Hw'

text questions

3. How is oxygen and carbondioxide transported in human beings?

Ans- Haemoglobin in red blood all have large affinity for oxygen. It temporarily, combines with oxygen to form oxyhaemoglobin and thus oxygen is carried from lungs to various body parts. CO_2 is highly soluble in water, so it is mostly transported in dissolved form in our blood plasma.

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

Ans- Lungs play a majour role in the respiratory system. In humans a pair of lungs are designed in such a way that they are lined by a thin membrane, the smaller tubes called bronchials a balloon like structure called alveoli and a network of blood capillaries increase the surface area for exchange of gases

Exercise

89. How are the alveoli designed to maximise the exchange of gases

Ans- The human respiratory system made up of nostrils, larynx, nasal, chamber, pharynx trachea, epiglottis, alveoli, bronchi and lungs. Within the lungs the oxygen is exchange for carbondioxide waste through millions of microscopic sacs known as alveoli. The alveoli are thin-coalled and richly supplied with a network of blood. and the air filled in alveoli. They have a balloon like structure that provides maximum surface area for exchange of gas

94. What are the different ways in which ~~oxygen~~ glucose is oxidized to provide energy in various organisms.

ns There are two ways in which glucose is oxidised.
i) aerobic respiration (Oxygen)
breaking down of pyruvate using oxygen take place in mitochondria. This process breaks up the three carbon pyruvate.

(ii) anerobic respiration (without oxygen)

The breaking down of six carbon molecule, into 3 molecule called pyruvate

5. What advantage over an aquatic organism does a terrestrial organism have with regard to obtaining oxygen for respiration?

Ans- Terrestrial organisms breathe by using almospheric oxygen whereas aquatic organism takes place dissolved in water. A terristial animal has over an aquatic animal with regard to obtaining oxygen for respiration.

6. Why is trachea provided with cartilagecus rings?

Ans- The function of the cartilagious rings of the trachea in respiratory system is to stabilize the trachea and keep it rigid while allowing the trachea to expand and lengthen when the person breathes.