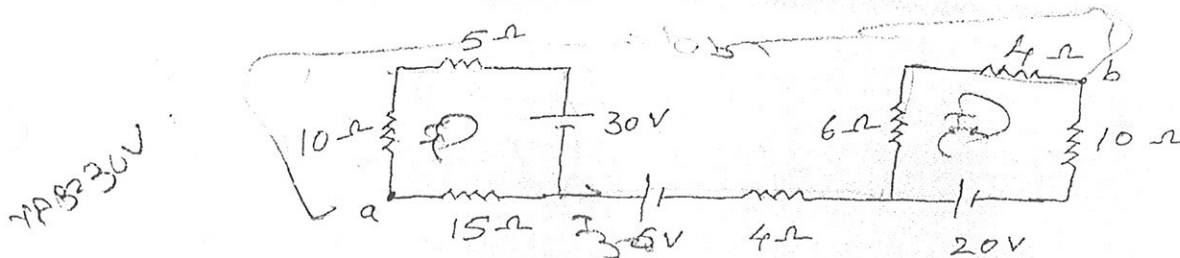


Shivajirao S. Jondhale College of Engineering, Dombivli
Class Test -1

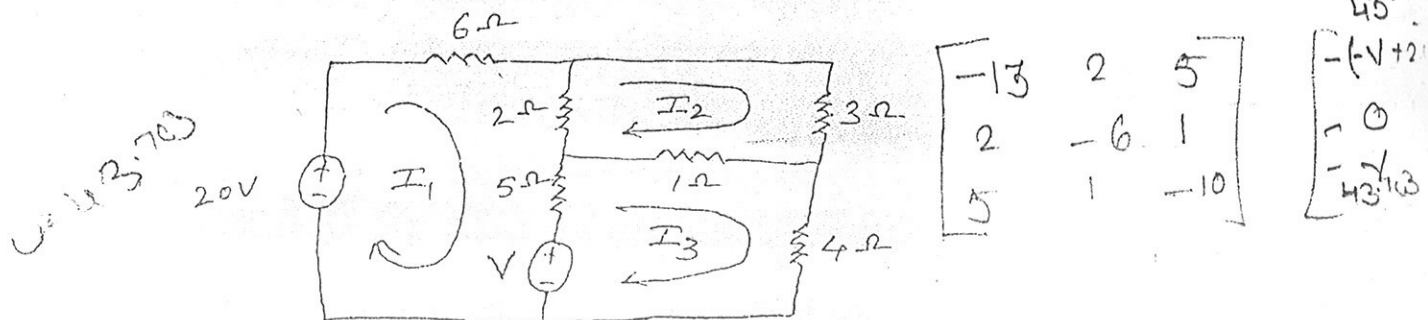
F. E. (Division A & C)
Subject : B.E.E.

Time: 60 Minutes
Marks : 20

- Q. 1 (a) State and explain Superposition theorem. (2 marks)
 (b) State and explain Thevenin's Theorem. (2 marks)
 (c) State and prove the maximum power transfer theorem. (3 marks)
 (d) Find the potentials at point a w.r.to point b (V_{ab}) in the network shown below. (3 marks)

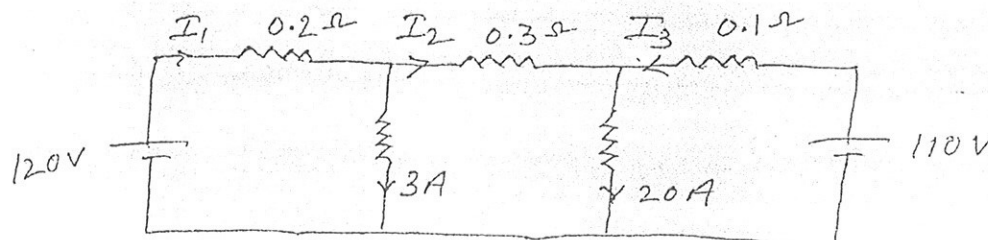


- Q.2 (a) By mesh analysis, find the unknown emf (V) in the network shown below which cause the mesh current $I_1 = 0$. (4 marks)



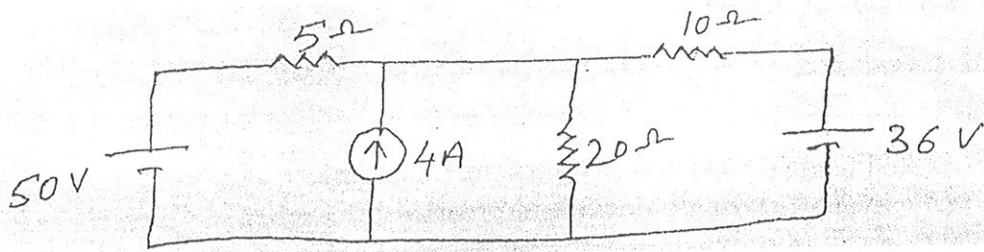
Or

- Q.2 (a) By node voltage method, find the currents I_1 , I_2 & I_3 in the network shown below. (4 marks)



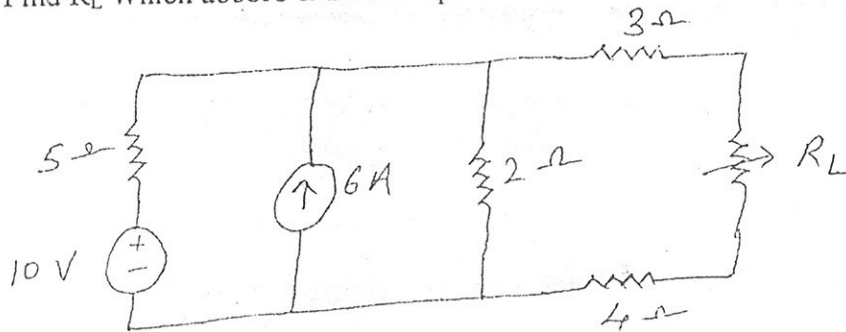
Div
b. App.

Q.2 (b) Find the current in $5\ \Omega$ resistor in the network shown below using superposition theorem. (6 marks)



Or

Q.2 (b) Find R_L which absorb maximum power and find out the maximum power. (6 marks)



or

Q.2 (b) Find the average and rms value of the waveform shown below. (6 marks)

