

ECE515/315 QUIZ 1

Roll No.

Name _____

Q.1. Identify transistors that constitute the current source and currents sink pairs in Figure 1. No explanation required (Give the transistor numbers). (10 Marks)

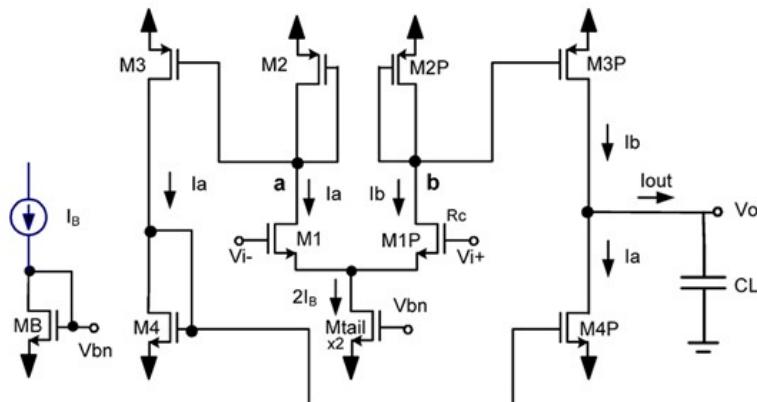


Figure 1

Answer

Current sources: (M3 and M2) and (M2P and M3P)

Current Sinks: (M4 and M4P) and (MB and Mtail)

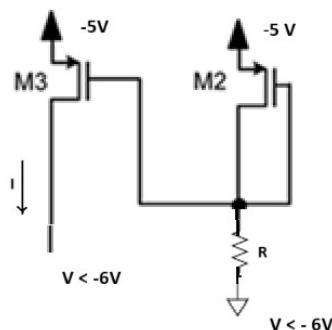
Q.2. Design a current source which can operate with a supply voltage of -5 V. Take $V_{Th} = 0.8$ V.

(10 Marks)

If someone answers that it is not possible to design this circuit

OR

If someone gives following circuit



Give 10 MARKS