

Q1) How are the lungs designed in human beings to maximise the area for exchange of gases?

Exchange of gases takes place between the blood capillaries that surround the alveoli and the gases present in the alveoli. Thus, alveoli are the site for the exchange of gases. The lungs get filled up with air during the process of inhalation as the ribs lift up and the dia~~g~~ diaphragm lowers and flattens out. The air that rushes inside the lungs fill the numerous alveoli ~~part~~ present in the lungs.

Each lung ~~con~~ contains 300-350 million alveoli.

These numerous alveoli increase the surface area for gaseous exchange making the process of respiration more efficient.

Q2) What are the functions of lymph in our body?

The functions of lymph in our body are:

- (i) It carries digested and absorbed fat from intestine
- (ii) Drains excess fluid from extra cellular space back into the blood.
- (iii) plays an important role in the immune system.

Q3) How is haemoglobin associated with respiration?

Haemoglobin is a protein and respiratory pigment found in RBCs (Red blood cells). It carries oxygen from the respiratory organs to the rest of the body. There it releases oxygen to permit aerobic respiration to provide energy to power the functions of the organism. It also transports some amount of carbon dioxide from different parts of the body to the lungs.