Date
Page

Q1)	Aerobic respiration	Anaerobic respiration.
a)	The respiration that takes place in the presence of oxygen is called as ~~aa~~ aerobic respiration.	The respiration that takes plaw in the absence of oxygen is called as anaerobic respiration.
b)	More energy is produced in aerobic respiration. (About 36 ATP)	less energy is produced in anaerobic respiration. (About 2 ATP)
c)	In aerobic respiration, carbon dioxides and water are also formed as a byproduct with energy.	In anaerobic respiration, ethanol or lactic acid with carbondioxide are formed as by product
d)	It takes a long time to release energy. ex- respiration in plants.	I takes less time compared to aerobic respiration. ex- respiration in yeast.

Q1) Terrestrial organisms need not to filter oxygen from air cause it is freely and plentily available. But aquatic organisms do have gills to filter oxygen because oxygen is not freely available inside water. That's the advantage.

Q2) The different ways in which glucose is oxidised to provide energy in various organisms are -

i) Aerobic respiration,

$Glucose + O_2 \rightarrow CO_2 + H_2O + Energy\ (ATP)$

ii) Anaerobic respiration,

$Glucose \rightarrow C_2H_5OH + CO_2 + Energy\ (ATP)$

$Glucose \rightarrow Lactic\ acid + Energy\ (ATP)$

Q3) After respiration CO_2 and H_2O are produced as by products with energy. Now the blood containing oxygen is called deoxigenated blood. This blood goes to heart and is pumped into lungs for purification. Now blood is oxidised in alveoli and CO_2 is thrown out through exhalation. And this oxygenated blood is carried to heart for pumping so that respiration could take place.

Q4) The lungs have numerous branches of bronchi called the bronchioles and at the end of this bronchiole we have alveoli. Now in the alveoli it contains a numerous network of blood vessels inorder to maximise the area of exchange of gases. This is how lungs are designed to maximise the area of exchange of gases.

Q8) The organisms that use anaerobic mode of respiration are - yeast, bacteria, archaea and other prokaryotic organisms.