Enzymes

Enzymes: Are large biological proteins molecules increase the rate of reaction by lowering the activation energy and catalyze nearly all chemical reactions taking place in the cells of the body.
*Activation energy :Is the energy required to start the reaction.

Name of enzymes

The name of enzymes :
•Usually ends in - ase.
• Identifies the reacting substance, for example Sucrase catalyze the reaction of sucrose.
•Describe the function of the enzyme for example Oxidase catalyze oxidation.
•Can be common name, Particularly for the digestion, enzymes such as pepsin and trypsin .

•A four –digit Enzyme Commission (E.C) number is assigned to each enzyme representing the class(first digit), sub class (second digit), Sub-Sub class(third digit) and the individual enzyme(forth digit).

Properties of Enzymes

•Catalysts for biological reactions.
•Most are proteins and may be simple proteins
•Lower the activation energy.
•Increase the rate of reaction.
•Activity lost if denatured.
•Enzyme are the agents of metabolic function.
•Enzymes are often very specific promote only 1 particular reaction.
•Not consumed by the reaction.

Classification of Enzymes

Enzymes are classification according to the reaction they catalyze: