

③ It insulate nerve cells and helps in brain functioning.

④ They protect vital organs like kidney and heart etc.

x ————— x

Enzymes:

Enzymes naturally occurring organic compounds in human body. These are made up of amino acids, helping the body to regulate the chemical reactions occurring in it.

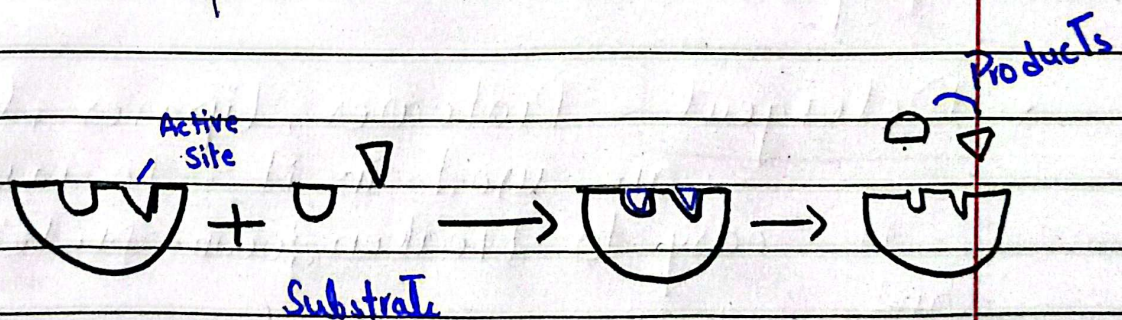
Features

- Enzymes are compounds with specific active site, performing only one reaction at a time.

Date: _____

Day: _____

- It composed of active site on which substrate stick.
- It also consist of protein and non protein parts.
non-protein part, known as co-factor
Protein part, known as apo enzyme
Together, these parts are known as Holoenzyme.
- It is also known as lock-key model, due to its specific site for only one substrate molecules.
- It actually regulate the chemical reactions occurring in the body.
- These are highly sensitive to the temperature and PH.



Lock-key MODEL!

Functions

Enzymes are not only helpful in the

body but also in the physical world, it plays a significant role.

Functions

Industries

- > Tanning
- > Paper making
- > Rubber
- > Brewing
- > Detergents

Environment

- > Degrading microbes occurring in the soil

Human Body

- > Digestion Process
- > Movement of muscles

> **Paper Industry** = Cellulases, Xylanases are used to remove cellulose and make smooth texture of paper.

> **Detergent** = Proteases, Lipases, Lipnases are used in it. To make it easy to break down protein (stain).

> **Movement of muscles** = Myosin helps in movement of muscles

> **Tenderizers** = Papain is used to soften the meat.