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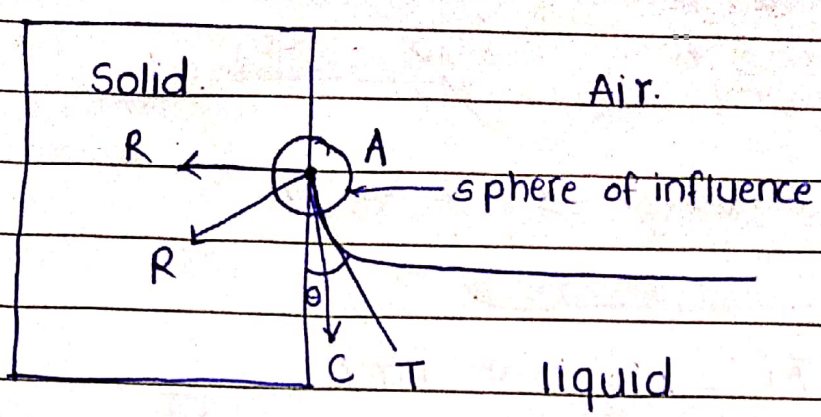
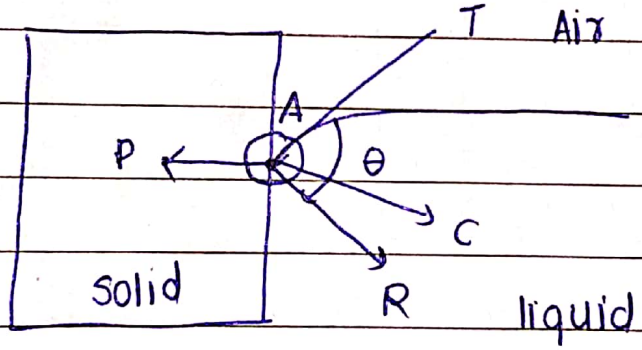
1) concave meniscus — acute angle of contact



$\overrightarrow{AR}$ = adhesive force
$\overrightarrow{AP}$ = resultant force
$\overrightarrow{AC}$ = cohesive force

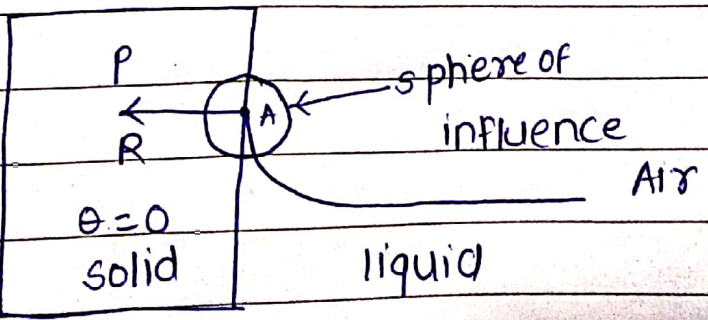
2).



convex meniscus -obtuse angle of contact

$\overrightarrow{AP}$ = Adhesive force
$\overrightarrow{AR}$ = resultant force
$\overrightarrow{AC}$ = cohesive force

(3)



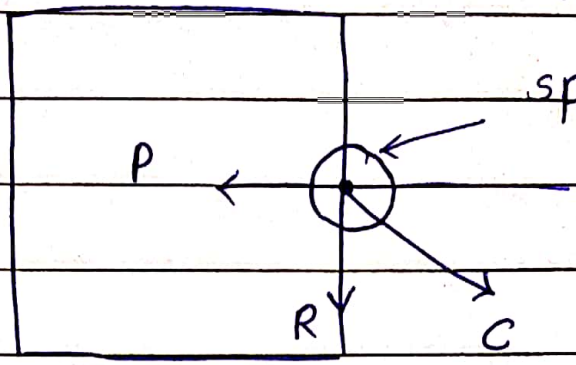
zero angle of contact

Here cohesive force is negligible i.e $\vec{AC} = 0$ and the net adhesive force itself is the resultant force i.e $\vec{AP} = \vec{AR}$

(4)

· Angle of contact go

sphere of influence



In this case, net cohesive force is itself $\vec{AC}$ is exactly at 45° with either of the surfaces and the resultant force $\vec{AP}$ is exactly vertical

$\vec{AP} = \frac{AC}{\sqrt{2}}$ where AR is magnitude of the net force

∴ For acute angle of contact $\vec{AP} > \frac{AC}{\sqrt{2}}$ &

for obtuse angle of contact $\vec{AP} < \frac{AC}{\sqrt{2}}$.