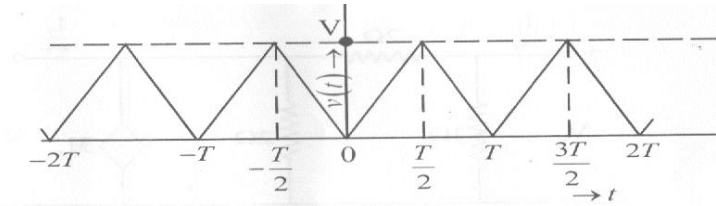


RGPV BASED ASSIGNMET QUESTION.

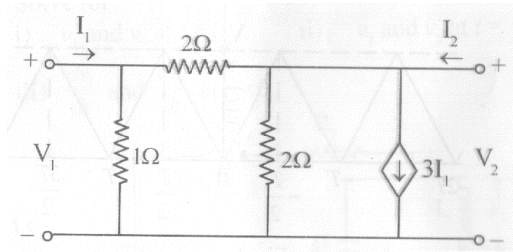
SUBJECT- NETWORK ANALYSIS (EC-305) BRANCH- EC 3RD SEM

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

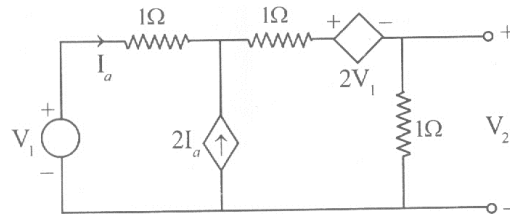
1. Find the Fourier series coefficient for the circuit shown in fig.



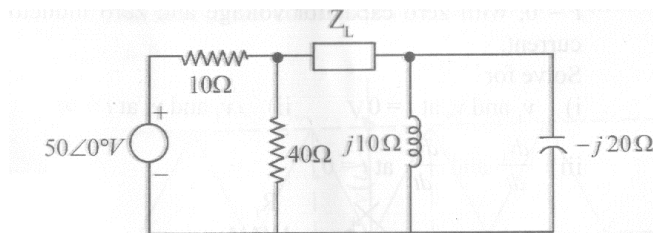
2. For this network contain the current controlled current source find the Y parameter.



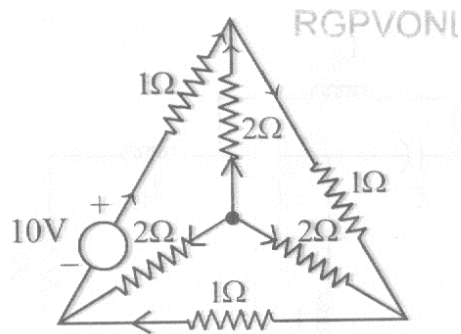
3. The circuit shown in fig. Find the ratio of V_2/V_1 .



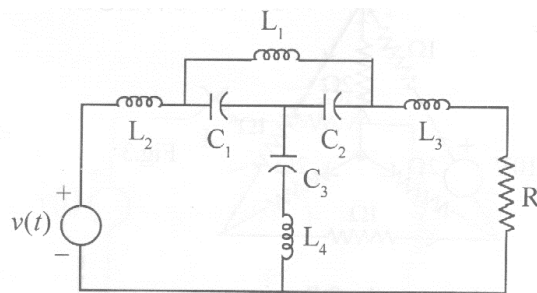
4. In the network shown in fig .find the value of Z_L so that power absorbed by it is maximum and the value of power absorbed.



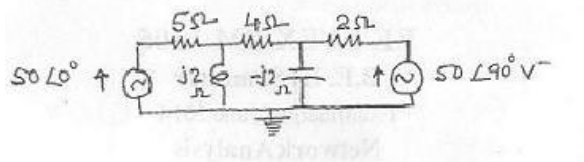
5. For the network shown in fig. Draw the graph and write the tie-set matrix.



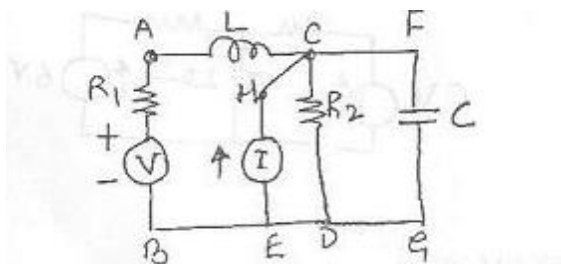
6. Draw the dual of the network shown in fig.



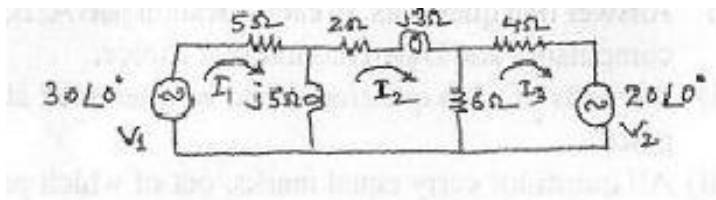
7. In the network shown in fig. determine the node voltage V_1 AND V_2 with respect to the reference node.



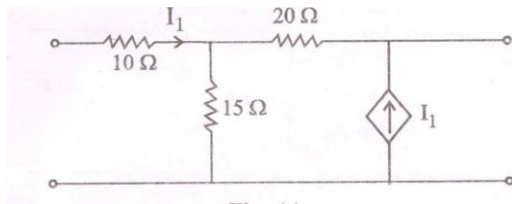
8. Draw the graph of the network shown below.



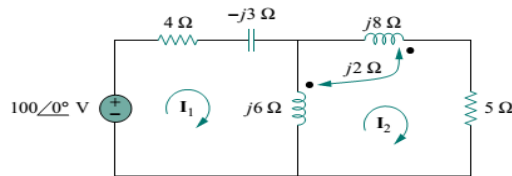
9. In the network given below find the current in the $(2+3j)$ impedance by mesh method due to each of the sources.



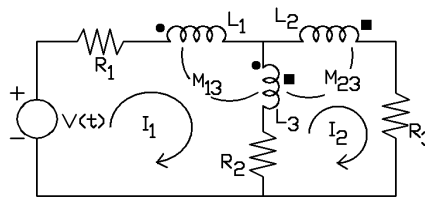
10. Find the Z parameter of the network shown in fig.



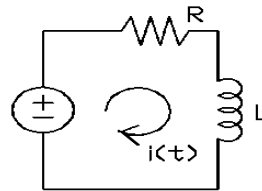
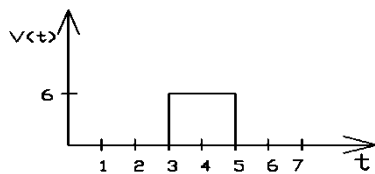
11. Find both mesh currents for given circuit.



12. write KVL equation if $M_{12}=0$

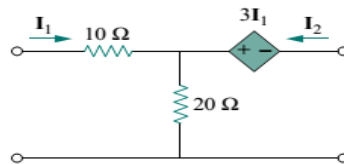


13. A voltage pulse of magnitude 6V & duration 3 sec extending from $t = 3$ sec to $t = 5$ sec is applied to a series RL circuit $R=6$ $L=2$ H. Find current $i(t)$?

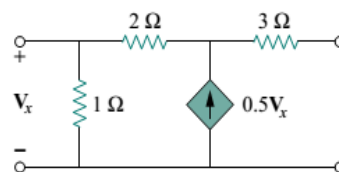


14. Find relationship between Z parameter and A'B'C'D' parameter.

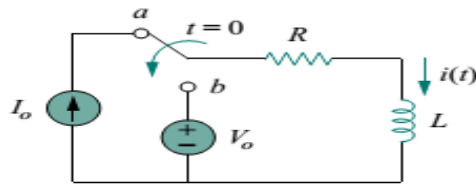
15. Find transmission parameter of given two port network.



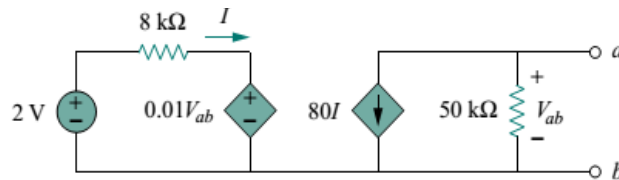
16. Find the open circuit impedance and short circuit admittance parameter for given network



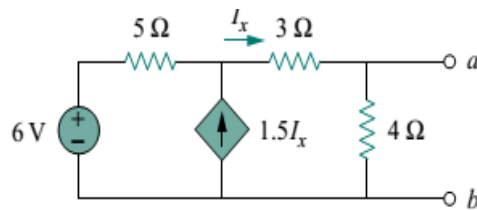
17. find $i(t)$; draw response for $i(t)$; define time constant .



18. Find the Thevenin equivalent circuit of the circuit in Fig.

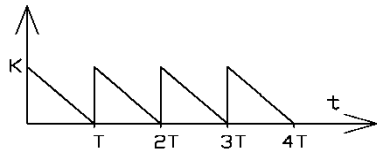


19. Obtain the Norton equivalent at terminals $a-b$ of the Circuit



20. A Ramp voltage $v(t)=r(t-2)$ is applied to series RC network at $t=0$, when $R=3\Omega$ & $C=1F$, assuming zero initial condition find current $i(t)$.

21. Find the Laplace Transform of given waveform?



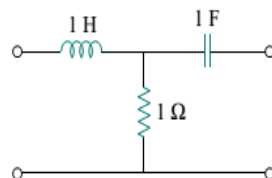
22. Derive expression for current in series RL circuit when source is suddenly applied at $t=0$?

draw the output current characteristics and define time constant?

23. Derive expression for current in series RL circuit when source is removed at $t=0$?

draw the output current characteristics and define time constant?

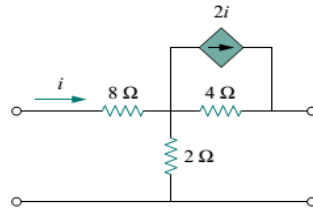
24. Find the h and g parameter for given two port network?



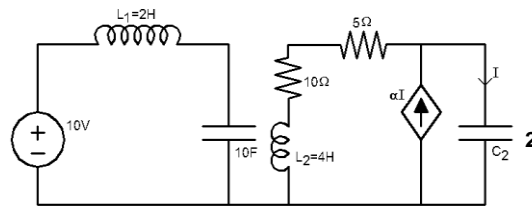
25. A Ramp voltage $v(t) = r(t - 2)$ is applied to series RC network at $t = 0$, when $R = 3\Omega$ & $C = 1F$, assuming zero initial condition find current $i(t)$



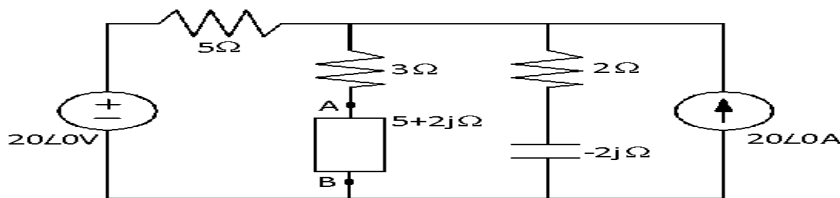
26. Find the h and g parameter for given two port network ?



27. Draw Dual Network of given circuit



28. Find the power dissipated in load $(5 + 2j)\Omega$ by Superposition Theorem?



29. Draw the Norton's equivalent circuit for given network and find the power dissipated across $(2 + 3j)\Omega$ load terminals?

