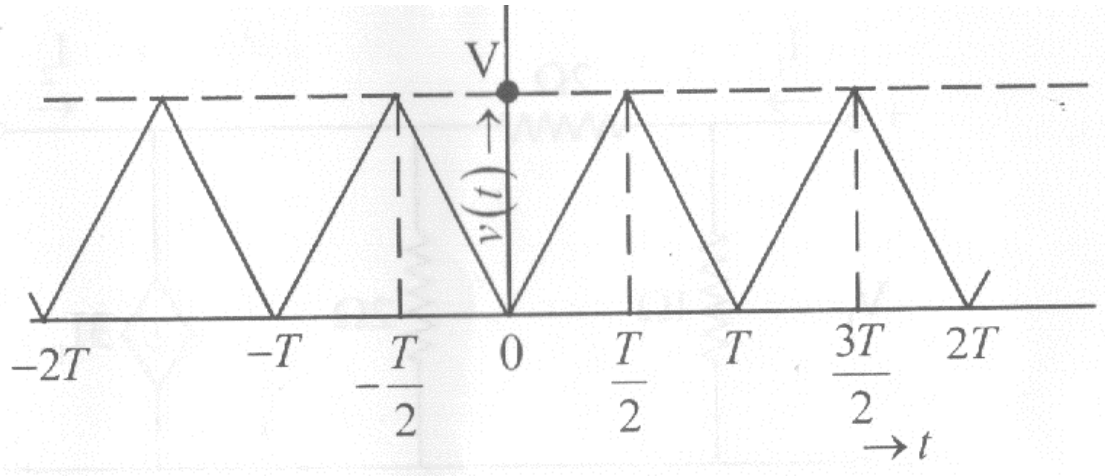
RGPV BASED ASSIGNMET QUESTION.

SUBJECT- NETWORK ANALYSIS (EX-305)

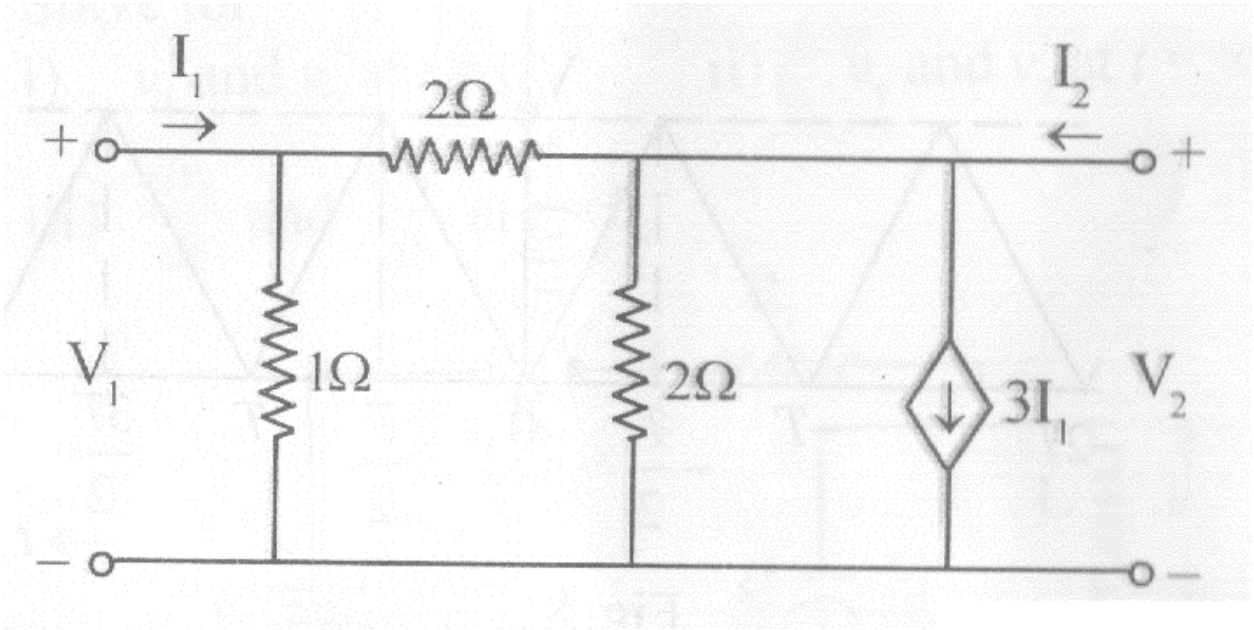
BRANCH- EX 3RD SEM

INTRUCTIONS. 1. All questions with their solution are submitted till 27 October 2014.

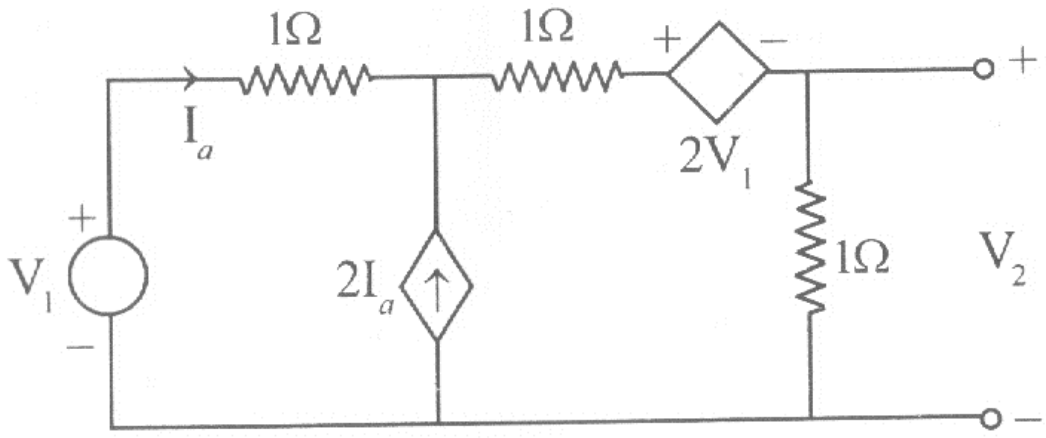
1. Find the Fourier series coefficient for the circuit shown in fig.



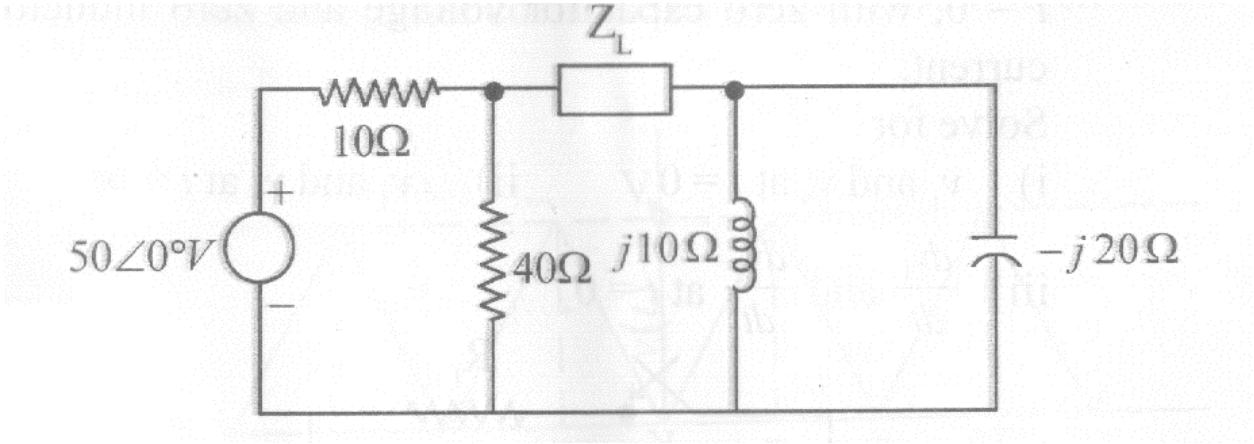
2.For this network contain the current controlled current source find the Y parameter.



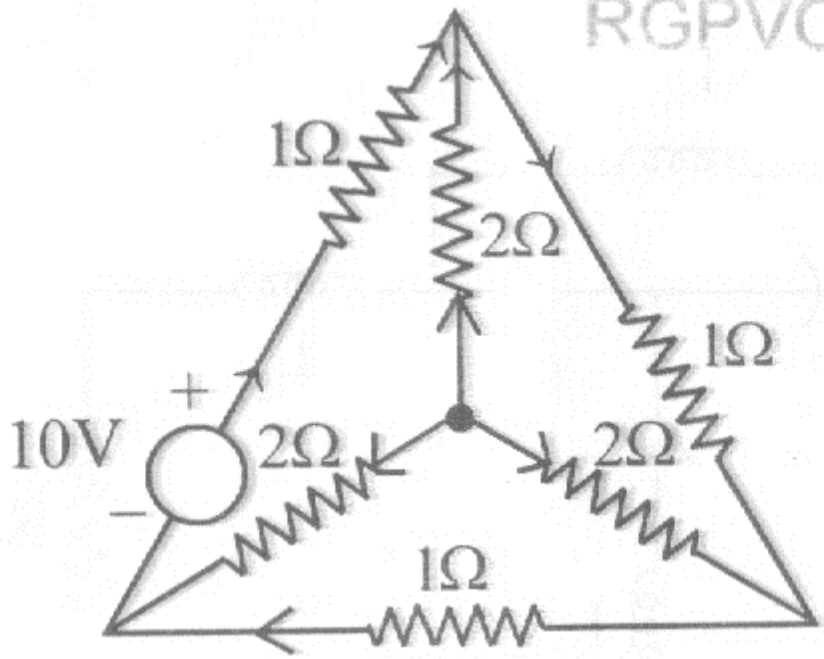
3.The circuit shown in fig.Find the ratio of V2/V1.



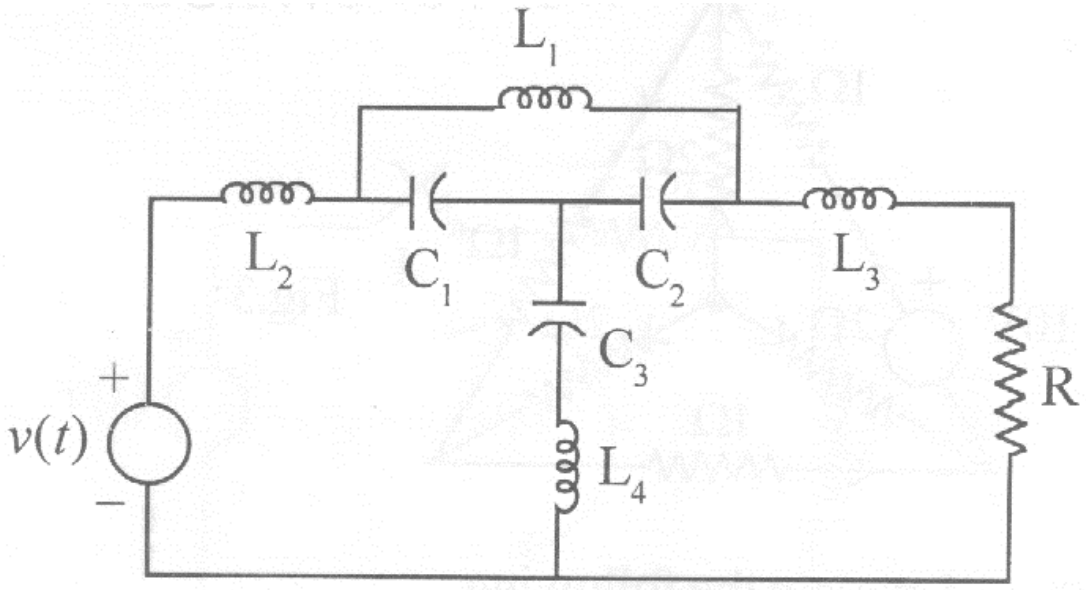
4.In the network shown in fig .find the value of Z_L so that power absorbed by it is maximum and the value of power absorbed.



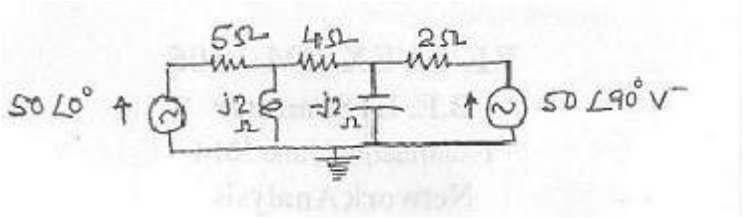
5.For the network shown in fig.Draw the graph and write the tie –set matrix.



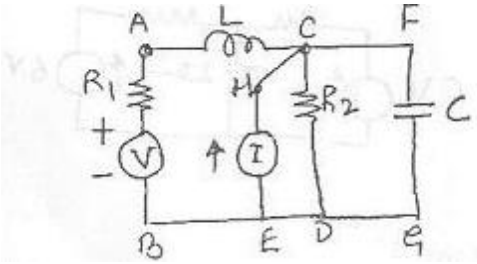
6.Draw the dual of the network shown in fig.



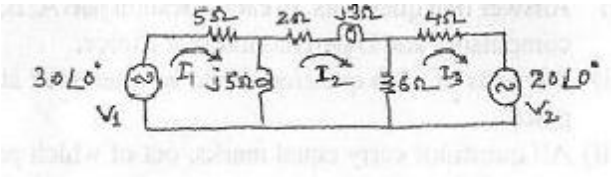
7.In the network shown in fig .determine the node voltage V_1AND V_2 with respect to the reference node.



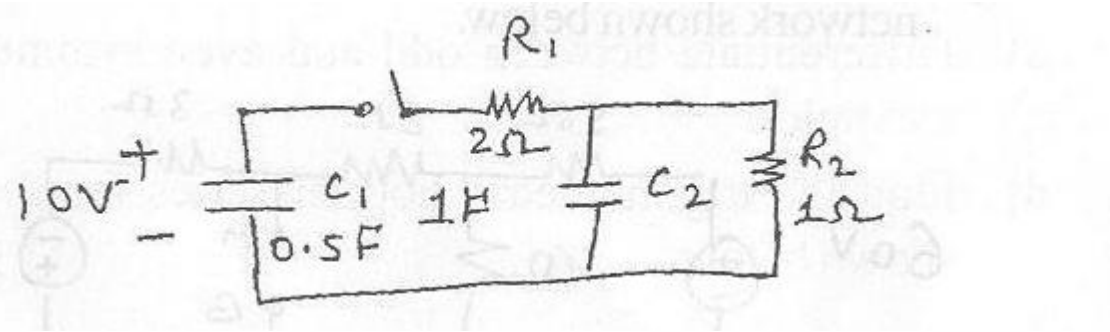
8.Draw the graph of the network shown below.



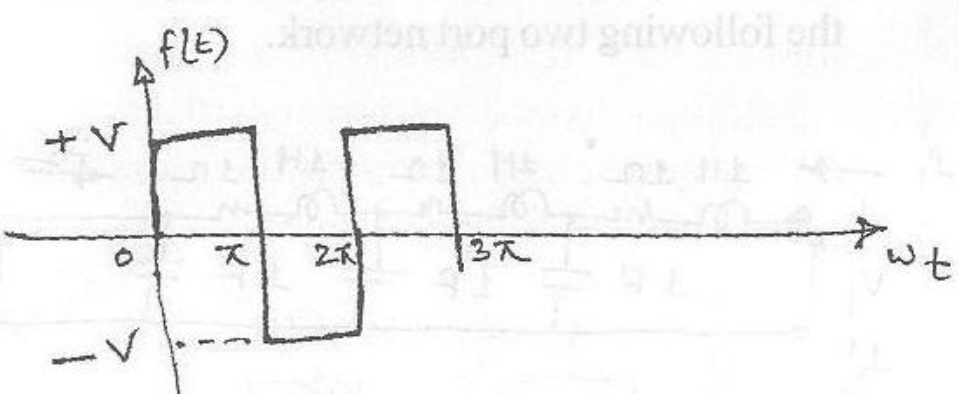
9.In the network given below find the current in the (2+3j)impedence by mesh method due to each of the sources.



10.Find the current by using thevenin's theorem through 1 ohm resistance .



11.Find the exponentional fourier series for the square waveform shown below.

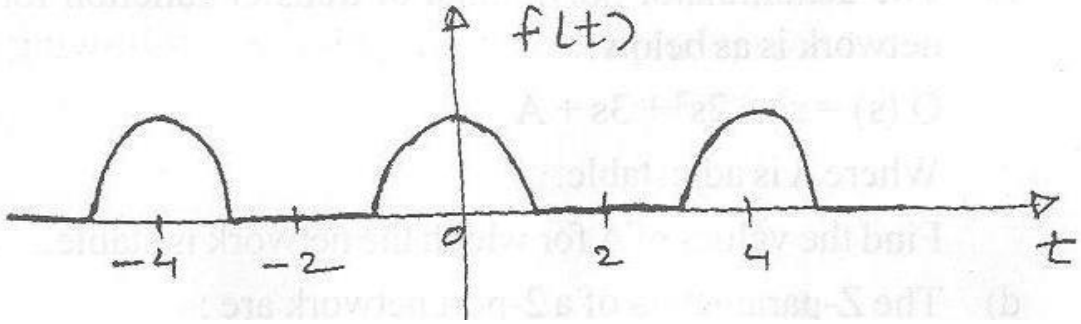


12.Verify whether the following expression for the driving point impedance Z(s)is suitable for representing

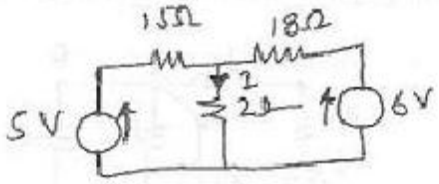
a passive one port network

$$Z(s)=\frac{s^4+2s^3-2s+1}{s^3+s^2-2s+12}$$

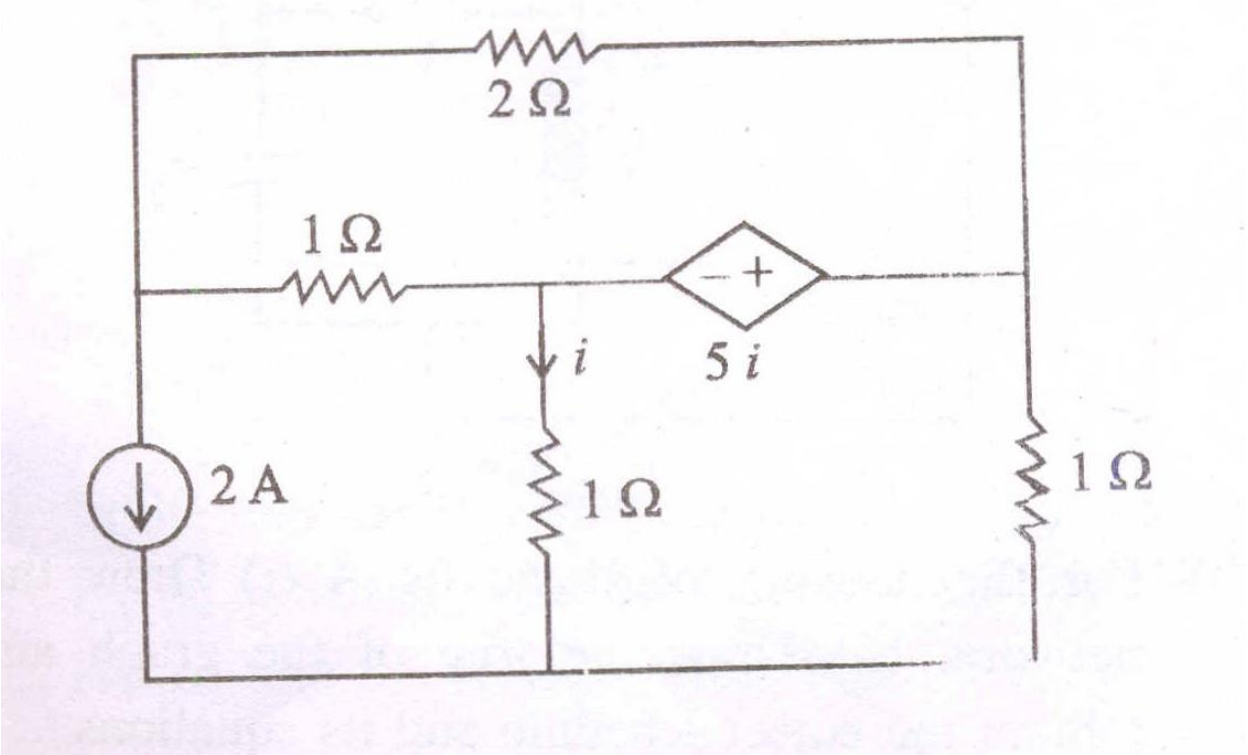
13.Find the trigonometric fourier series for the function shown below.



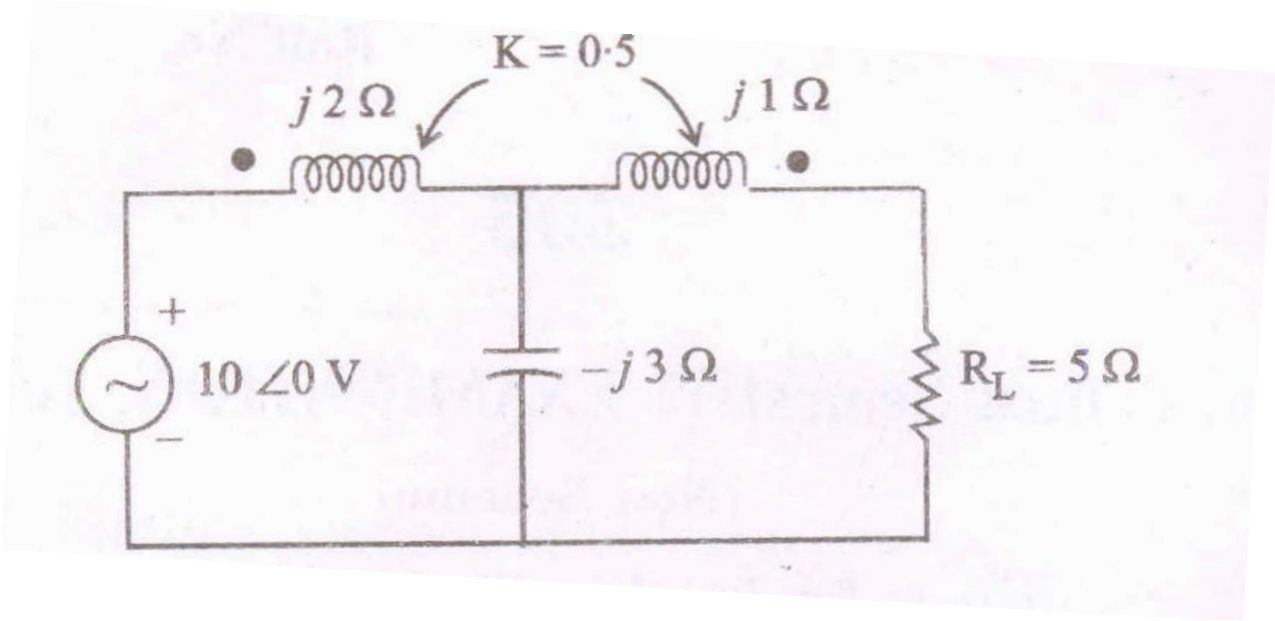
14.Calculate the current through the 2 ohm by using milliman's theorem.



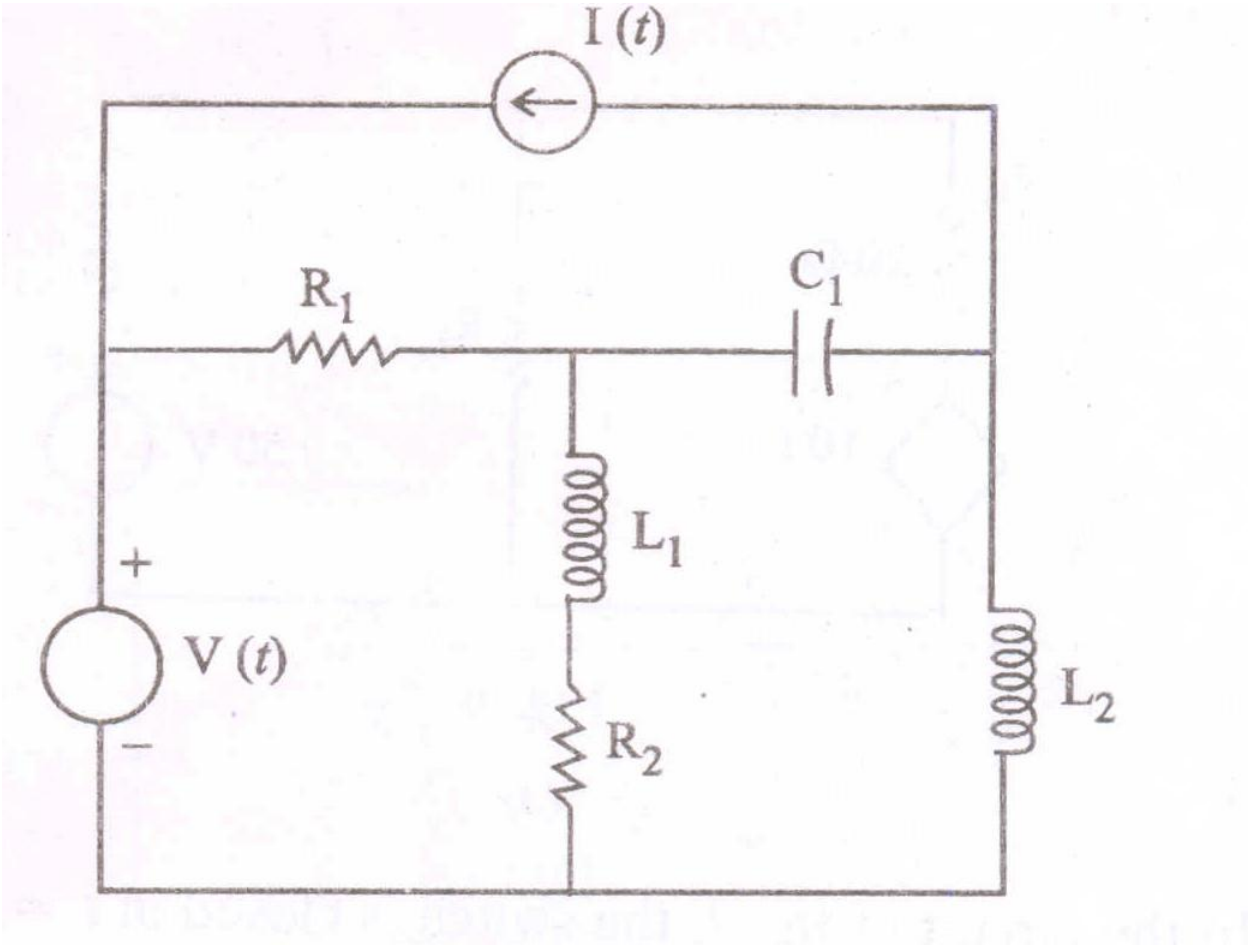
15.By using the mesh analysis find the value of current dependent voltage source and current through the 2 Ohm resistance.



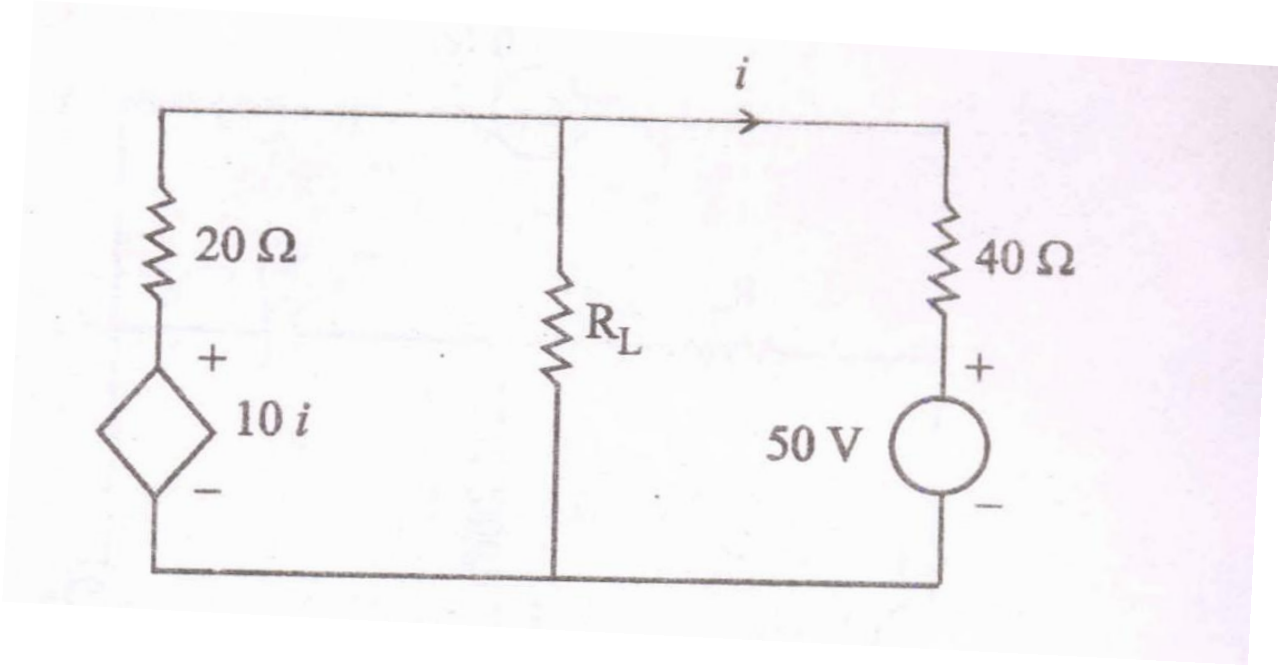
16.Find the drops across R_L circuit shown below.



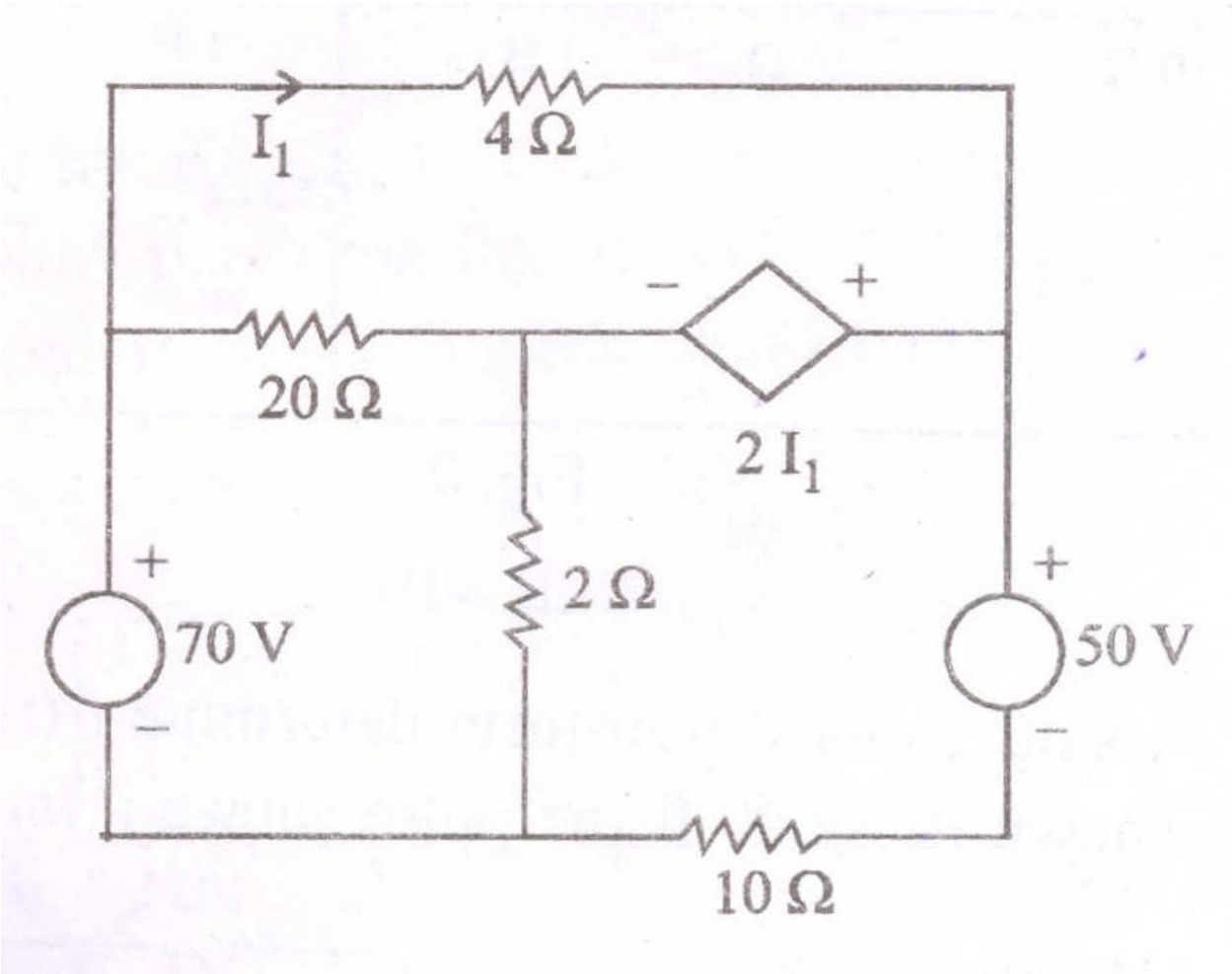
17.Draw the dual of the network shown below.and draw the tree of the graph.



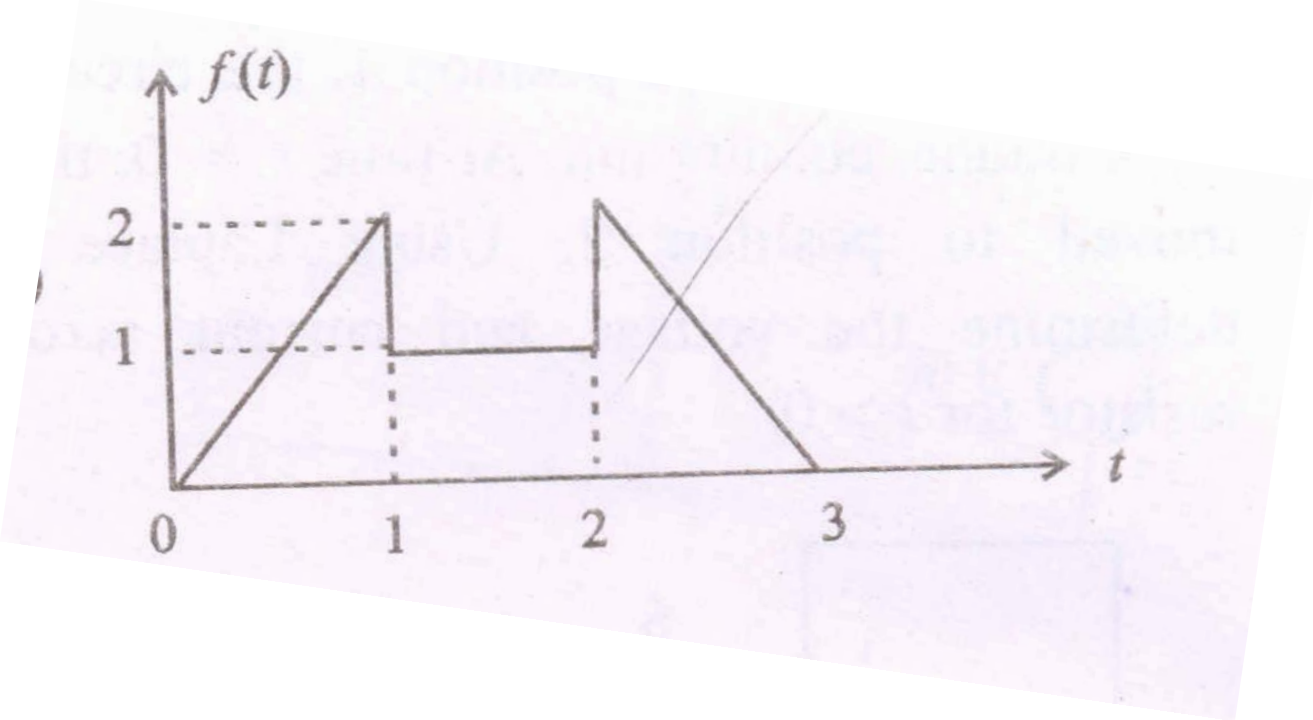
18.In the network shown in fig .find the value of R_L so that power absorbed by it is maximum and the value of power absorbed.



19. Calculate the current I by using superposition theorem.


I_1
4 Ω
20 Ω
2 I_1
2 Ω
70 V
50 V
10 Ω

20.Find the Laplace transform for the waveform shown below.



21..Find the Zparameter of the network shown in fig.