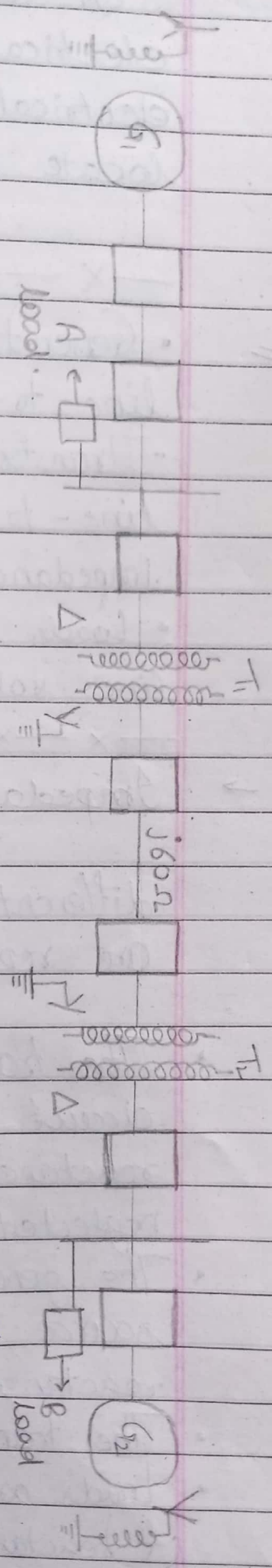
Single Line Diagram (SLD) -

—O ⇒ Motor or Generator
⇒ Two winding transformer
—— ⇒ Transmission line
⇒ Ckt. breaker (liquid)
⇒ Air ckt. breaker
Δ ⇒ Delta Connection.
Y ⇒ Star connection, ungrounded.
Y ⇒ Y-connection, ground.

- **Parameters** -

| | |
|---|---|
| n | 40MVA, 11kV, X = 20% |
| | 30MVA, 11kV, X' = 30% |
| $T_1$ | 40MVA, 11/220kV, X'' = 15% |
| $T_2$ | 40MVA, 220/11kV, X'' = 15% |
| oad | 40mw, 11kV, 0.9 lagging. |

The SLD is the representation of the power system using symbols for each components. It is the n/w which shows the main connection & arrangement of the system components along with their data.



It can be termed as building of an electrical system. It makes updation of electrical n/w very easy. It helps to locate fault by drawing SLD of area.