

H.W.  
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Q1: How are the lungs designed in human beings to maximize the area for exchange of gases?

Ans: Within the lungs, the air passage divides into smaller and smaller tubes which finally terminate in balloon like structures called alveoli. The alveoli provide a surface where the exchange of gases can take place. The 2 lungs together have about 300-500 million alveoli. The walls of the alveoli are supplied with an extensive network of blood vessels. So lungs maximize the area for gaseous exchange through the presence of large number of alveoli which are richly supplied with blood.

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

Ans: ⇒ It supplies mature lymphocytes to the blood.  
⇒ Lymph acts to remove bacteria and other particles.  
⇒ It also maintains fluid balance.  
⇒ Lymph carries digested & absorbed fat from intestine & drains excess fluid from extracellular space back into the blood.



Q3:

How is hemoglobin associated with respiration?

Ans:

Hemoglobin in the blood carries oxygen from the respiratory organ to the rest of the body. Then it releases the oxygen to permit aerobic respiration to provide energy to power the functions of the organism in the process called metabolism.