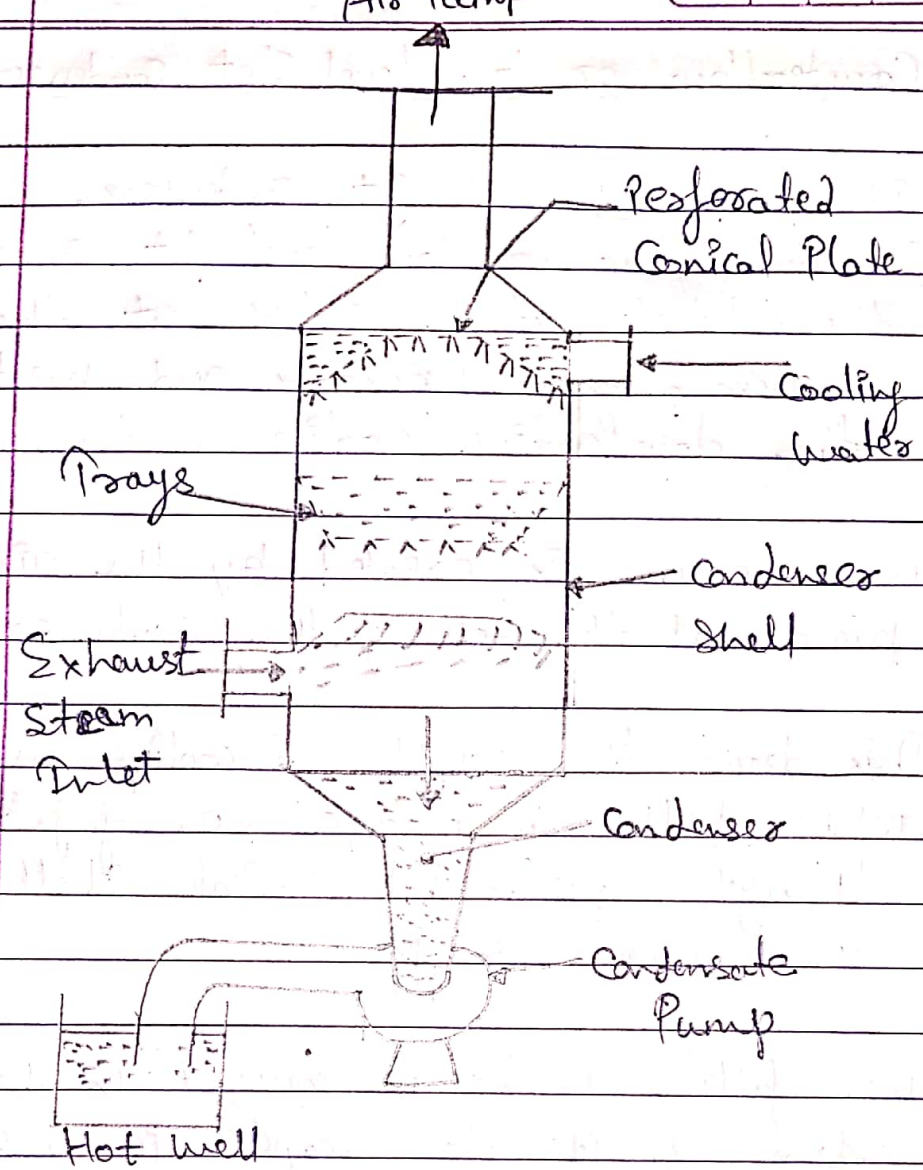

fig :- Counter flow Jet or low level Jet Condenser