EAST WEST UNIVERSITY

Course Title:Electrical Circuits
Course:CSE251
Lab Report (6)
Section: 5
Date: 12.1.22

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

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Submitted to:
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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:

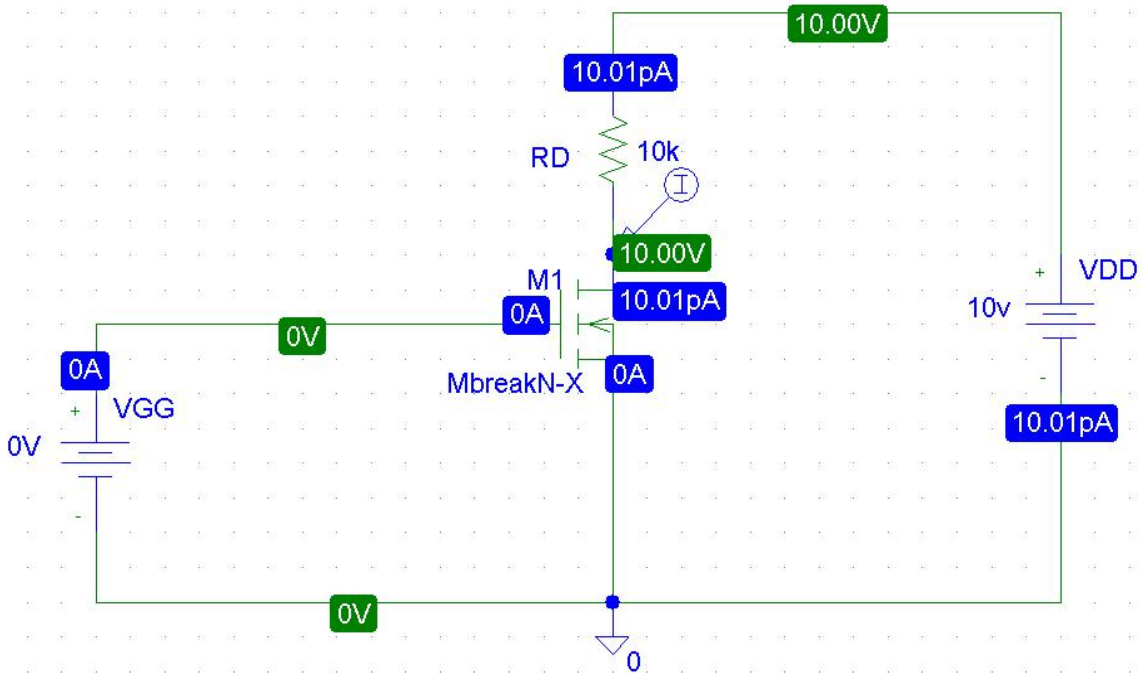


Fig: N-channel MOSFET

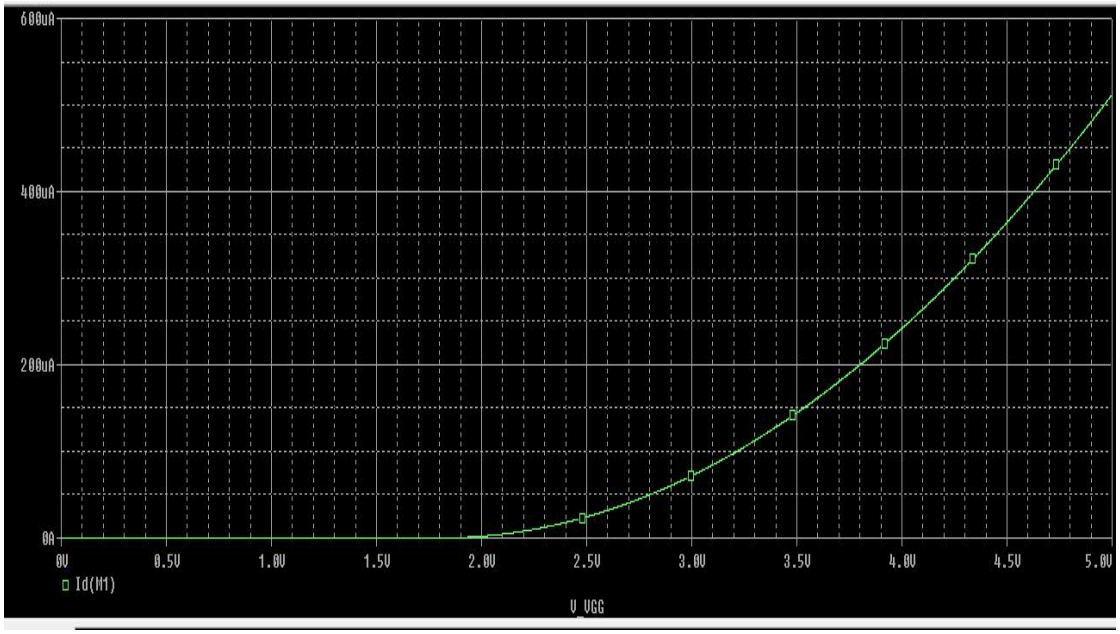


Fig: ID-VGS Characteristics

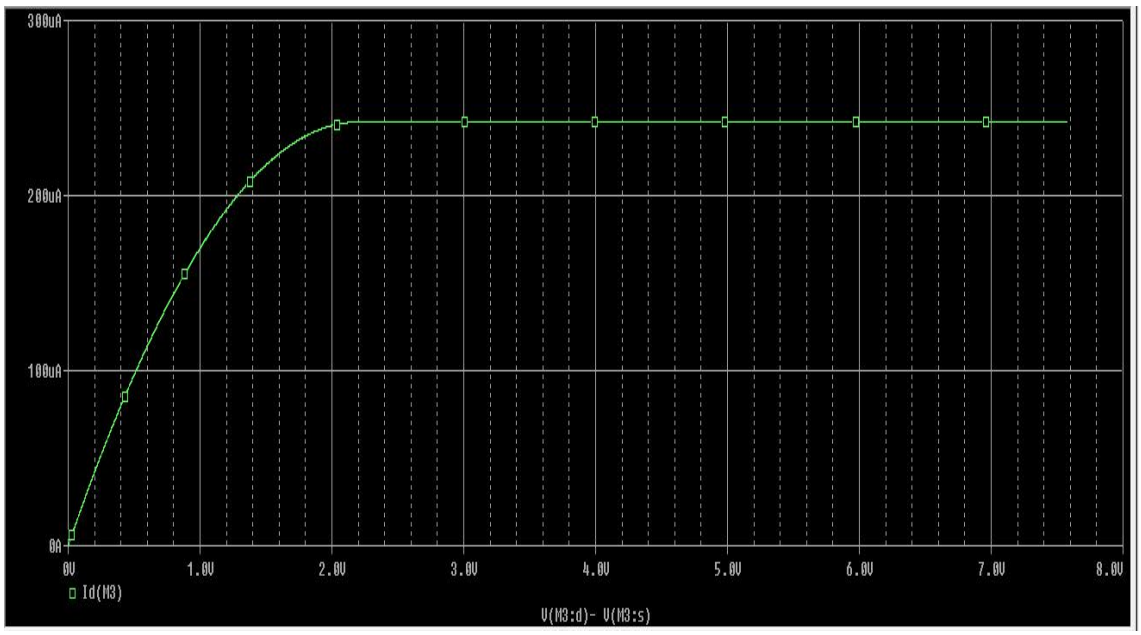


Fig: ID-VDS Characteristics

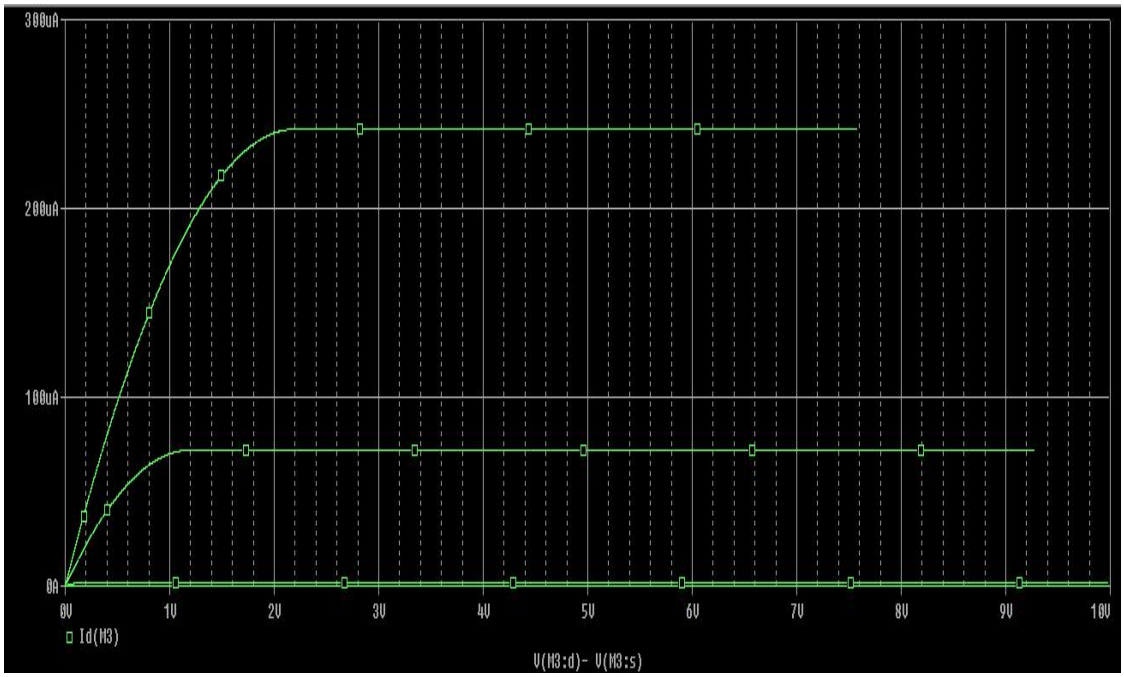
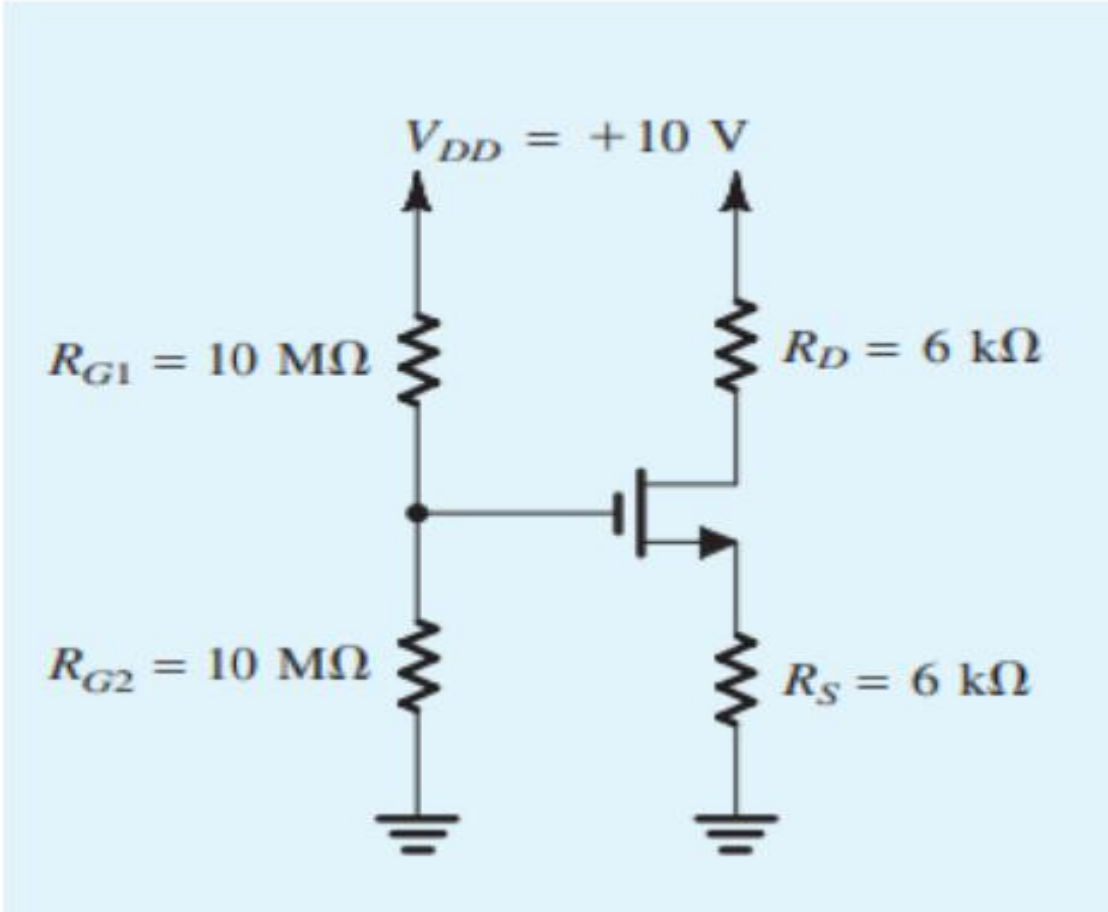


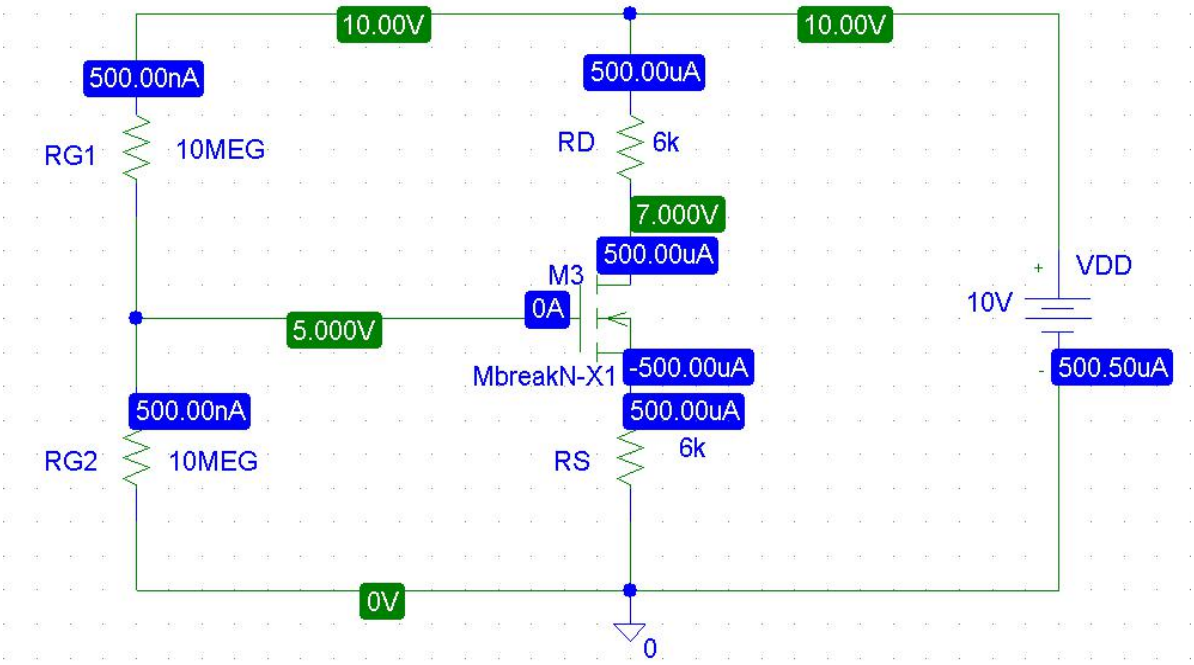
Fig: ID-VDS Characteristics for multiple VGS

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.