# Complex Engineering Problem(CEP)
Session 2019 Fall 2021
Power Distribution System
(CLO3/PLO5)

A 2-wire d.c. distributor AB is fed from both ends. At feeding point A, the voltage is maintained as at 230 V and at B 235 V. The total length of the distributor is 200 metres and loads are tapped off as under :25 A at 50 metres from A; 50 A at 75 metres from A 30 A at 100 metres from A; 40 A at 150 metres from A
The resistance per kilometer of one conductor is 0.3 ohm. Calculate:
(i) currents in various sections of the distributor
(ii) minimum voltage and the point at which it occurs
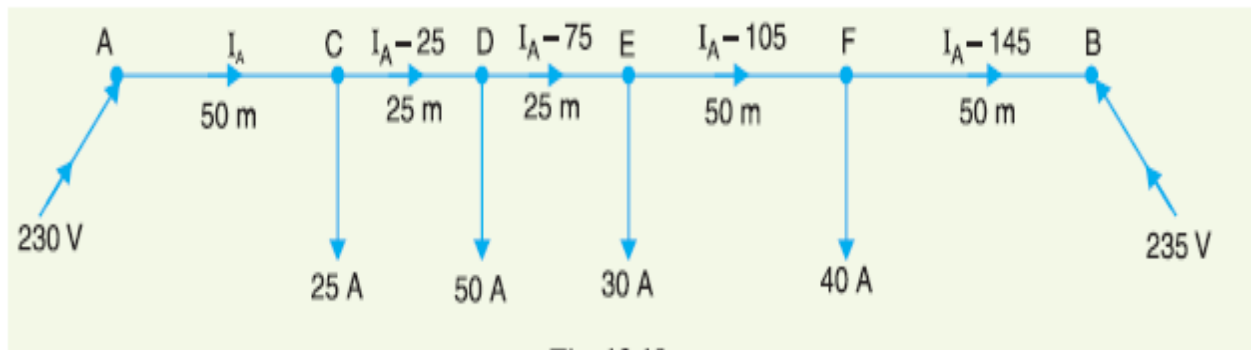
For simulation , power for loads is required you can find this by multiplying current with voltage at point C,D ,E ,F .

Tasks:

1. Simulate DC Distribution Network.
2. Calculate Voltage drops using Exact Method
3. Calculate Voltage drops using Approximation Method.
4. Compare results of above methods with simulation.