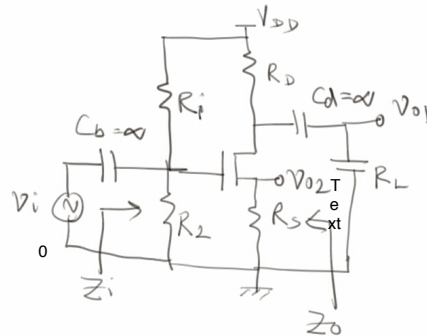| Assignment-4	EE204 - Analog Circuits	6th Feb 2018
Submission Deadline-17.00 12th Feb, 2018.	Submission Protocol: Drop hardcopy in the EE office	Comment: None

1.	

Assume the following parameters: g_m = 2 mS, r_0 = 100 kΩ, R_D = 20 kΩ, R_S = 5 kΩ, R_L = 20, R_1 = R_2 = 10 kΩ, C_{gs} = 10 pF, C_{gd} = 0.1 pF. Assume input signal has an internal resistance of 100 Ω. Draw Bode plot for gain and phase i) from analytical expression and ii) using Miller's theorem with approximation for the following cases.

I. C_b = 100 pF and C_d = ∞
II. C_b = ∞ and C_d = 100 pF
III. C_b = 100 pF and C_d = 100 pF
IV. An additional capacitor C_S = 1 nF is connected in parallel with Rs along with III.