Roll No:.....

National Institute Of Technology Delhi

Name of the Examination: B. Tech

Branch : EEE & ECE

Semester : III

Course Name : Network Analysis & Synthesis

Course Code: EEL-201

Time : 2:00 hours

Maximum Marks: 25

Note:

- All Questions are compulsory.
- Do not write irrelevant Theory.

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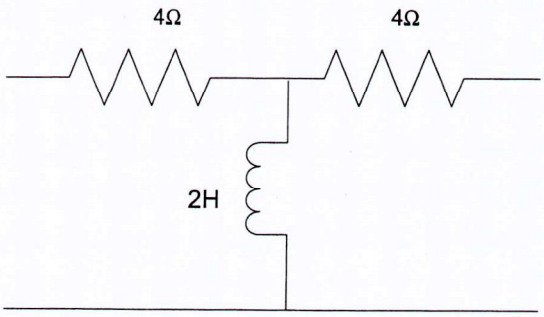
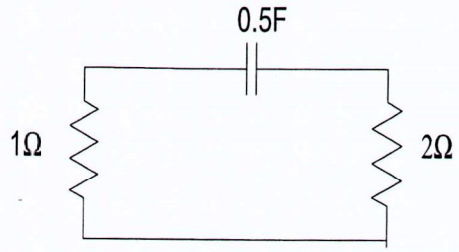
1. Two circuits A and B connected in cascade. Calculate the T- parameter for the over all circuit. [5]



Circuit A



Circuit B

2. The Y parameter for two port network N are given as [4]

Y_{11}= 4 mho

Y_{22}=5 mho

Y_{12}=Y_{21}= 4mho

If a resistor of 1 ohm is connected across the port – 1 of N, then find out the output Impedance

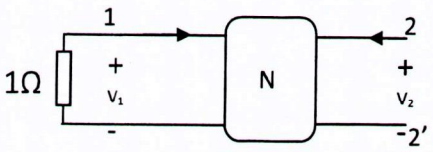


Fig. 2

3. Determine the Z and Y parameter for the figure shown in Fig. 3 [5]

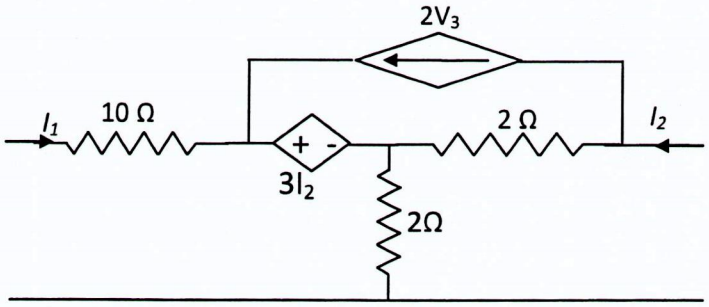


Fig.3

4. Find the driving point impedance at 1-1' of the ladder network shown in Fig. 4 [3]

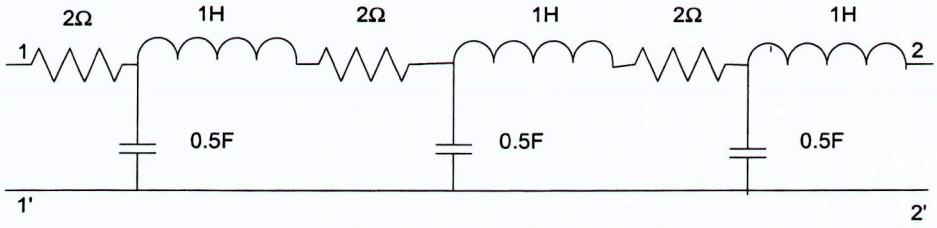


Fig.4

5. Find the pole zero plots of driving point and transfer impedances of the network shown in Fig. 5. [5]

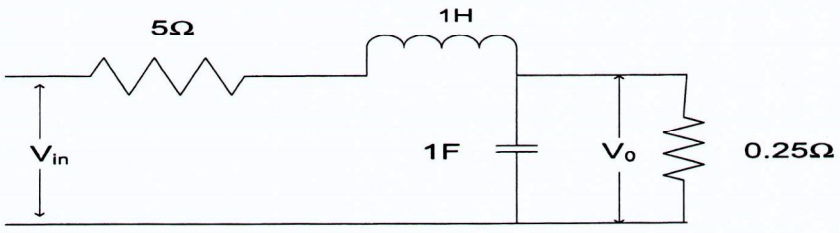


Fig. 5

6. Express ABCD parameter in terms of hybrid parameter and short circuit parameter. [3]