भाग-1

3322355

M

नामांकन संख्या

अनुक्रमांक (अंकों में)

अनुक्रमांक (शब्दों में)

परीक्षार्थी का पूरा नाम ..... हस्ताक्षर .....

कक्ष निरीक्षक का नाम .....

परीक्षार्थी द्वारा सम्पूर्ण विवरण भर लिए गये हैं।

R

2018- भाग-2

M.Sc. Internal

चौधरी चरण सिंह विश्वविद्यालय, मेरठ
Ch. Charan Singh University, Meerut

निम्नलिखित विवरण परीक्षार्थी द्वारा स्वयं भरा जाए (To be filled by the Examinee)

परीक्षा का नाम..... वर्ष 20 ..... भाग/सेमेस्टर .....
(Name of Exam) (Year 20.....) (Part / Semester)

विषय ..... प्रश्न-पत्र/पाठ्यक्रम..... पेपर कोड नं. .....
(Subject) (Paper /Course) (Paper Code No.)

परीक्षा का दिन..... दिनांक .....
(Day of Examination) (Date)

प्राप्तांक एवं पूर्णांक परीक्षकों द्वारा भरे जायें

पूर्णांक.....
(Max. Marks)

प्रश्नों की क्रम संख्या	a/I	b/II	c/III	d/IV	e/V	f/VI	g/VII	h/VIII	i/IX	j/X	योग
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

प्राप्तांक

(शब्दों में)	अंकों में

जाँचकर्ता के हस्ताक्षर एवं तिथि

परीक्षक के हस्ताक्षर एवं तिथि

2018- भाग-3

R

चौधरी चरण सिंह विश्वविद्यालय, मेरठ

आवश्यक निर्देशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

(परीक्षार्थी द्वारा भरा जाए)

परीक्षा का नाम..... भाग/सेमेस्टर .....

विषय .....

प्रश्न पत्र ..... दिनांक .....

परीक्षार्थी का अनुक्रमांक (Roll Number)

उत्तर-पुस्तिका क्रमांक

KM-I-01-

कालेज कोड

(परीक्षार्थी की श्रेणी)

- संस्थागत
- व्यक्तिगत
- बैक पेपर
- अंक सुधार
- भूतपूर्व
- एकल विषय

नामांकन संख्या (Enrollment Number)

M

पेपर कोड

परीक्षार्थी का पूरा नाम

कक्ष निरीक्षक का नाम

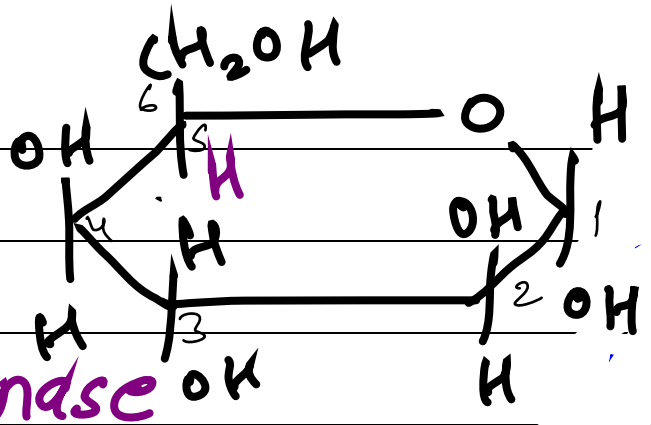
Sec - C

DCPAP

Q- 10 Mechanism of Glycolysis :-

- Glycolysis is a part of Metabolism of Glycose.
- It's occurs in Cytosol or cytoplasm.
- In Glycolysis last product is Pyruvic formed (2 molecules)

Glucose

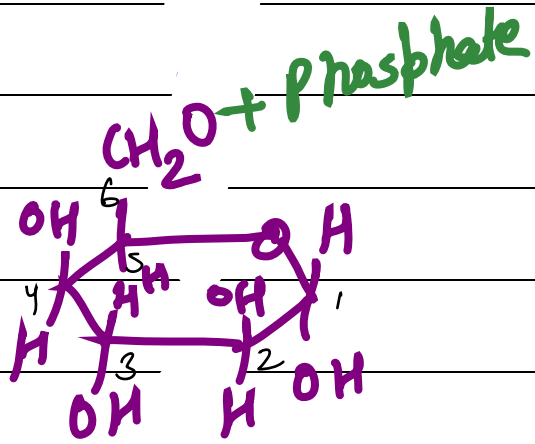


ATP

ADP

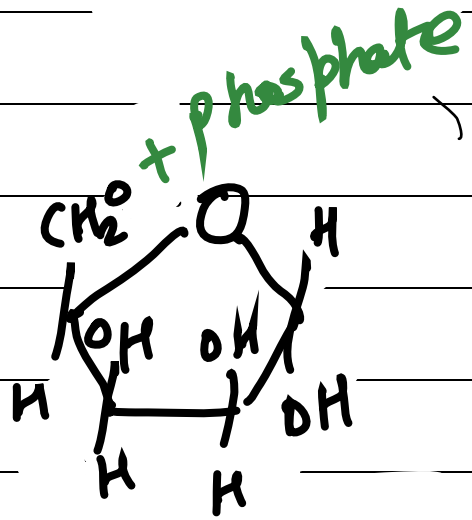
Hexokinase

Glucose-6-Phosphate



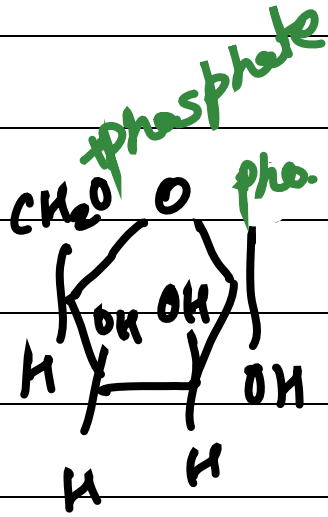
Phospho Glyco-genase

Fructose-6-Phosphate



ATP → ADP

Phospho fructo kinase



Fructose - 1,6 - bisphosphate

Aldolase

Glucoacetone - 3 Phosphate ⇌ (isomerase) Dehydroxy acetone Phosphate

$[CH_3OH \cdot H_3PO_4]$

$2NAD^+$

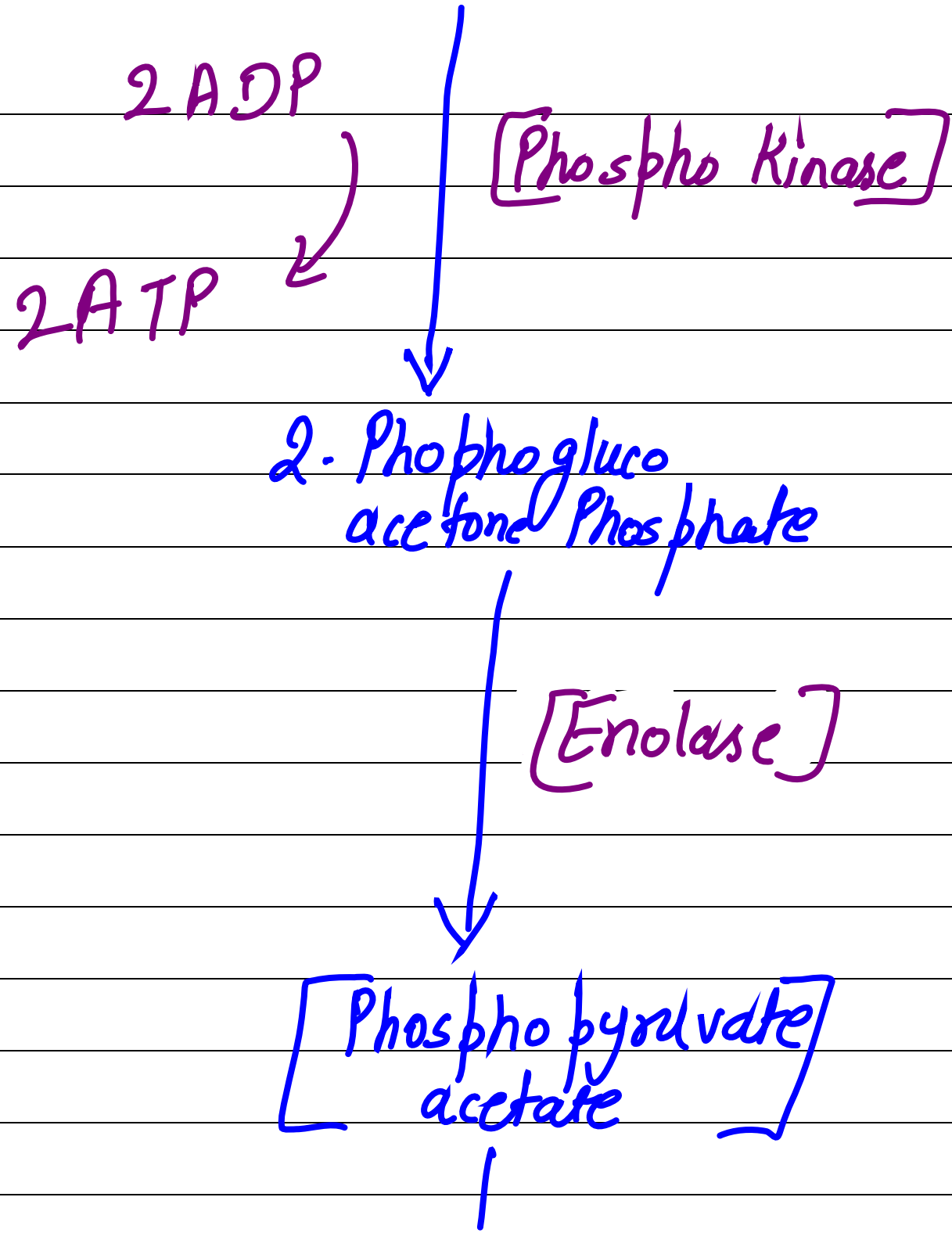
$2NADH$

[Glucoacetone 3-Phosphate hydrogenase]

1, 3 Phosphoglucoacetone Phosphate

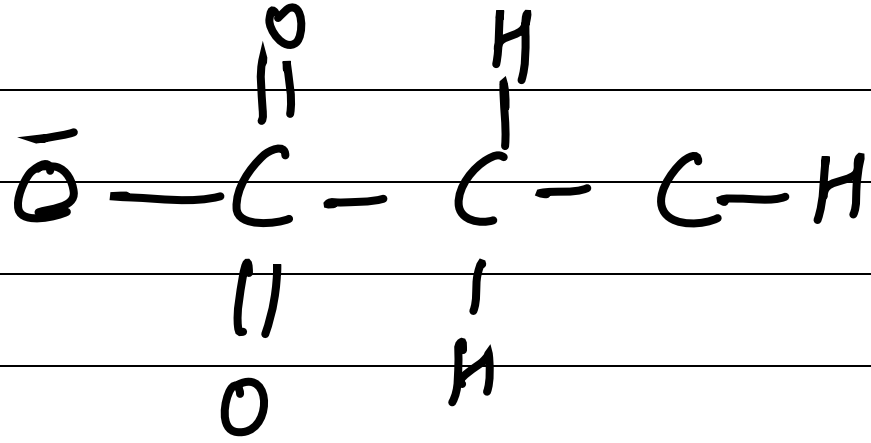
[Phosphoglucohydrogenase]

3-Phospho Gluco acetone Phosphate


2ADP
2ATP
[Phospho Kinase]
2. Phophoglucoacetone Phosphate
[Enolase]
[Phosphopyruvate acetate]

[Pyrolase]

[Pyruvate]



(2 molecule)

In Glycolysis Cycle 2 mol. of Pyruvate is formed.

In this cycle Total 8 mol. of ATP formed.

By -> 2 NADH ⟶ 6 mol. of ATP

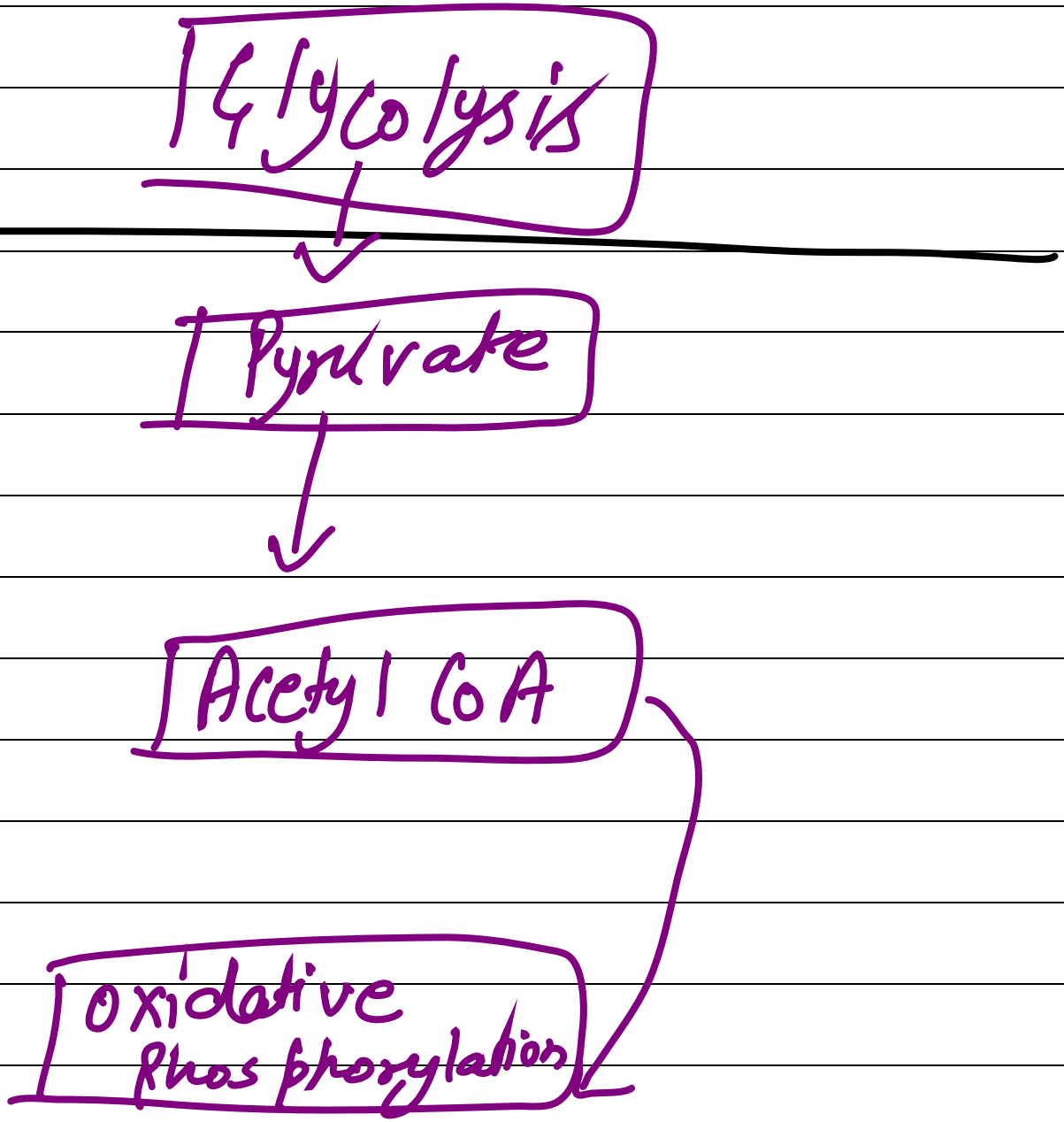
Because 1 NADH ⟶ 3 ATP

2 ADP ⟶ 2 ATP

Total No. of ATP formed is 8 mol.

Cytosol

Nucleus



B-9 Conformation of Protein :-

Summary :-

- Protein Conformation
  - Primary structure
  - Secondary structure
    - α-helix & β Sheets
    - Domain
    - motifs
  - Tirtary structure
- Ram chandran Plot

* Conformation :-

Protein conformation is a state in which protein found/gain their all structure & it's structure is completed.

or

All formation types includes in protein formation it's known as protein conformation.

It's a final state or condition in which all forms are complete which help in protein formation.

Protein conformation includes following:

- Primary structure of Protein
- Secondary structure of Protein
- Tertiary structure
- Quarternary structure of Protein

Primary structure :-

#Protein Protein are made up of Amino-acids.

or The simplest unit of protein is or monomer unit of protein is Amino acids.

Protein is a biochemical component which help to make body formation, immunization & Growth etc.. works.

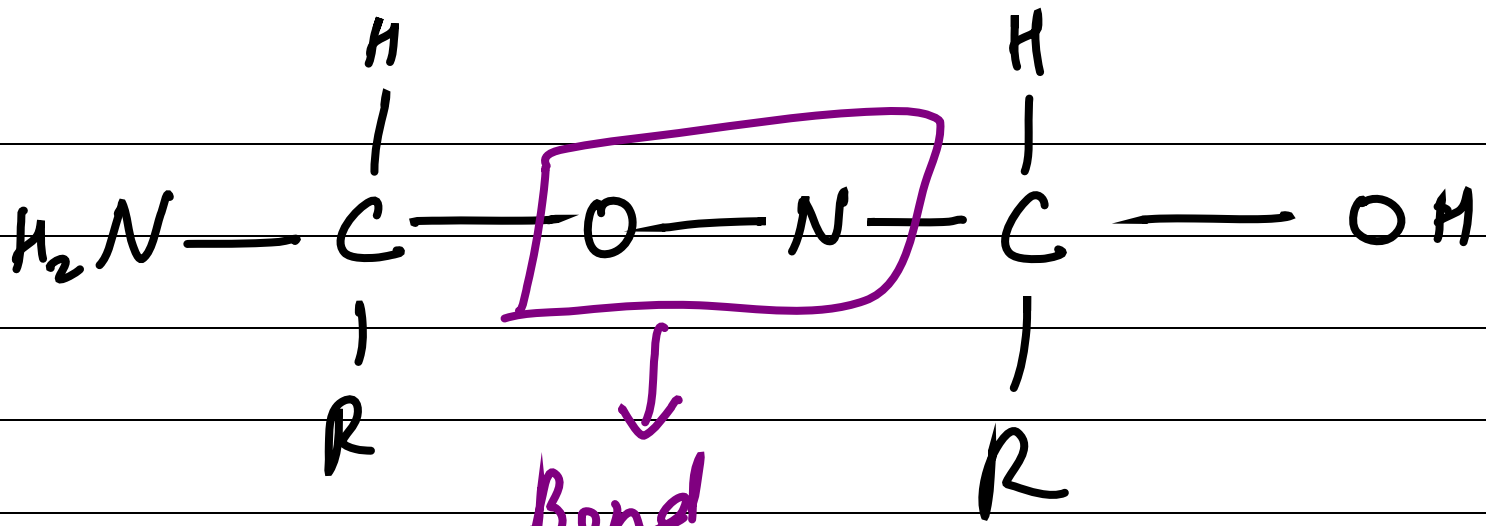
In our body 20 Amino acid are present all amino acids works together & make protein.

Primary structure of Protein consist of a single chain layer of Amino acids which attached together with Peptide bond.

N-C-N-C is the back bone of Polypeptide chain.

Eg:-

Primary protein structure

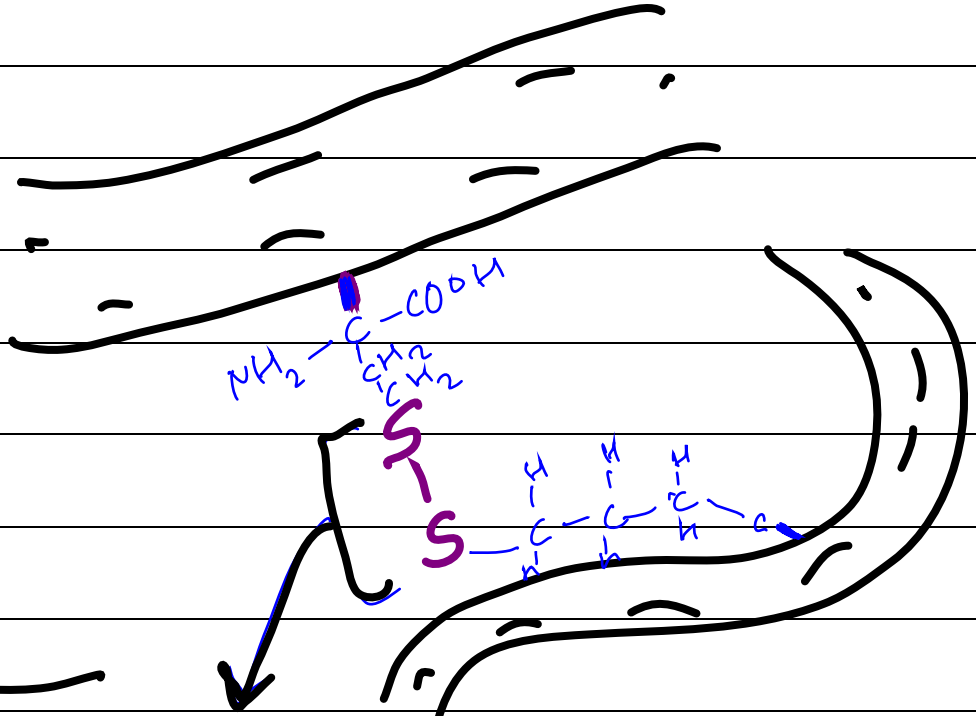


H & R are not the member of Polypeptide back bone. (only C-N)

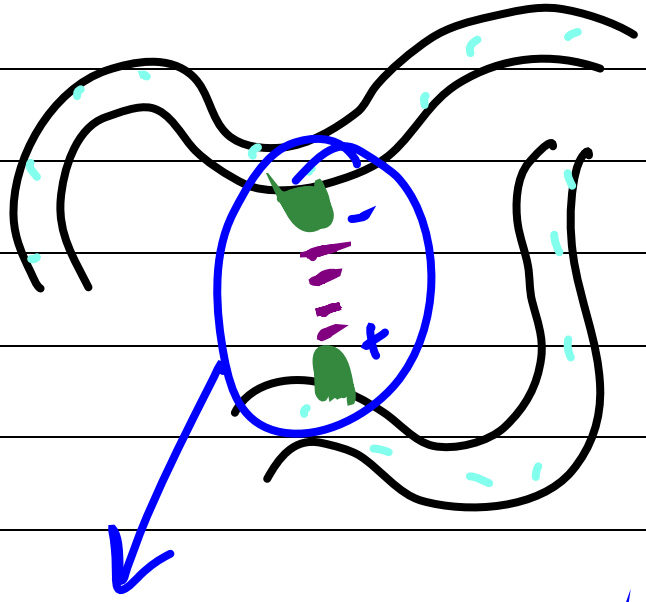
Secondary structure of Protein :-

Made up of :- α-helix
β-Sheet

- Secondary structure of Protein consist of many single chain & Many chain of Poly peptide chain.
- These poly peptide chain attached togethr with ionic bond & Non-Covalent bond with togethr. & They Make secondary structure of proteins.



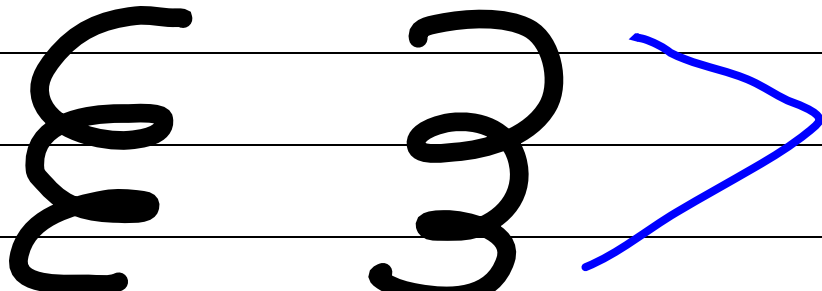
Two single chain of polypeptide attached to gether with Non-covalent disulphide bond



Attached together with ionic bond

α-helix :- They are the spiral shaped.

find in Nail, hair, horns etc..

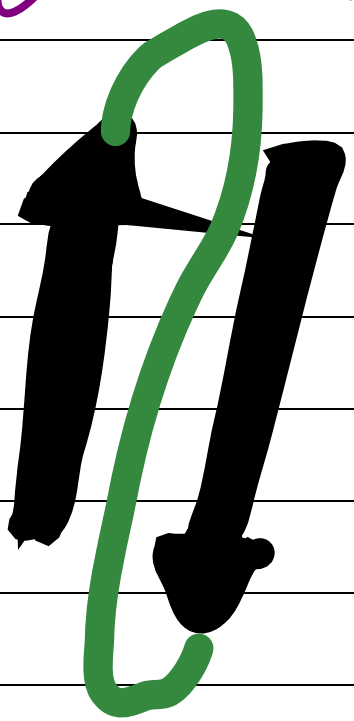


α-helix

β-Sheets :-

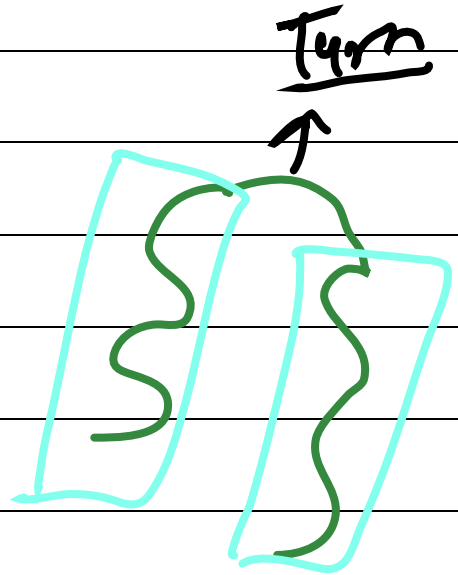
They are rod-liked.

They are parller or Non-parller.



Antiparler

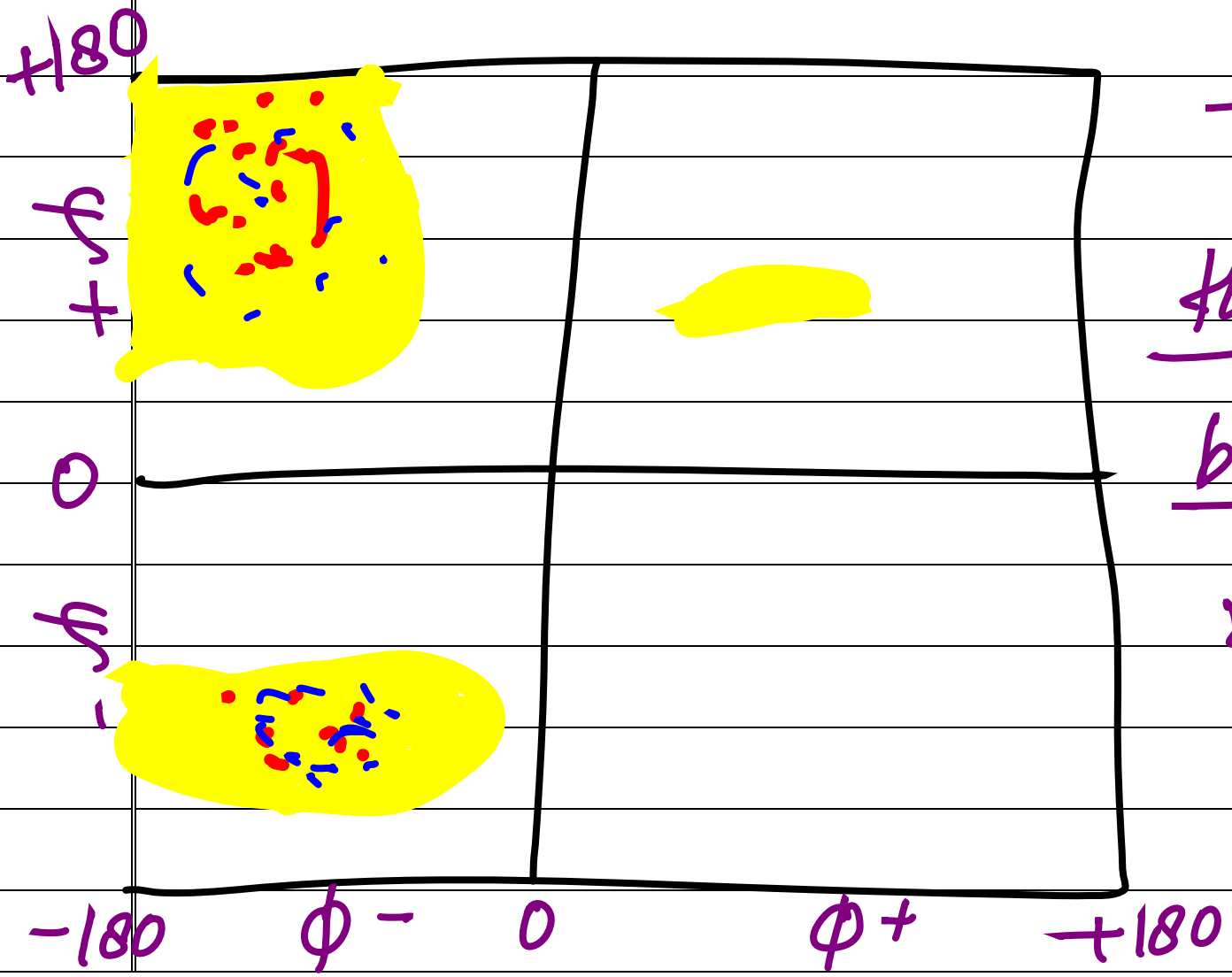
Parlex



Helix - ~~turn~~ - helix

Ram-chandran Plot

Given by :- Ramchandran (Indian Scientist)



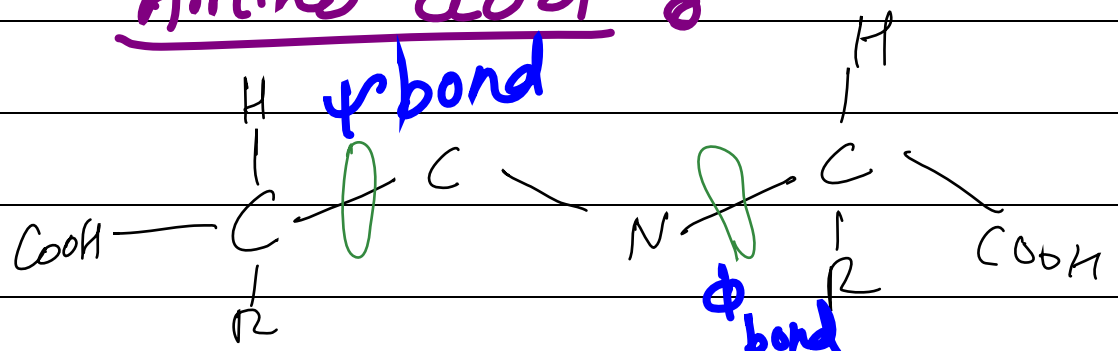
These plot show the Phi ϕ & Psi ψ bond & it's not represent for glycin AA.

Most fre. for AA. :-

At :- $-60\ \phi\ \&\ -60\ \psi$ in Lower

$\&\quad -90\ \phi\ \&\ -120\ \psi$ in Upper

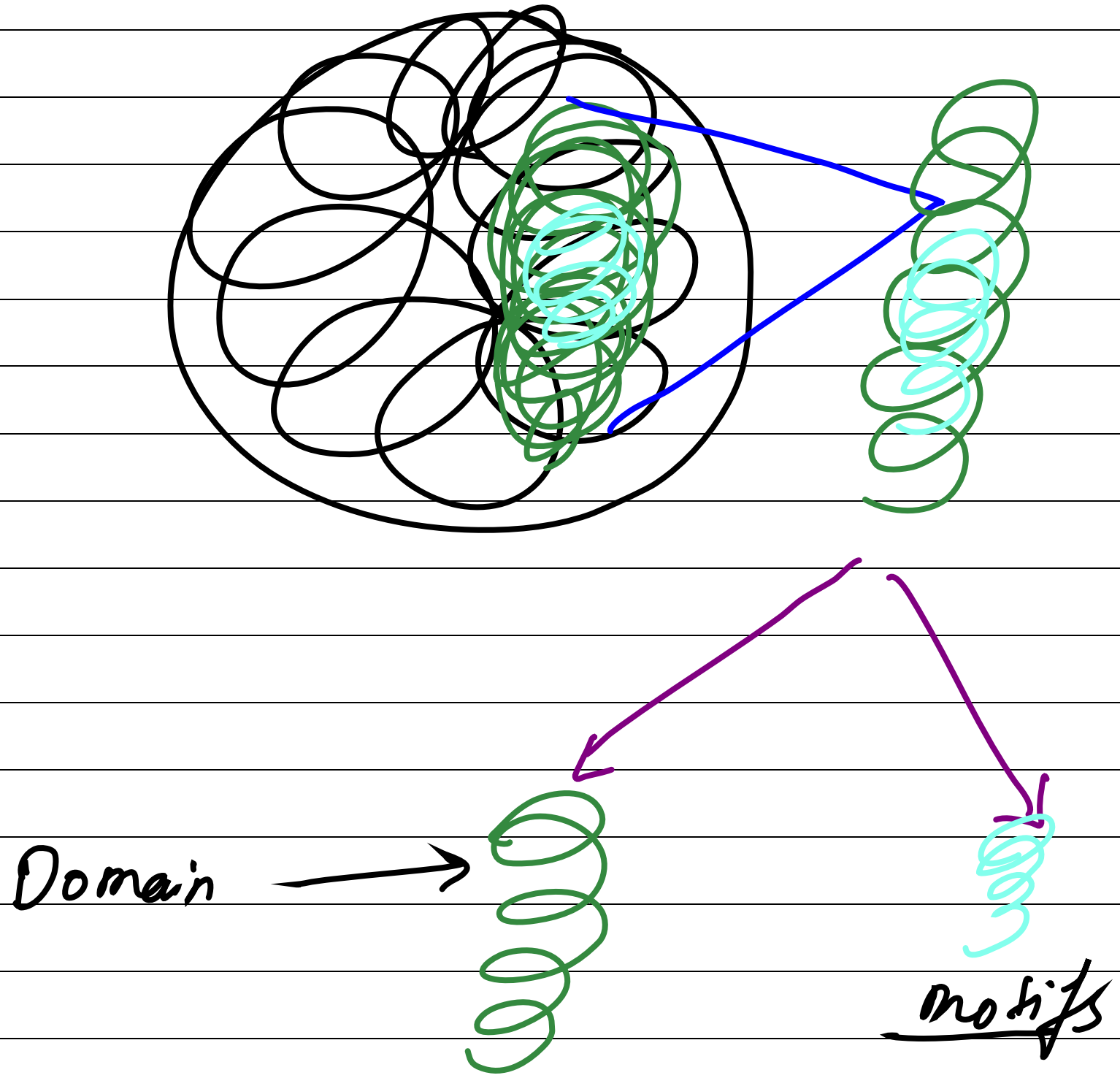
These region red is most represt the fre. of Amino acid.



- ϕ bond is making between N-C
- ψ bond is making between C-C

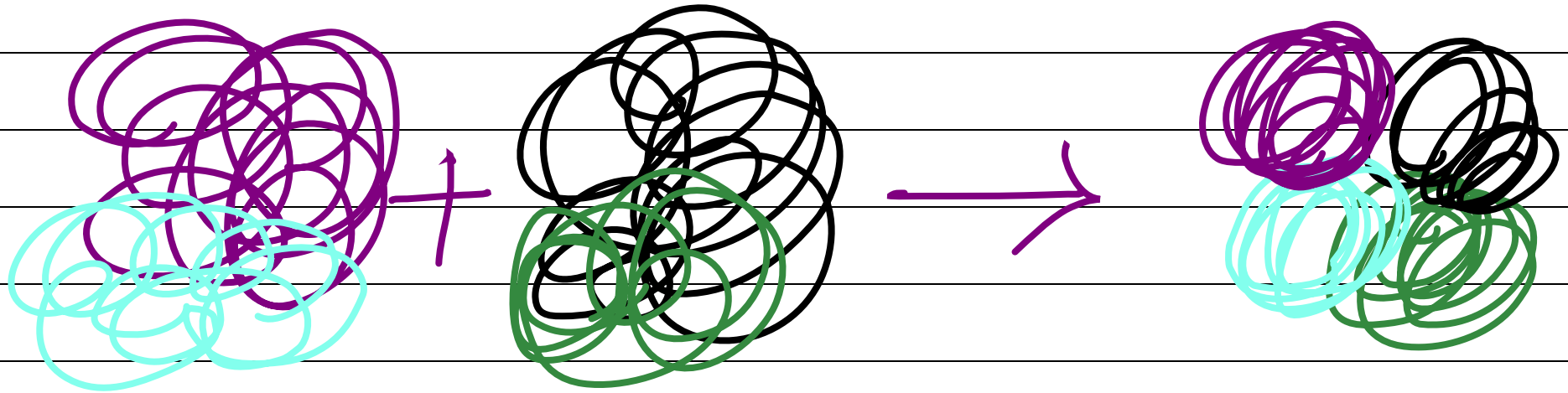
Domains :- They are the part of Polypeptide chain & they work independently.

Motifs :- They are found between the Domains with out Domains & they do not work or independently

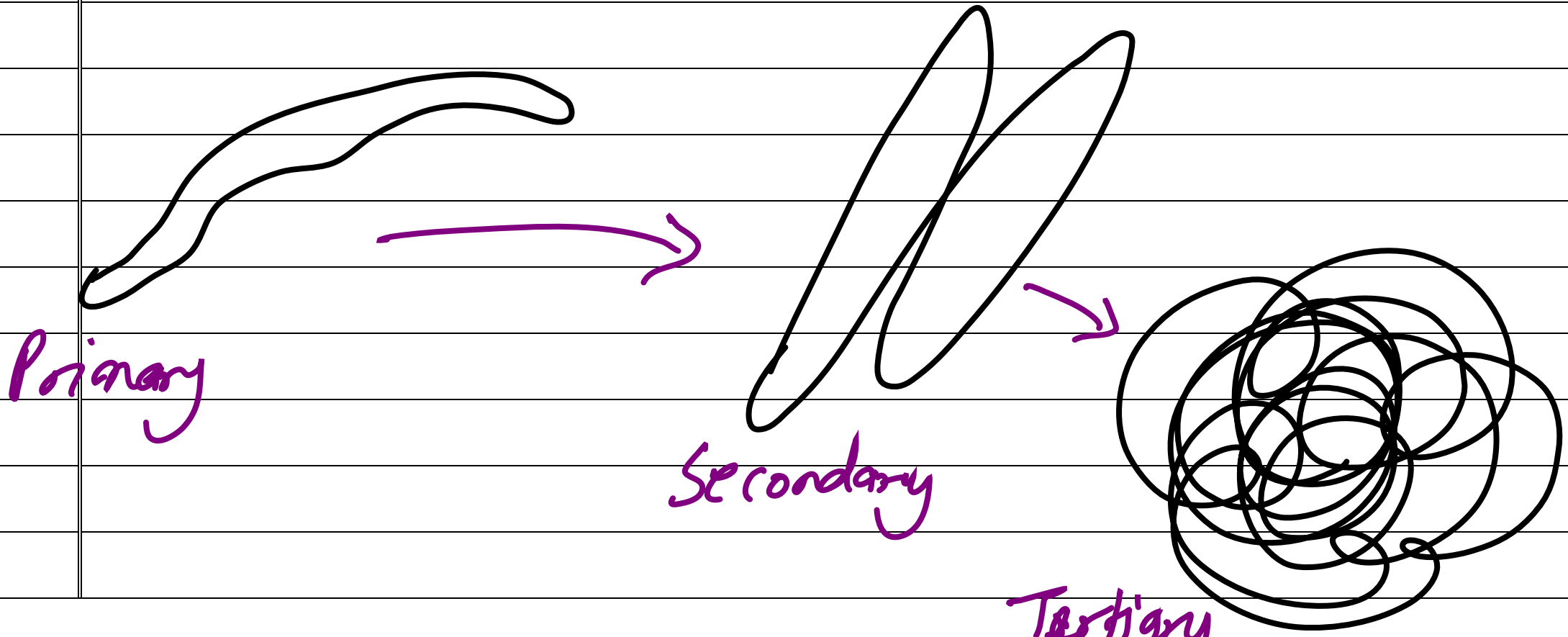

Domain
motifs

Tertiary structure of protein :-

It's consist of secondary structure Many type of sec. subunit of protein add togethr & flun they make tiytiary protein .

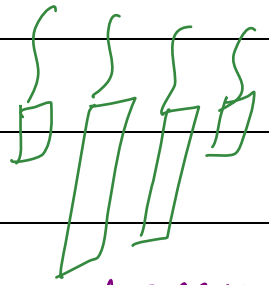


In these the four subunits of protein making a haemoglobin unit.



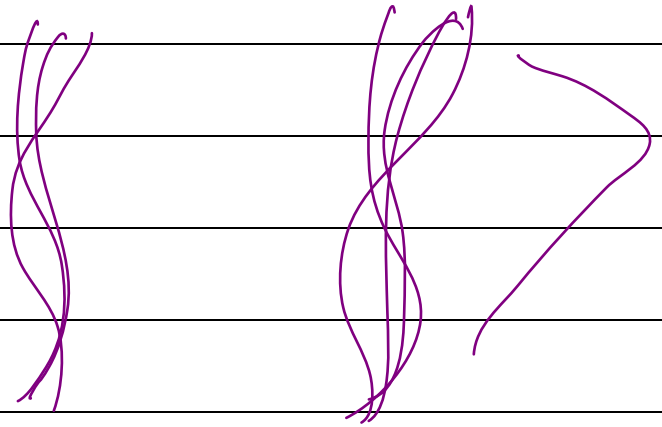
Some kind of Protein

- Globular :-
  - eg :- Immunoglobins



Immunoglobin.

- Fibrous :-
  - In nails, hair etc...



they are helix type & quivelled together.

Sec- A

B-1

Purine	Pyrimidine
• They are the — Adenine & Guanine	• They are — Thymine & Cytosine (DNA) & Uracil & Cytosin in RNA
• Purine is Nitrogenous base of DNA & RNA also.	• They are Nitrogenous base.

A≡T , C≡G

* Adenine & Guanine is double ring structural.

* Purine are most stroger than Pyrine (Comparable by the ring structure)

* & Thymine & Cytosine is single ring structure.

Pyrimidine is less stabe than Purine

Because, they have single ring structure.

B-2

* cDNA → Complimatery DNA

it's make by Reverse transcryptase.

RNA ⟶ DNA

↓

Reverse transcriptase

* cDNA :- It's the type of DNA like ADNA & ZDNA and BDNA

They are named by containg their salts & Wate Conc. in their structure.

- CDNA is Right handed.

B-3 Vitamins

- Vitamins is helpful for body.

Enzymes

- Enzymes is also helpful.

- Vitamins is take out side by food

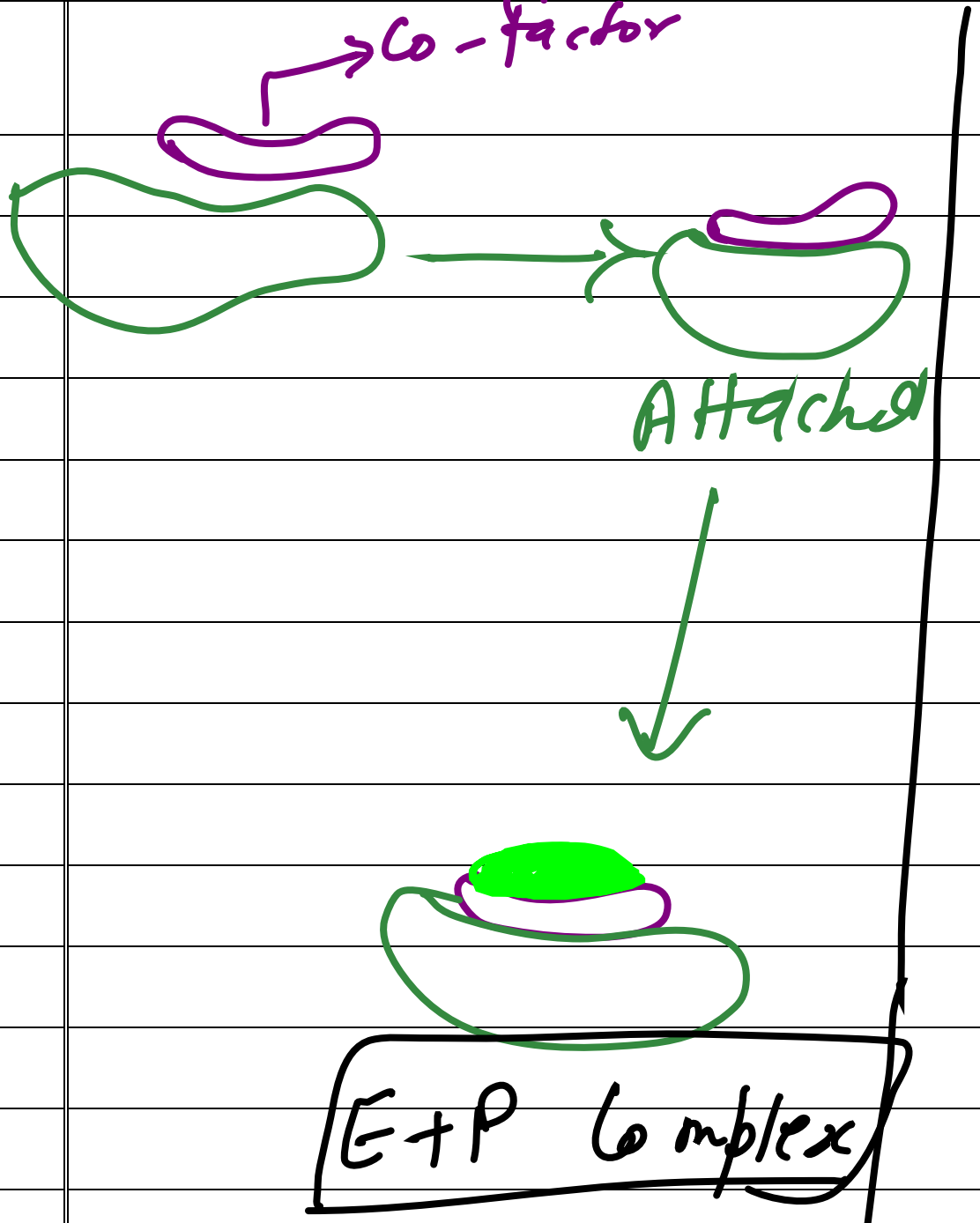
- They are used by parts of body & help them.

- Enzymes secreated in body parts like
  - → Lipase
  - → Peptidase
  - → Maltase

- They speed up the rate of reaction & not-utilized.

Enzyme work as a Catalyst.

B-4 Co-factor	Enzyme
• They are the factor which is specific for some type of reaction.	


Co-factor
Attached
E+P Complex