H.W.
14.5.21

1.(Q3) In human beings, air is taken into the body through the nostrils.

The air passing through the nostrils is filtered by fine hairs that line the passage. The passage is also lines with the mucus which helps in this process.

From here, the air passes through the throat into the lungs. Rings of cartilage are present in the throat. These ensure that the air-passage does not collapse.

Within the lungs, the passage divides into smaller

and smaller tubes which finally terminate in balloon-like structures which are called alveoli.

The alveoli provide a surface where the exchange of gases can take place.

The walls of the alveoli contain an extensive network of blood vessels.

As we have seen, when we breath in, we lift our ribs and flatten our diaphragm, and chest cavity becomes longer as a result.

Because of this, air is sucked into the lungs and fills the expanded alveoli.

The blood brings carbon dioxide from the rest of the body for release into the alveoli, and the oxygen in the alveolar air is taken up by blood in the alveolar blood vessels to be transported to all the cells in the body.

(Q4) When we need to breath in, we lift our ribs and flatten our diaphragm, and chest cavity becomes longer.

As a result a low pressure is created in the lungs and the air is sucked in and fills the expanded alveoli.

Due to increased area it maximizes the area for ~~expande~~ exchange of gases.

Q2, Q3 & Q4 are repeated

5. Terrestrial organisms have abundance of atmospheric oxygen than dissolved oxygen for aquatic organisms.

Therefore, they have more energy than aquatic organisms as respiration is faster and breathing rate is slow.

6. Trachea is provided with rings of cartilage to ensure that the air-passage does not collapse.