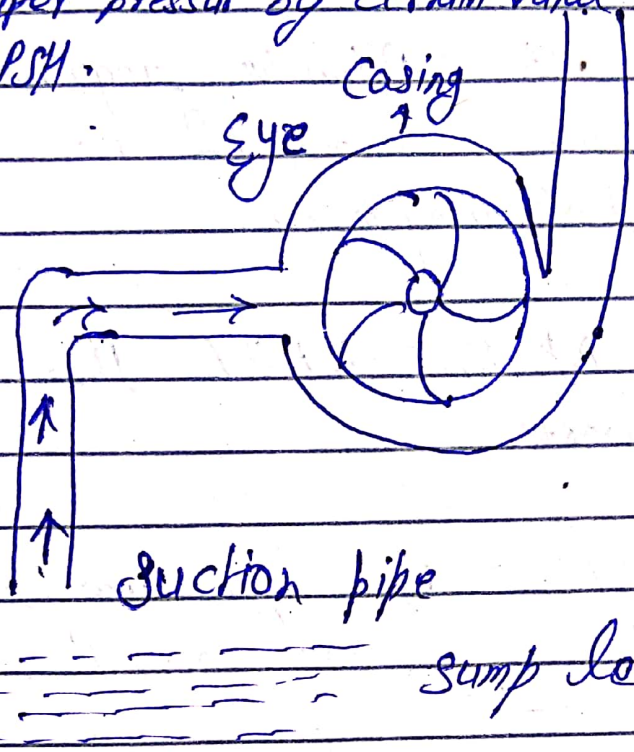
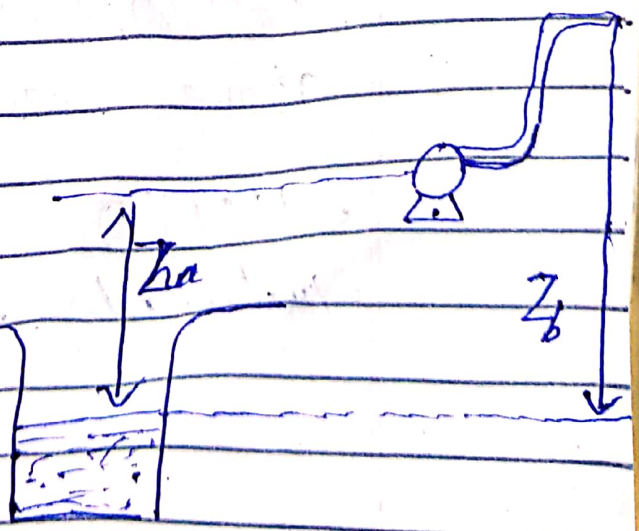
Q.A NPSH (Net Positive suction head) → To avoid cavitation, the pressure at the pump inlet must exced the vaper pressur by certain value called ~~as~~ NPSH.



The ~~Available~~ Available NPSH a measure of how close the fluid at a given point is to flashing, and so to cavitation. Technically it is the absolute pressure head minus the vapour pressure of the liquid

(b) Calculate NPSH



NPSHA → Liquid pressure at pump suction − vapor pressure of the liquid

NPSHR → Minimum required net positive suction head. It is specified by vendor/manufacture

NPSHA > NPSHR than only pump will work

NPSHA = Liquid pressure at pump suction − vapor pressure of the liquid.

$$NPSHA = \frac{1}{g}\left[\frac{Pa'}{\rho} - \frac{Pv}{\rho} - h_{fs}\right] + Z_d$$

STATIC HEAD: Measure it from the centre line of the pump suction to the top of the liquid level

SUCTION LIFT → If pump installed above reservoir

SUCTION HEAD → If pump installed below reservoir