

Q How Oxygen & Carbon dioxide is transported in human beings?

A- Human beings inhale Oxygen & release Carbon dioxide.

* Oxygen in alveoli is given to the blood vessels where it binds with haemoglobin & is supplied to the body's cells.

* Carbon dioxide brought by the blood from the whole body is given to the alveoli which it releases into the atmosphere.

Q How are the lungs designed in human beings to maximise the area for exchange of gases?

A Lungs are lined by a thin membrane, the smaller tubes called bronchioles, a balloon like structure called alveoli & a network of blood capillaries increase the surface area for the exchange of gases.

Q How are the alveoli designed to maximise the exchange of gases.

A Alveoli are thin-walled & ~~are~~ richly supplied with a network of blood vessels to facilitate the exchange of gases. They have a balloon like structure that provides maximum ~~area~~ surface area for exchange of gases.

Q Why is the trachea provided with cartilaginous rings?

A Incomplete rings of cartilage keep the trachea open for the passage of air & also prevents the air passages from collapsing when there is no air in it.

Q What advantage over an aquatic organism does a terrestrial organism have with regard to obtaining Oxygen for respiration?

A The rate of Oxygen dissolved in water is less for which the aquatic animals like fishes breathe faster to satisfy the need of Oxygen in the body whereas in case of terrestrial animals Oxygen is present abundantly in the atmosphere for which there is no need to breathe faster.

Thus, terrestrial organisms have an advantage over an aquatic organism with regard to obtaining Oxygen for respiration.