

Protein

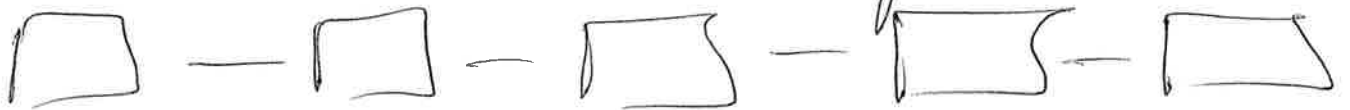
①

Biomolecule :

On the DNA, we have genes.

One gene encodes for one protein.

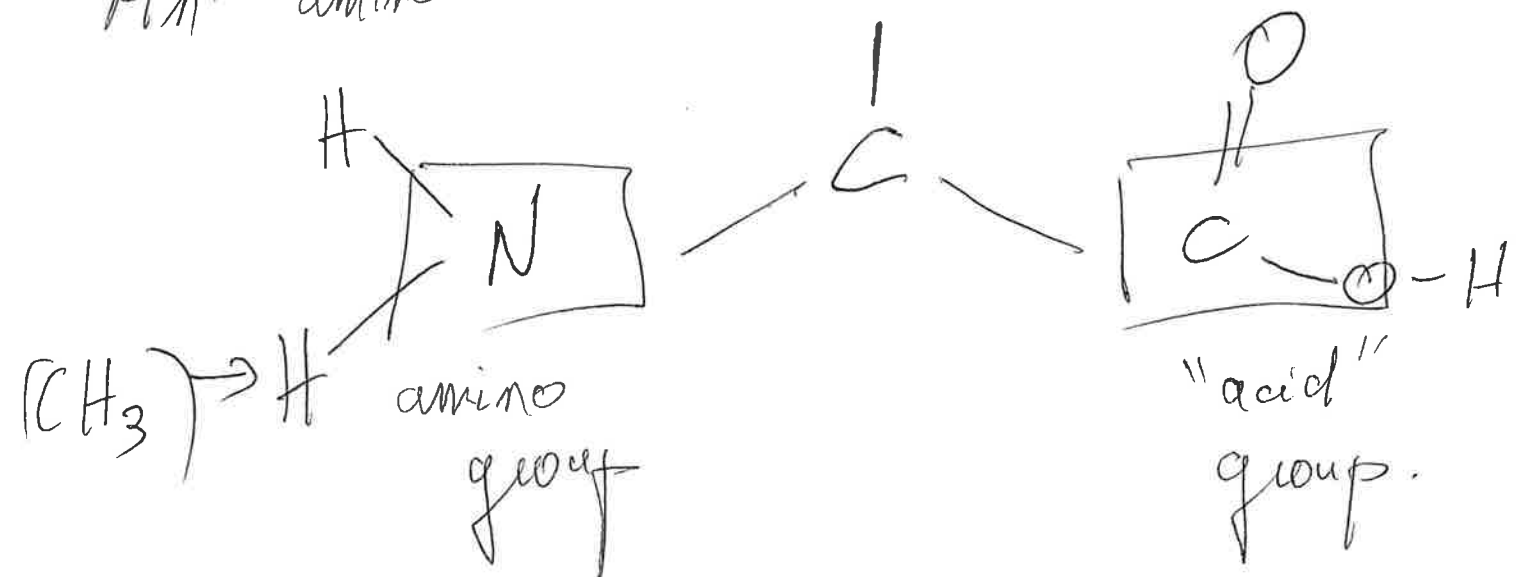
One protein is a polymer :
monomers attached to each other.



Monomers are amino acids:

An amino acid:

Sidechain



20 different side chains

(2)

corresponding to the 20 Amino Acids.

Different types of side chains:

- Those that "do not like water"

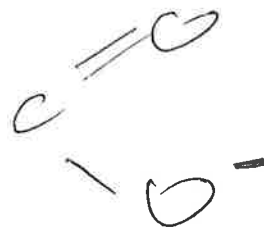
hydrophobic (non polar)

- Those that like water.

hydrophilic (polar)

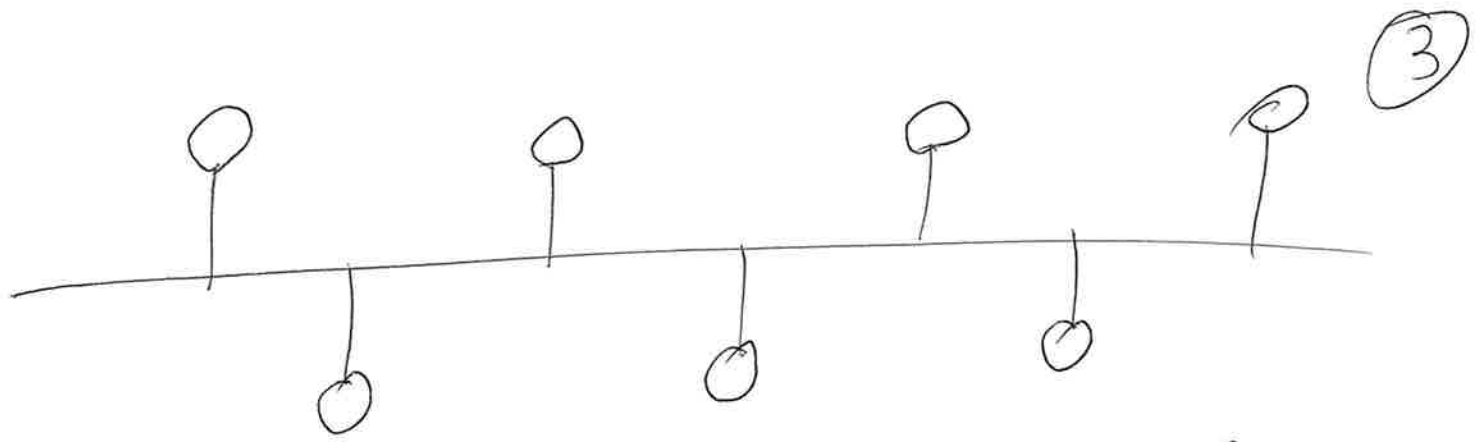


at physiological pH:



at very low pH:





A protein is not a linear chain.
It is organized in a shape.

Organization:
 | scaffold.
 | active site.

The chain scaffold is organized around:

① helices:

② strands packed as sheets

