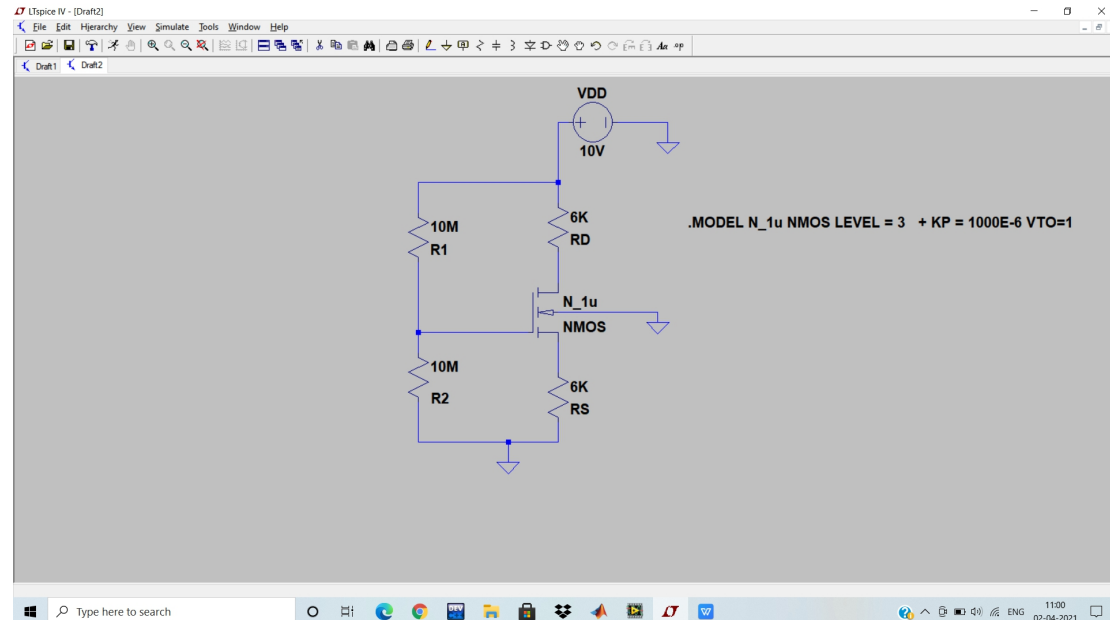Q3.

(a). VG = (R2/R1+R2)VDD = 5V

VD= 10V

(b).

(d) the current through gate of mosfet is zero because gate terminal and substrate are isolated from each other by an dielectric medium. So this dielectric medium does not allow current to flow through gate terminal of mosfet.

(e) Voltage divider bias.

(f) threshold voltage is the gate voltage which makes the transistor ON. It is the minimum voltage to make a conducting path between source and drain.