OR

1. a) Find the pole - zero plats of the driving point and transfer impedance of the network given in fig.3 **(8)**

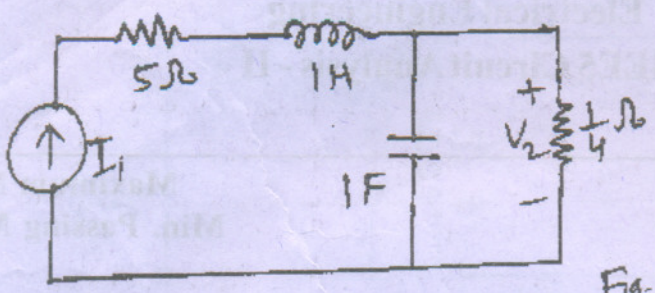

Fig. 3

b) A current transfer function is given by $I_S = \frac{5s}{(s+2)(s^2+2s+2)}$ obtain its time domain response. **(8)**

Unit - II

2. a) Test whether the following functions are Hurwitz or not. **(8)**

i) $s^5+3s^4+3s^3+4s^2+s+1$

ii) s^4+3s^2+2

b) Check whether the function $Z(s)=\frac{2s^2+2s+1}{S^3+2s^2+s+2}$ is a PR function. **(8)**

OR

2. a) The driving point impedance of a one port reactive network is given by $Z(s)=4\frac{s(s^2+4)}{(s^2+1)(S^2+16)}$ obtain the Faster First form of LC network realisation. **(8)**

b) The driving point impedance of a reactive network is given by $Z(s)=\frac{s^4+4s^2+3}{2s^3+3s}$ Find the second form of Cauer network. **(8)**

Unit - III

3. a) Determine the Z - parameters of the network given in fig.4 **(8)**

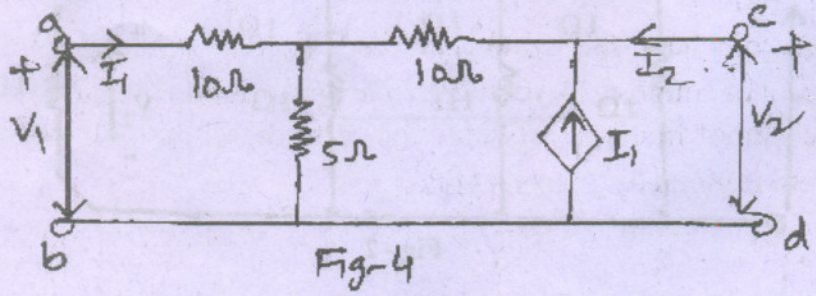

Fig-4