## Special Problem 4.2-5

The voltage along the transmission line below is described as:

$$
V(z)=V_{0}^{+} e^{-j \beta z}+V_{0}^{-} e^{+j \beta z}
$$



Using the definition of admittance parameters, evaluate this 2-port device and find explicitly the values $Y_{11}$ and $Y_{21}$.

Hint: Use your transmission line knowledge to determine the required voltages and currents at each port.

