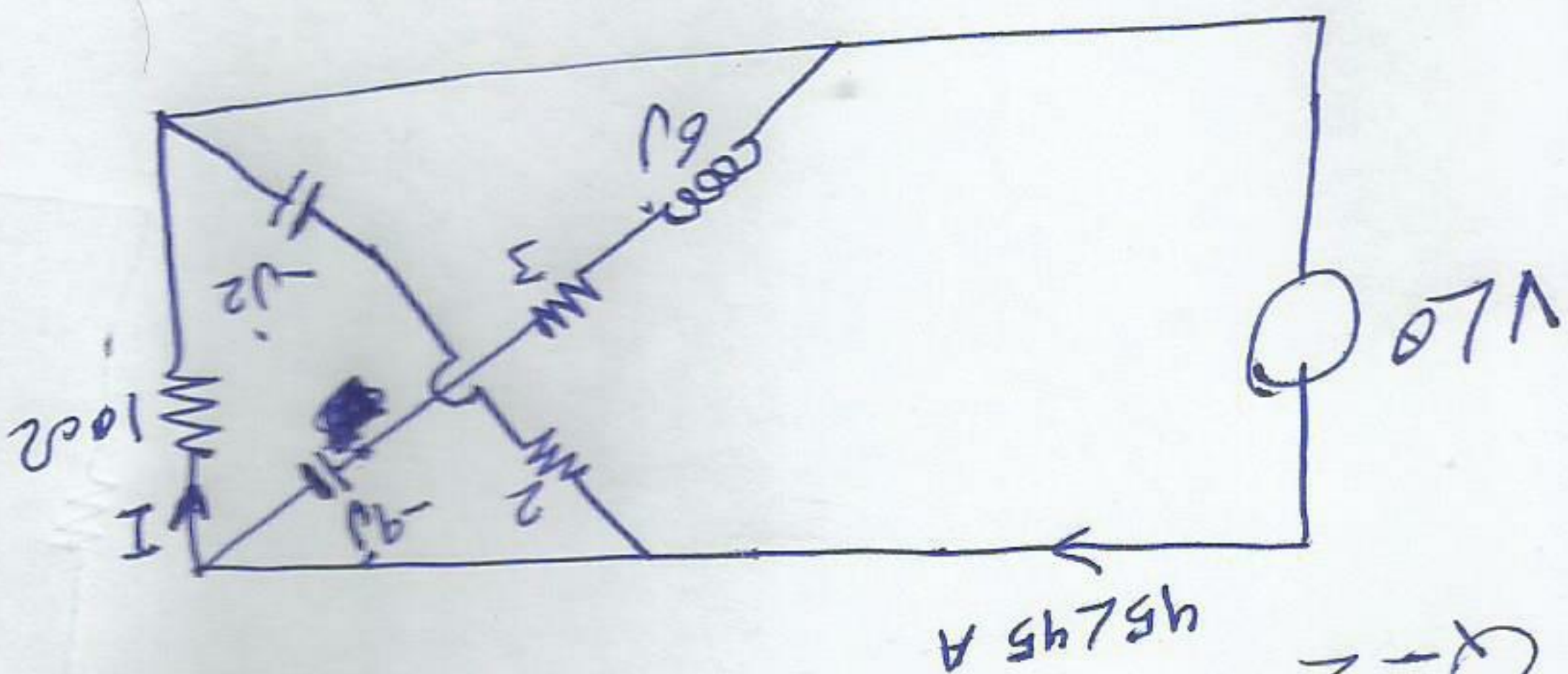


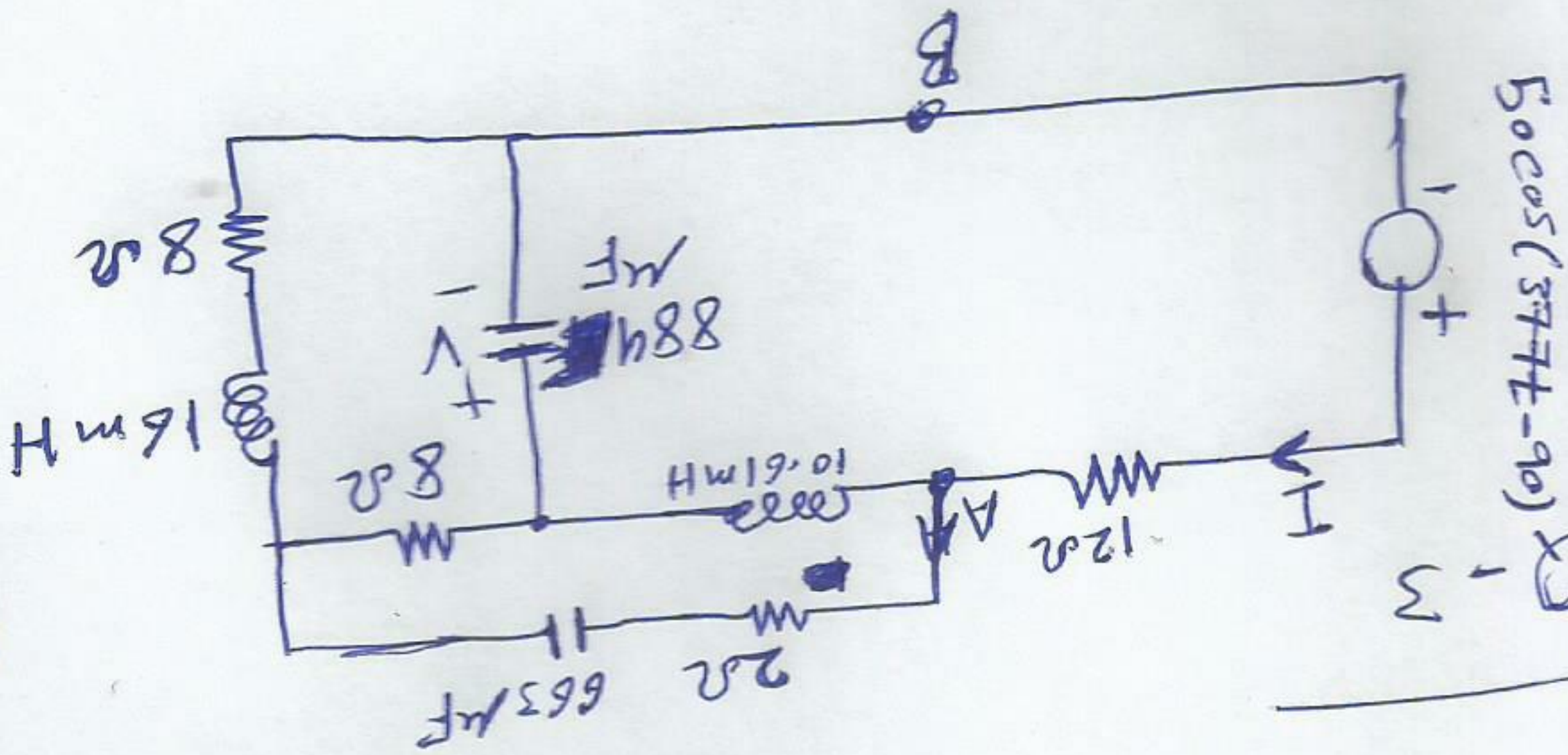
Q-1

Q-2



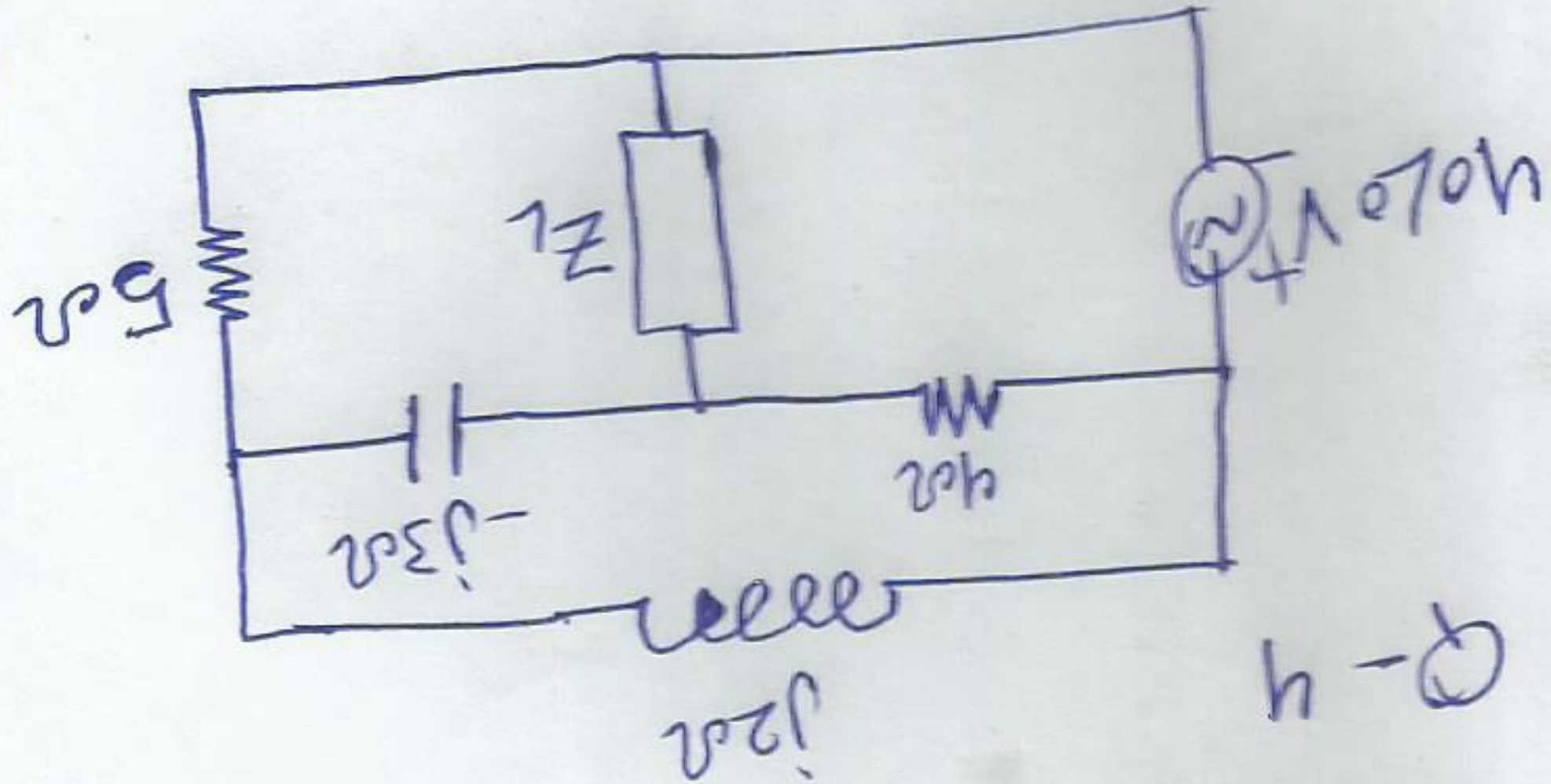
- (a) Find the source voltage V .
- (b) Find the current I in 100Ω resistor.

Q-3



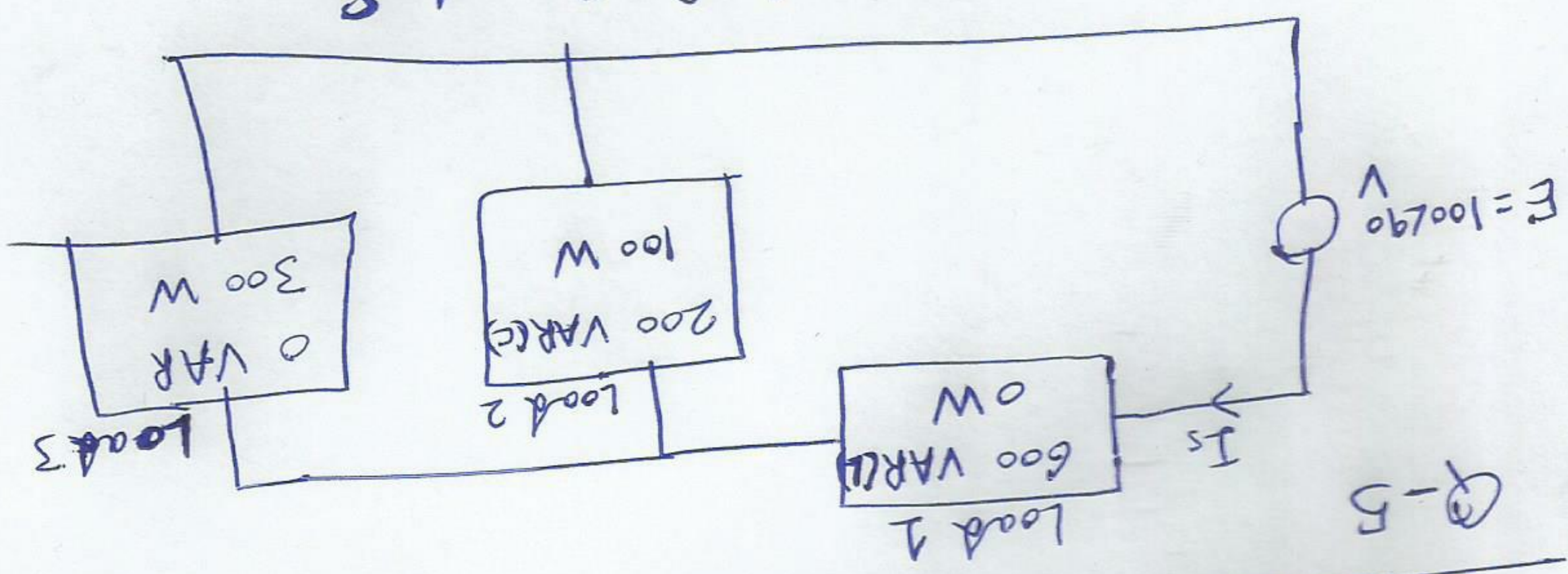
- (a) Find impedance Z_{AB} .
- (b) Source current I .
- (c) Find voltage V across the capacitor (use nodal method).

Q-4



- Find:
- (a) The Thevenin equivalent circuit across Z_L .
- (b) The load impedance Z for maximum power transfer (to Z).
- (c) calculate P_m .

Q-5



- Find
- (a) Total number of P , Q and S .
- (b) Source current I_s (A).
- (c) P.f of the source (before P.f improvement)
- (d) Shunt reactance to improve the power factor to unity