

EE210: Analog Electronics - Quiz 7

NAME (in capital)

Roll No

Time: 15 minutes

1) : All transistors in the figures are biased in saturation (biasing network has not been shown). Assume transconductance of M_1 is g_{m1} and that of M_2 is g_{m2} . Neglect CLM.

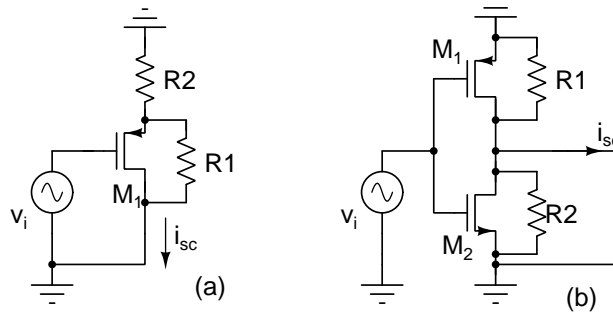
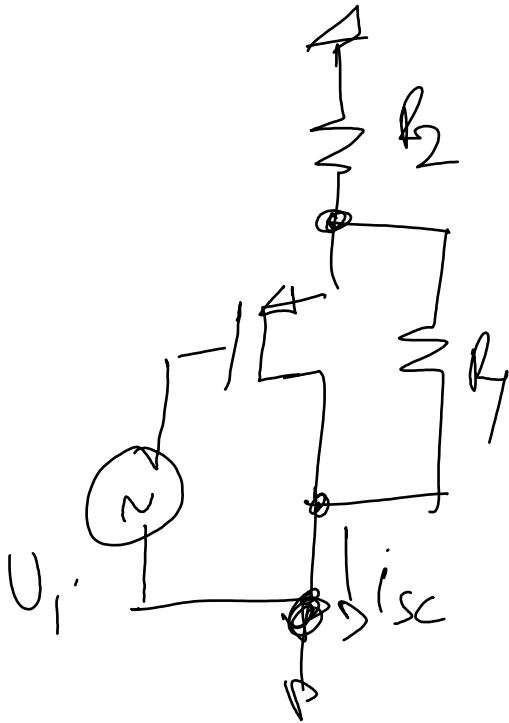


Fig. 1. Problem 1

a) : Find the small-signal short circuit current, i_{sc} , as indicated in Fig. (a).

[5]



Same as Set 1.

But sign of i_{sc} will be -ve.

contd..

b) : Find the small-signal short circuit current, i_{sc} as indicated in Fig. (b).

[5]

Same as Set 1