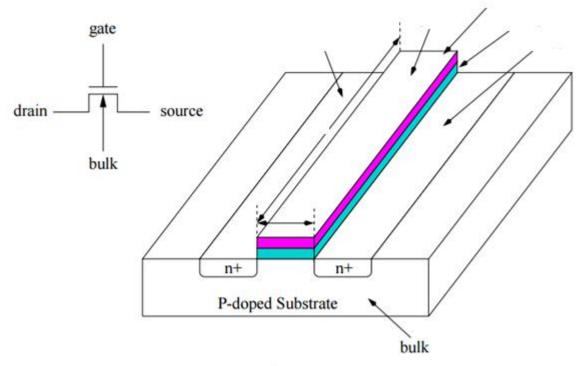
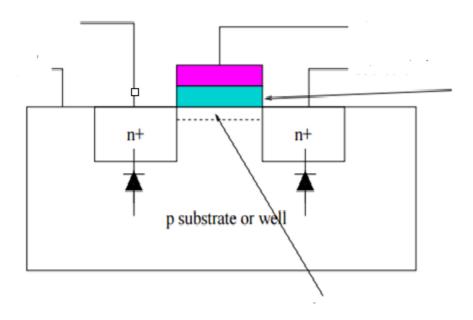
HW 1 due: March 03

- 1. How does an n-type MOSFET work? Why does the current saturate at high VDS? **Do not write** more than two pages. Diagrams are always helpful.
- 2. Draw or Name all device parts for cross section of n-type transistor as shown below (also mark width (W) and length L):



N Transistor



Electrical and Computer Systems Engineering Department

ENCS333

Integrated Circuit

ment

BIRZEIT UNIVERSITY

Dr. Khader Mohammad

HW 1 due: March 03

- 3. Explain the three region of operation of the NMOS device , draw the three region of operation (I-V curve)
- 4. Explain how does the current depends on the process /Geometry of the device?
- 5. What does Vt depends on?