

⇒ Midsem syllabus: (Mod 1 & Mod 2)

Q1) Define Pressure. unit of Pressure?

Pascal

$N/m^2$  → SI

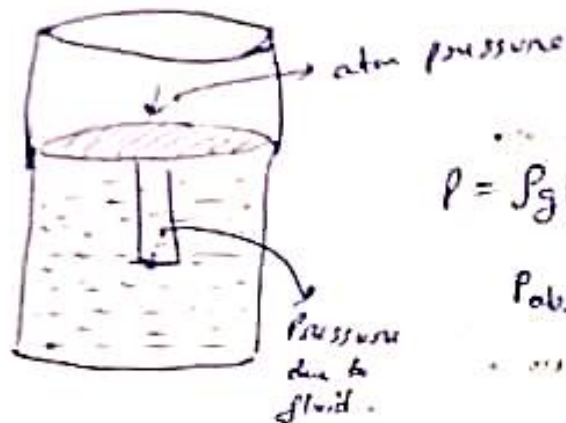
Dyne/cm<sup>2</sup> → CGS

psi → pressure per square inch

→ High pressure

→ low pressure

Q2) Define gauge pressure and absolute pressure?



$$P = \rho gh$$

$$P_{\text{absolute}} = P_{\text{fluid}} + P_{\text{atmosphere}}$$

Q3) Write a short note on U-tube manometer?

height difference  $\propto$  Pressure difference.

Disadvantages: ① water cannot be used. Mercury used.

② Two points needed

③ works on gravity, so cannot be inverted.

④ Mercury may react with medium material.

④ Pressure sensor Vali pdf:

1) Manometer

2) U-tube manometer & their advantage & disadvantage

3) well typed manometer

4) Vacuum pressure definition

5) ionization gauge

6) LVDT

7) c-type Bourdon tube.

~~8) LVDT~~