

Mechanism of Breathing

Inspiration

Expiration

- Pressure Gradient is Important
- In atmosphere O_2 conc. (\uparrow)

↓ Inspiration

Lungs (low conc.)

↓

Now lungs are full of air

→ Intrapulmonary pressure increases

Means

Increases

{DEPTH OF BIOLOGY}

* O_2 moves from (\uparrow) to (\downarrow) conc.

Diaphragm intercostals → try to maintain pressure gradient

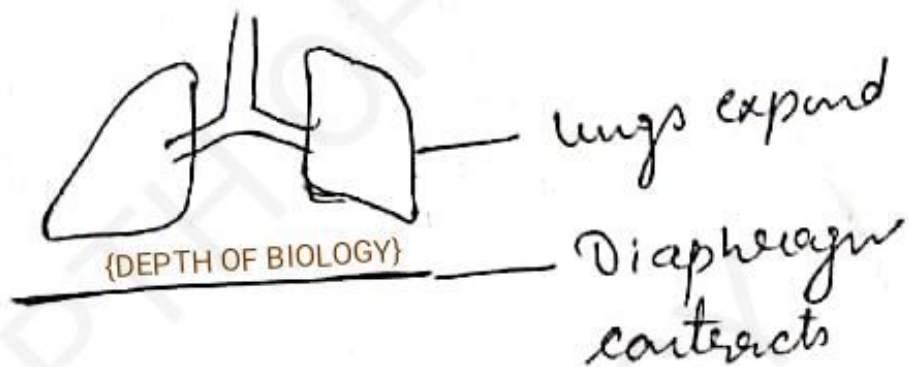
Ext. ICM

Int. ICM

O_2 atm \uparrow

In Inspiration → Diaphragm contracts and lungs expand.

- Intercostal muscle contract {DEPTH OF BIOLOGY}
- overall thoracic cavity vol. increases
- leads to pressure decrease



In Expiration → Here much less space for
the lungs {DEPTH OF BIOLOGY}

{DEPTH OF BIOLOGY}

→ Diaphragm will relax (even within
above region) ..

→ Vol. of Thoracic cavity decreases.

→ Vol. of lung quite less.

→ Intercostal muscles also relax

→ sternum get its place.

→ lead to increase in pressure.

* If the pressure is increase in lungs there is less
pressure in environment



Hence, the air moves from lungs to atmosphere

* If conc. of CO_2 ↑ in lungs from environment
↓
{DEPTH OF BIOLOGY}

Hence CO_2 moves from lungs to environment.