

ECE 4333/6333
Quiz #2
(4.3- 4.5, Ch. 5)

I. Microwave Network Analysis

- A. S-parameters
 - 1. S-parameters at arbitrary terminal planes
 - 2. Generalized scattering parameters
- B. Transmission matrix (ABCD matrix)
- C. Equivalent circuits for two-port networks
 - 1. T-network
 - 2. Π -network
- D. Signal flow graphs

II. Impedance Matching and Transformation

- A. Lumped element matching networks
 - 1. Network for $R_L > Z_o$
 - 2. Network for $R_L < Z_o$
- B. Single stub tuner
 - 1. Series stub
 - 2. Shunt stub
- C. Frequency response of matching networks
- D. Quarter wave transformer
- E. Double stub tuner
- F. Theory of small reflections
- G. Multisection matching transformers
 - 1. Binomial matching transformer
 - 2. Chebyshev matching transformer