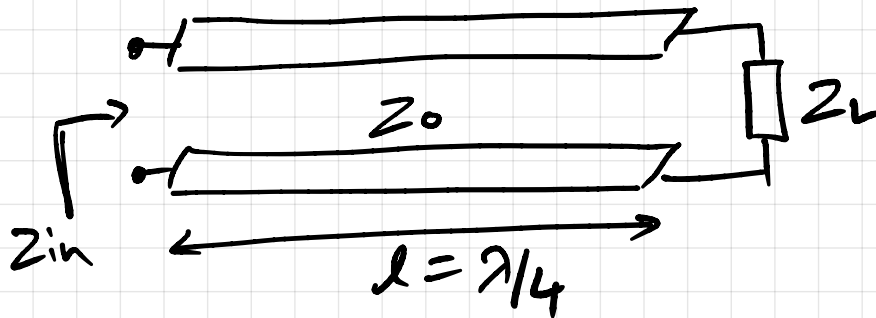


Assignment3  
EE5192 2022  
[akumar@ee.iith.ac.in](mailto:akumar@ee.iith.ac.in)

1. For a lossy transmission line, is propagation constant  $\beta$  a linear function of  $\omega$ ?

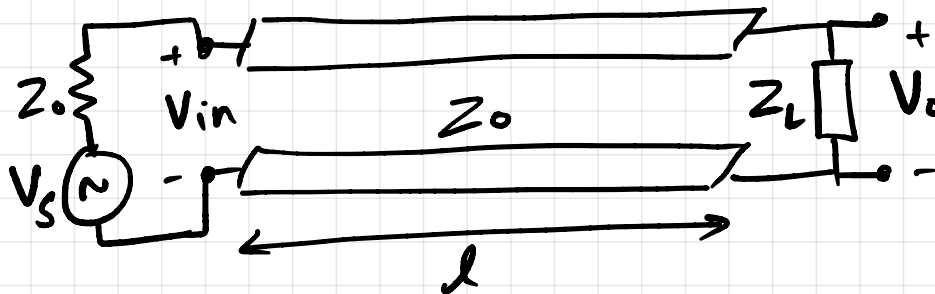
What can you say when,  $\frac{L}{R} = \frac{C}{G}$ .

2.



Find  $Z_{in}$  for the above lossless transmission line terminated with load  $Z_L$ .

3.



Find  $Z_L$  to maximise  $V_o$ . Find  $V_{in}$  for that case.