EAST WEST UNIVERSITY

Course Title : Electrical Circuits
Course code : CSE-251
Section : 04

Lab Report
Experiment No – 06

Submitted to : Touhid Ahmed
Lecturer
Department of Computer Science and Engineering
East West University

Experiment No: 06
Name of Experiment: Measurement of Parameters and I-V characteristics of an N-channel MOSFET.

Submitted By : Tasnima Sabrina Mahi
Id No: 2020-1-60-121
5Th semester, CSE Department

Experiment No: 6

Title: Measurement of Parameters and I-V characteristics of an N-channel MOSFET.

Objectives:
1. To measure the threshold voltage Vt and the process transconductance Kn of an N-channel enhancement type MOSFET.
2. To measure the I-V characteristics (ID vs. VDS) of an N-channel enhancement type MOSFET.

Circuit Diagram:

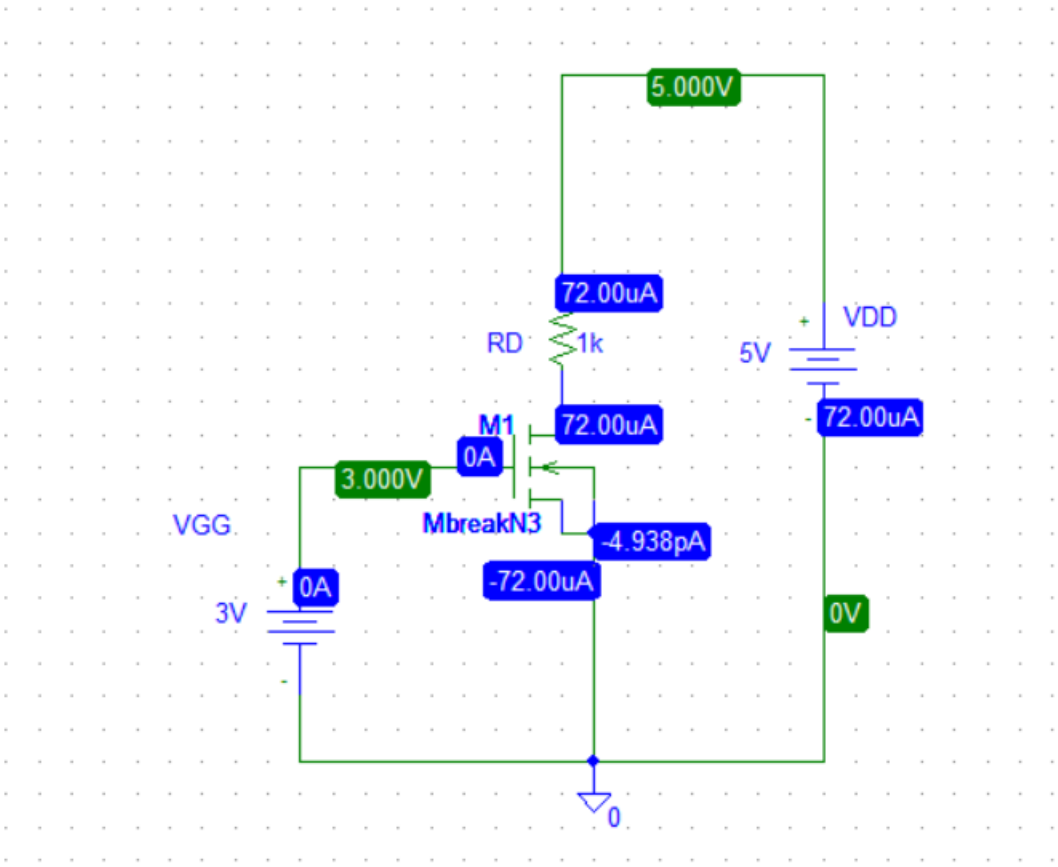


Fig: N-channel MOSFET

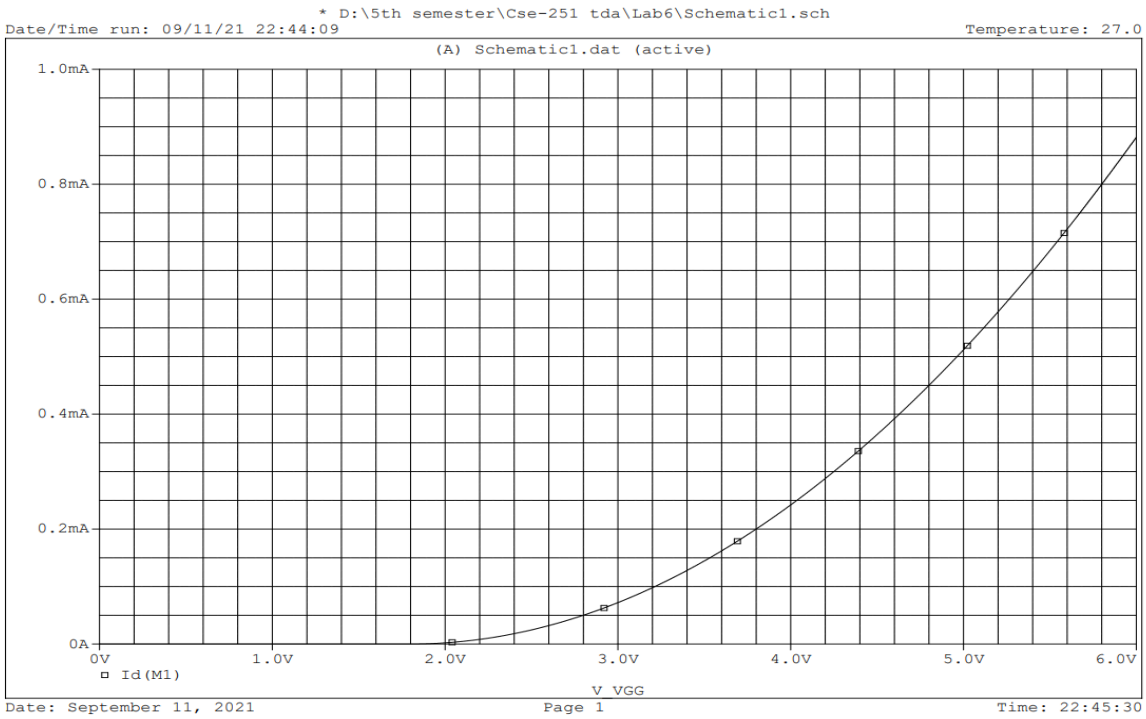


Fig: ID-VGS Characteristics

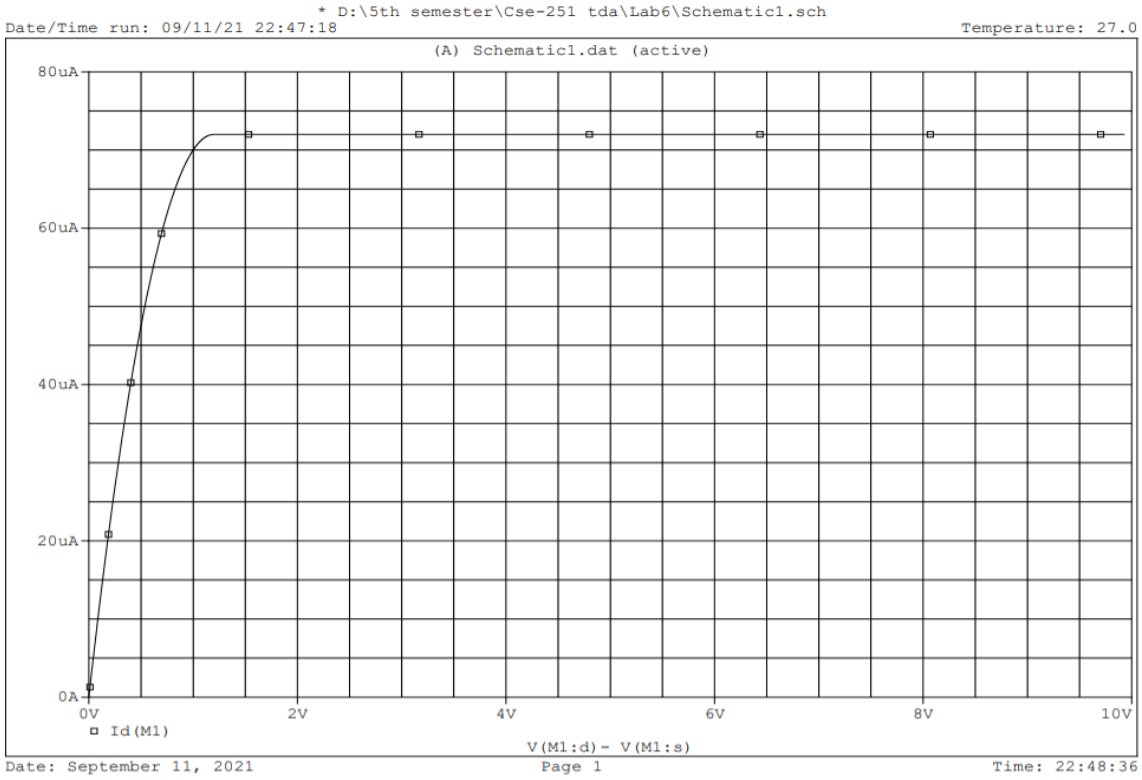


Fig: ID-VDS Characteristics

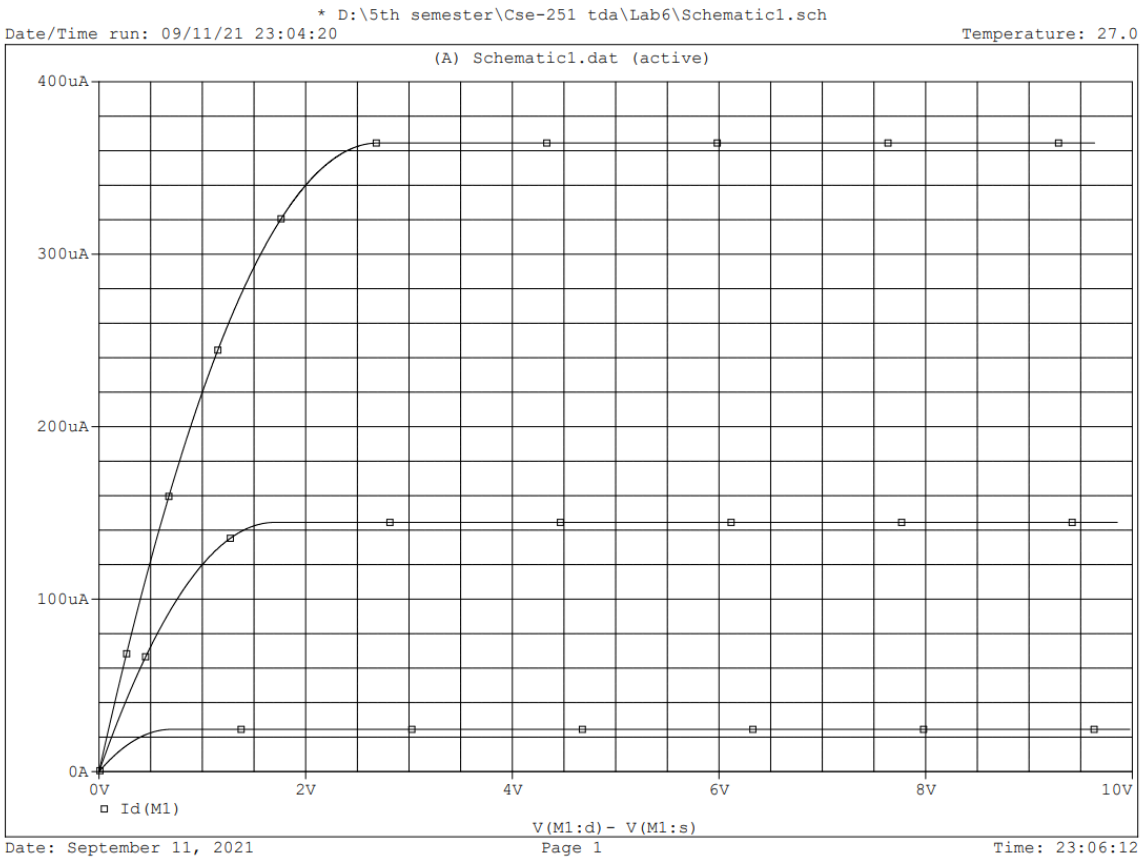
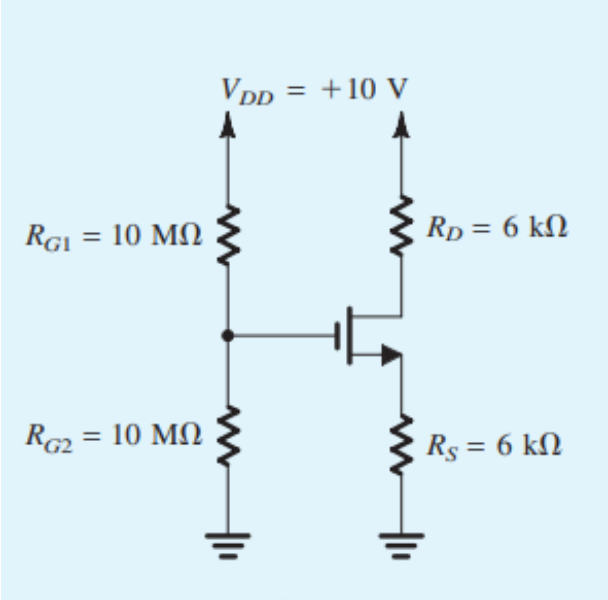


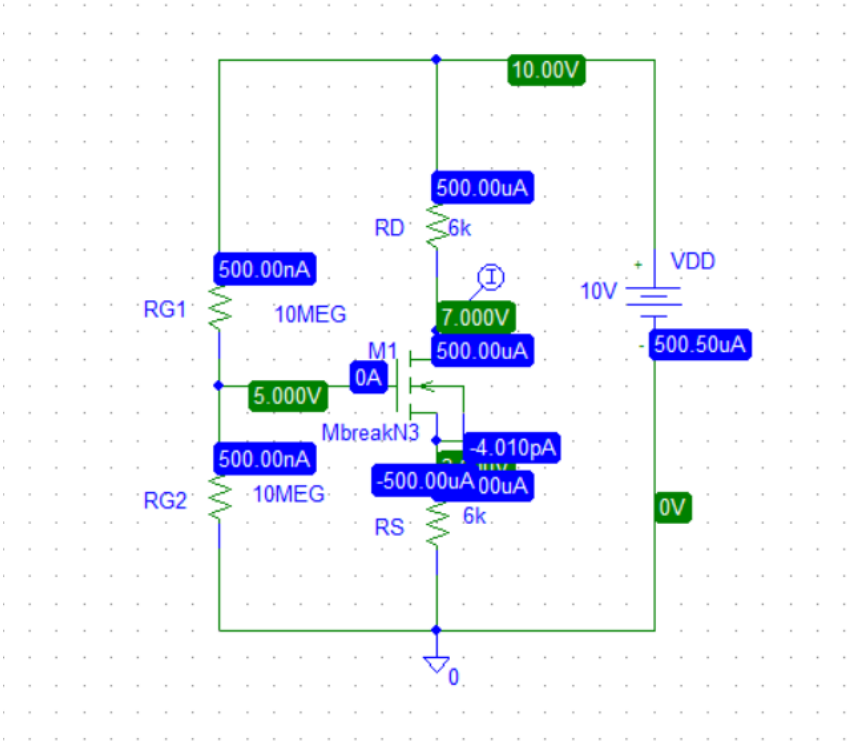
Fig: ID-VDS Characteristics for multiple VGS

Simulation of a MOSFET dc circuit from textbook:

Reference:



Simulation:



Conclusion:

From this experiment, we have learnt N-MOS charaterstics and Id-Vgs Characteristics, Id-Vds Characteristics of a circuits.