

## Section-6

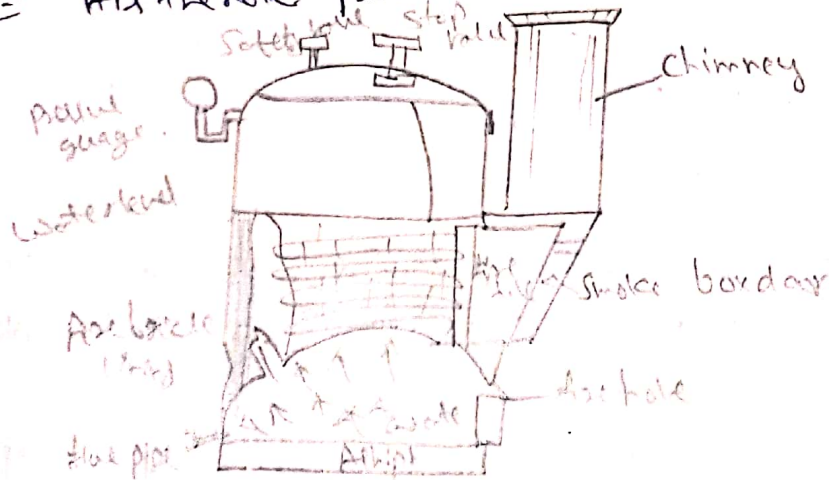
Ans 1 Cochran Boiler is a vertical cylindrical - natural circulation, natural draft, low pressure, multi-tubular solid fuel fired fire tube boiler with internally fired furnace. It is the modified form of a simple vertical boiler. In this boiler, the fire tubes are placed horizontally - the efficiency of this boiler is much better than the simple vertical boiler.

① Shell :- It has a vertical axis cylindrical drum with a hemispherical dome - type shell at the top.

② Grate :- This is the platform on which the solid fuel is burnt.

③ Combustion chamber :- The burning of fuel takes place in the combustion chamber.

④ Fire Hole :- This is the hole provided to insert fuel inside the furnace.



② Benson Boiler is a water tube boiler. This is a drum-less and high pressure boiler.

① Economizer :- The feed water by means of the feed pump is circulated through the economizer tubes. Hot fire gases pass over the economizer tubes and the feed water is preheated.

② Radiant evaporator :- The feed water from the economizer flows

Photo of the radiant evaporator with radiant parallel tubes section.