

TUTE-05
Network Analysis and Synthesis (UEE 503)
Department of Electrical and Instrumentation Engineering

Q1. Find Z-parameters of the network shown in Fig. 1. **(10.83Ω, 1.67Ω, 1.67Ω, 3.33Ω)**

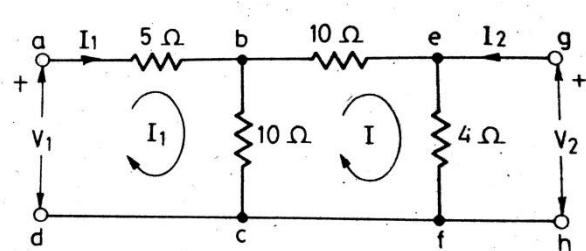


Fig. 1

Q2. For the circuit shown in Fig. 2 determine Z and Y- Parameters. **(-0.4Ω, -3.2 Ω, 0.4 Ω, 1.2 Ω and 1.5 Siemens, -0.5 Siemens, 4.0 Siemens, -0.5 Siemens)**

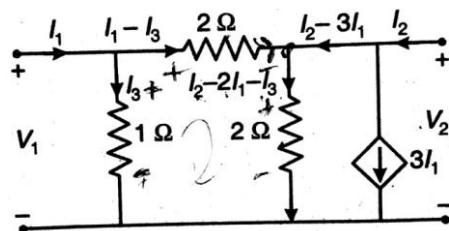


Fig. 2

Q3. Calculate impedance parameters equivalent of the network shown in Fig. 3. **(29.88Ω, 3.704Ω, -70.37Ω, 11.11Ω)**

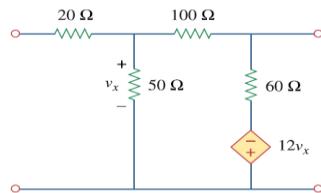


Fig. 3

Q4. Find the y parameters of the two-port in Fig. 4 in terms of s. **(s+0.5, -0.5, -0.5, 0.5+1/s)**

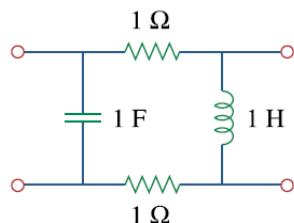


Fig. 4