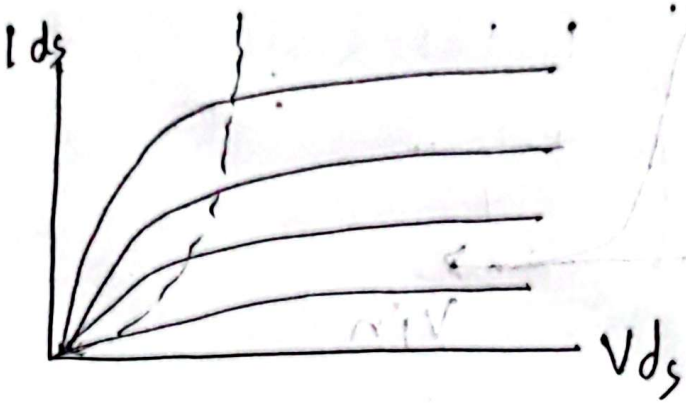
1)



2) Why NMOS Preferable?

= NMOS is N-type Metal Oxide Semiconductor transiter. It has often ~~proff~~ preferred over PMOS transistor because they are faster and more efficient

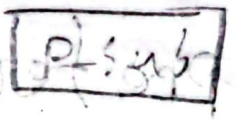
i. Faster Switching Speeds

ii) Higher Drive Current

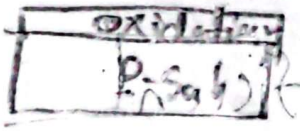
iii) Compact Design. NMOS Circuits require Smaller area Compared to PMOS for the same current capability

3) Draw the process diagram of N-well process.

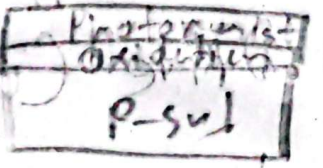
1) Substrate



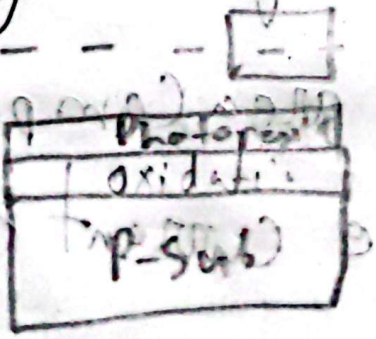
2) Oxidation



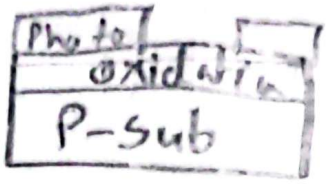
3) Photoresist



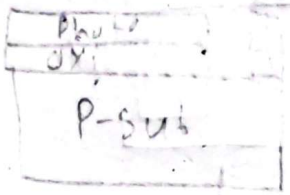
4) Masking



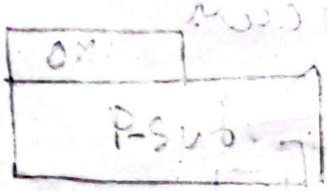
5) Photo resist removal



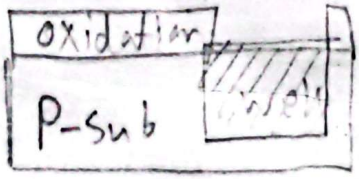
6) Removal of SiO_2 using acid etching



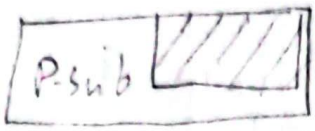
7) Removal of photoresist



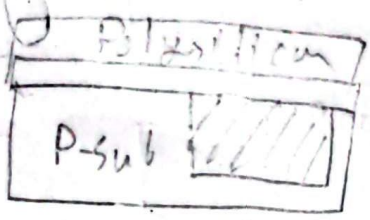
8) Formation of the N-well



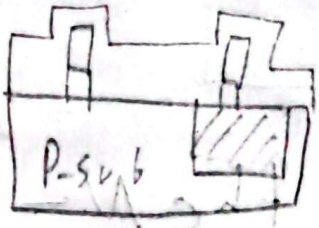
9) Removal of SiO_2



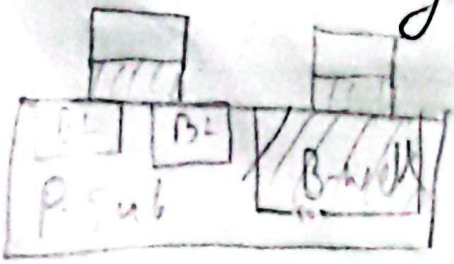
10) Deposition of Polysilicon



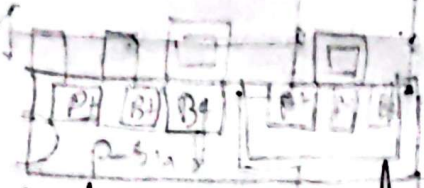
11) Removing the layer barring and oxidation process



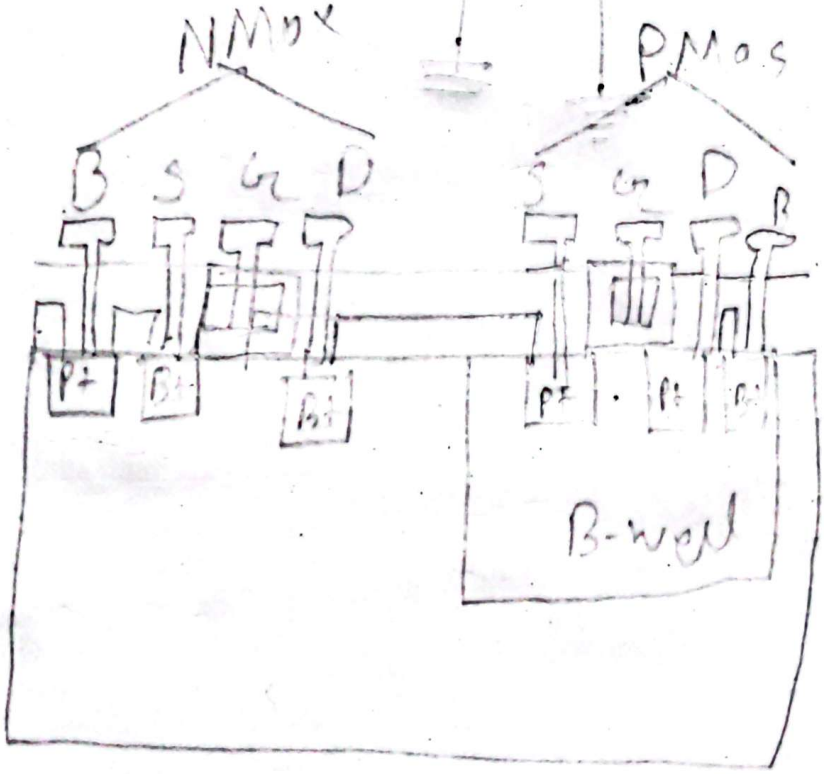
12) Masking and N-diffusion and oxide stripping



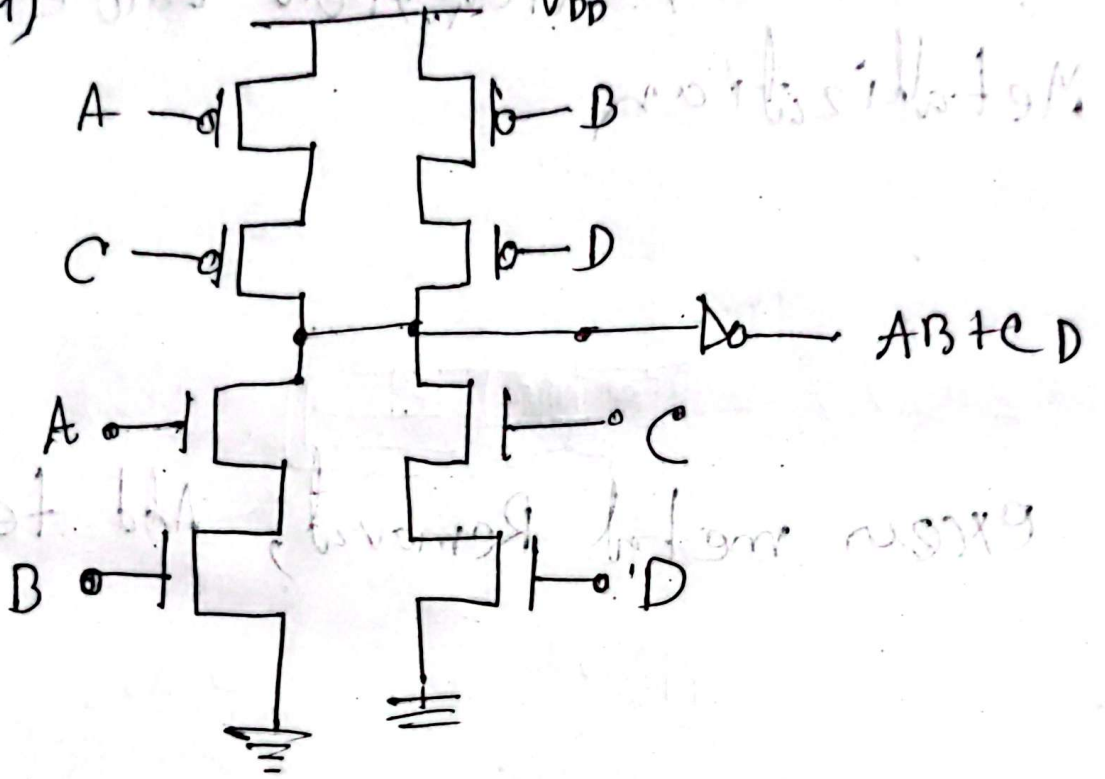
13) P-diffusion, thick field oxide and Metallization:



14) excess metal Removal, Add terminals



4)



5)