

HW
13/05/21

HOMEWORK ASSIGNMENT

Q1. Write 4 points of difference between aerobic and anaerobic respiration.

Aerobic Respiration	Anaerobic Respiration
(i) Aerobic respiration takes place in the presence of oxygen.	(i) Anaerobic respiration takes place in the absence of oxygen.
(ii) Complete breakdown of food occurs in aerobic respiration.	(ii) Partial breakdown of food occurs in anaerobic respiration.
(iii) The end products in aerobic respiration are CO_2 and H_2O .	(iii) The end products in anaerobic respiration may be ethanol and carbon dioxide or lactic acid.
(iv) Aerobic respiration produces a considerable amount of energy.	(iv) Much less energy is produced in anaerobic respiration.

2. In box Question no. - 2, Pg No. - 105
Q2. What are the different ways in which glucose is oxidised to provide energy in various organisms?

Ans- There are two different ways in which glucose is oxidised to provide energy in various organisms:

- Aerobic respiration and
- Anaerobic respiration

Aerobic respiration uses oxygen (of air) whereas anaerobic respiration takes place without oxygen.

(i) In aerobic respiration, the glucose food is completely broken down by the oxygen (of air) inhaled during breathing to form carbon dioxide and water, and a lot of energy is released.

(ii) In anaerobic respiration, the glucose food is incompletely broken down by micro-organisms like yeast in the absence of oxygen (of air) to form ethanol and carbon dioxide, but much less energy is released.

Ex-Q8. (b) Name some organisms that use the anaerobic mode of respiration.

Ans- Anaerobic mode of respiration is used by certain micro-organisms such as yeast and some bacteria known as anaerobic bacteria.

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