

HW  
28/6/21

1. How are the lungs designed in human to maximize the area for exchange of gases?

ans- Lungs have alveolar sacs which help in increasing the surface area of lungs during exchange of gases.

2. What are the functions of Lymph in our body?

ans- The functions of Lymph are as follows:-  
→ Lymph contains WBCs, which protect us from foreign harmful bodies by creating antigens.

→ It carries fats absorbed and digested in the intestines.

→ Drains excess fluid from extra cellular space back into the blood.

3. How is haemoglobin associated with respiration?

ans- Haemoglobin is a respiratory pigment which helps in carrying oxygen to the tissues which are deficient in oxygen. It has high affinity to oxygen.



## ~~Box Questions~~ Exercise Questions

11. Describe double circulation of blood in human beings. Why is it necessary?

ans! -> In double circulation, the blood enters the heart twice. One for being pumped to body <sup>parts</sup> and second for being oxygenated.

-> The oxygenated blood enters the left atrium through pulmonary vein. Then it is pumped to the left ventricle.

(it to the systematic arteries)

-> The aorta carries the oxygenated blood to different body parts and oxygen gets diffused in those parts from the blood. The waste materials and  $\text{CO}_2$  also gets diffused in blood from body parts.

-> This deoxygenated blood is again carried back to the heart by ~~systematic~~ systemic veins for oxygenation process. The deoxygenated blood enters the right atrium and then left ventricle.

-> From there it goes to lungs for oxygenation through pulmonary artery.



It is necessary because oxygenated blood is needed by the body parts for metabolic activities and deoxygenated blood should be removed from those parts in order to get rid of ~~waste~~ unnecessary waste materials.

### In Box Questions (Pg - 110)

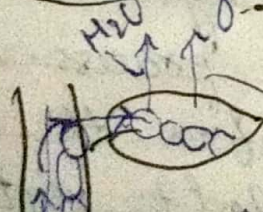
2. Why is it necessary to separate oxygenate blood from deoxygenated blood in mammals and birds?

ans - ~~Animals~~ Mammals and Birds require greater amount of energy to maintain their body temperature. Separation of deoxygenated and oxygenated blood ensure efficient supply of oxygen to the body, due to this reason mammals and birds have separation between oxygenated and deoxygenated blood.

Q.1  
1/7/21

Xylem

⇒ Ascent of Sap.



↳ cell sap - water + minerals.

through stomata  
transpiration

Transpirational Pull