

SIES Graduate School of Technology

Second half of Year 2015-16

Class FE /SEM I

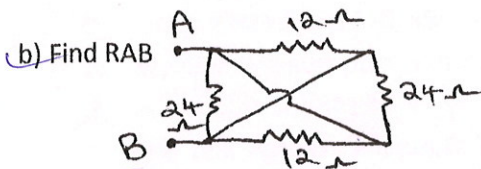
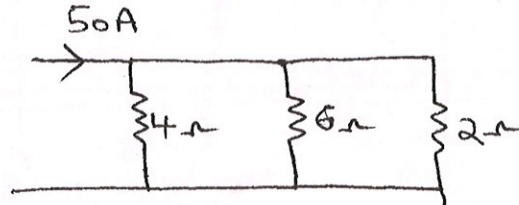
Marks 20

Time duration:- 1 Hr

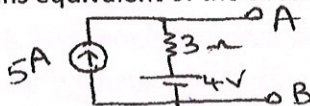
Subject :BEE

Q1 Solve any five (2 marks each)

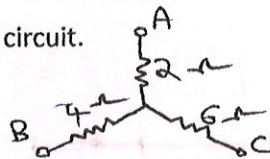
a) What is the voltage across 6 ohms resistor.



c) Find Thevenin's equivalent of the circuit given below.

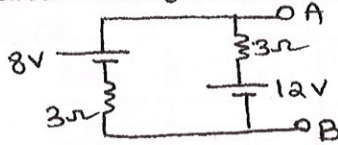


d) Convert the star circuit into its equivalent delta circuit.



e) If 'N' resistances of 'R' ohms are connected in series then what is the total resistance of the circuit.

f) Convert the given circuit into single current source in parallel with single resistance between point A and B

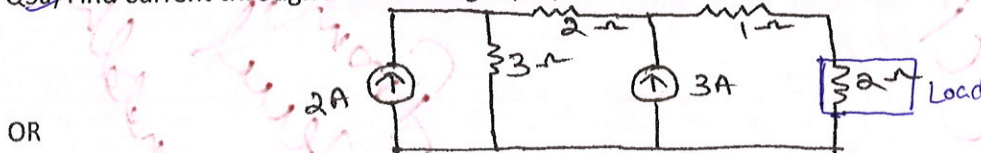


Q2a) Find current through 5 ohms resistor using mesh analysis. (5 marks)



Q2b) Solve Q2a by Nodal analysis. (5 Marks)

Q3a) Find current through 2 ohms using superposition theorem (5 Marks).



Q3b) solve Q3a by Norton/Thevenin's theorem. (5 Marks)