

## Homework

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

ans - Lungs are soft, spongy structures lodged in the thoracic cavity. Each lung is enclosed in a double-walled sac called pleura. In the lungs, the wind pipe divides into smaller tubes, called bronchi which in turn form bronchioles. The bronchioles later terminate in balloon-like structures, called alveoli. The presence of alveoli in the lungs provides a very large area for the exchange of

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gases and this availability of large surface area maximises the exchange of gases.

2q. What are the functions of lymph in our body?

ans - \* It takes up excess fluid that has diffused out from the blood capillaries and puts it into blood.

\* It has lymphocytes which fight against germs and bacteria and produce antibodies to fight against infections.

\* It absorbs and carries digested fats from the intestine. Serve as a middle man between blood and body.

3q. How is haemoglobin associated with Respiration?

ans - Haemoglobin is the respiratory pigment which is present in the red blood corpuscles (RBC). Haemoglobin has a very high affinity to oxygen. In multicellular organisms, the diffusion pressure alone can't take care of oxygen delivery to all parts of body, instead respiratory pigment present in blood take up oxygen from the air in the lungs and carry it to tissues which

arc deficient in oxygen.