भाग-1

3322355

M

नामांकन संख्या

अनुक्रमांक (अंकों में)

अनुक्रमांक (शब्दों में)

हस्ताक्षर

कक्ष निरीक्षक का नाम

परीक्षार्थी द्वारा सम्पूर्ण विवरण भर लिए गये है।

परीक्षार्थी का पूरा नाम

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											
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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

(11) **Summary :-**

- Enzyme
- Enzyme regulation — Constitutive enzyme
  - Regulatory enzyme
- Mechnism of Enzyme
- Allostatic Enzyme
- Co-factor.
- Active site. — Binding site.
  - Catalyst site.

Enzyme :- Enzymes made up of protein. They Increase the rate of reaction. These are biological catalyist.

Enzyme regulation :-

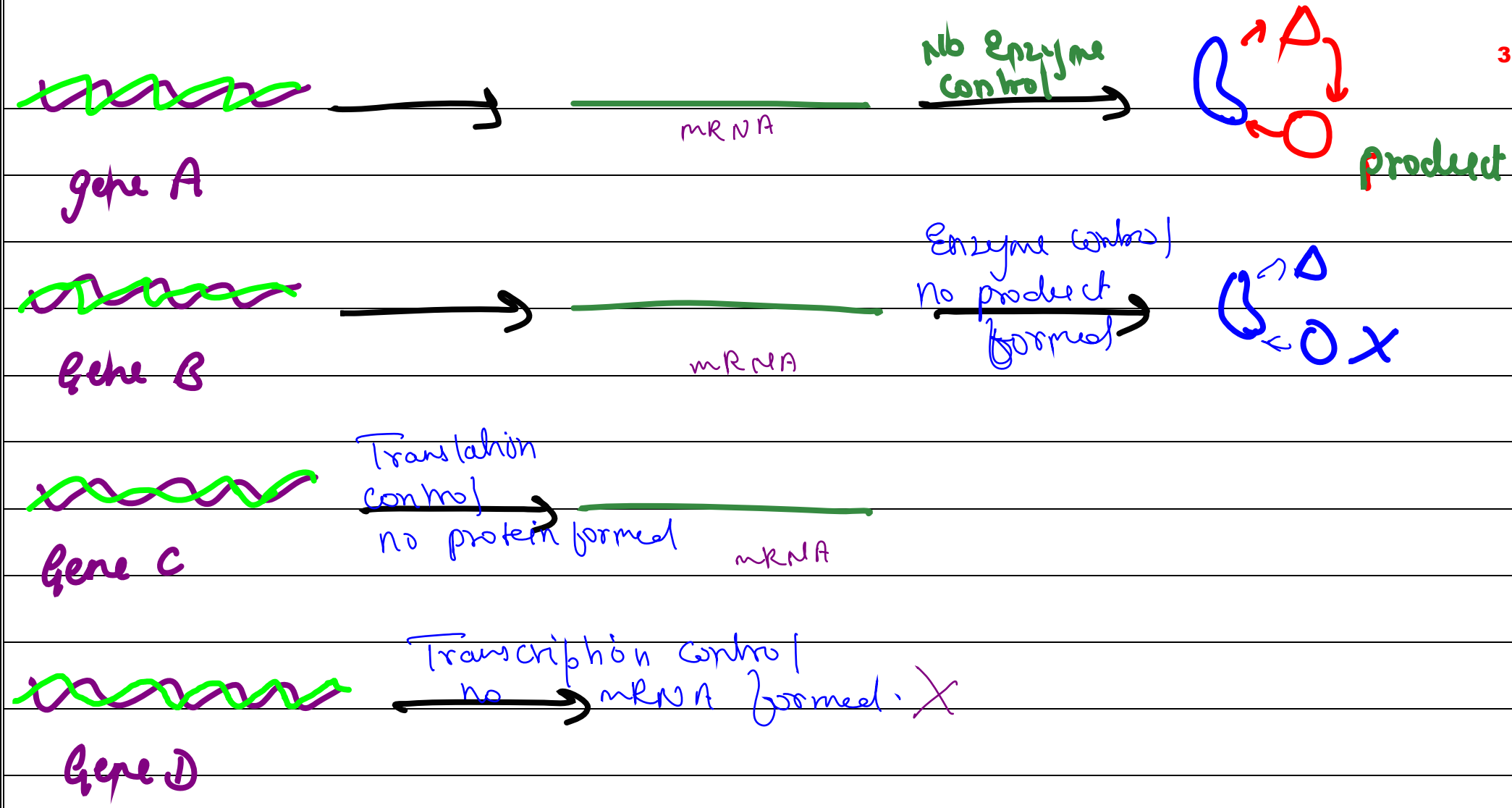
Enzyme regulation is control of the rate of reaction catalyist by a enzyme and other effectors.

① Constitutive enzyme:- They needed same conditions at the all time.

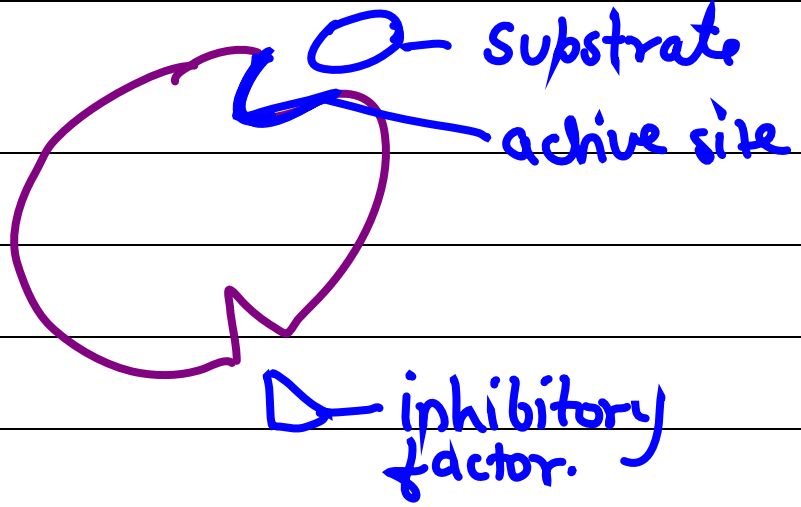
② Regulatory enzyme:- They need under some conditions not others.

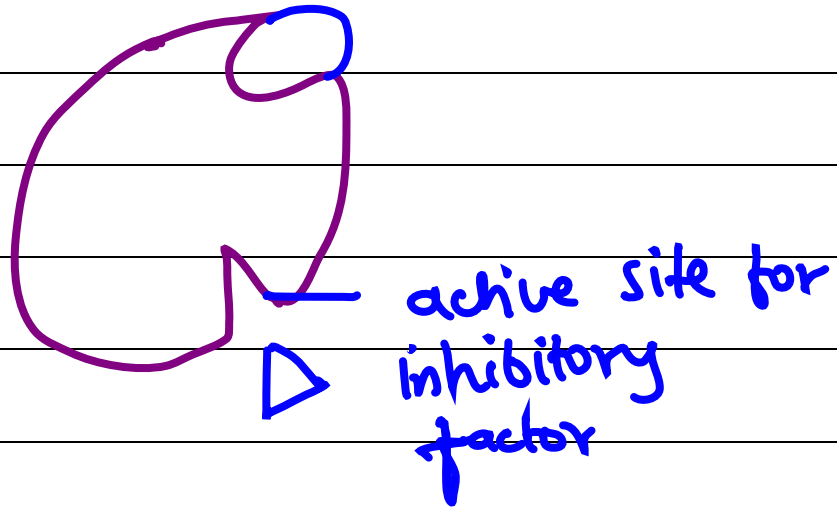
Ex. Lac operon. (Break down the lactose by β-Galactosidase enzyme. when Lactose present inside the body.

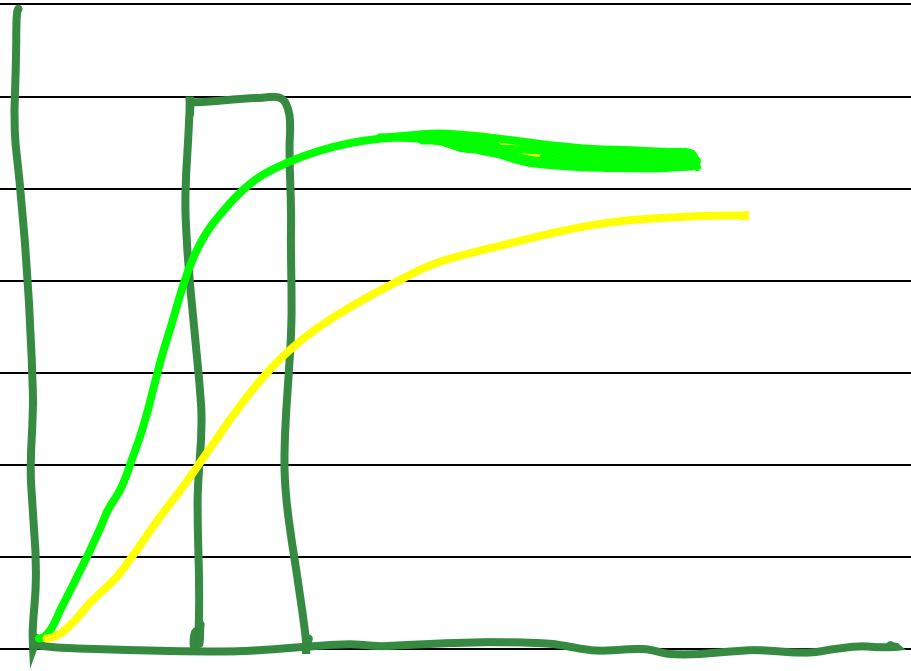
Mechanism of Enzyme regulation



Allostic Enzyme







Graph of reaction of Enzyme activity.

$E + S \longrightarrow ES$

Enzyme Substrate Product.

Co-factors :- Co-factors are non-protein which bind with enzyme. • provide area for holding the substrate

two type.

Inorganic

Organic

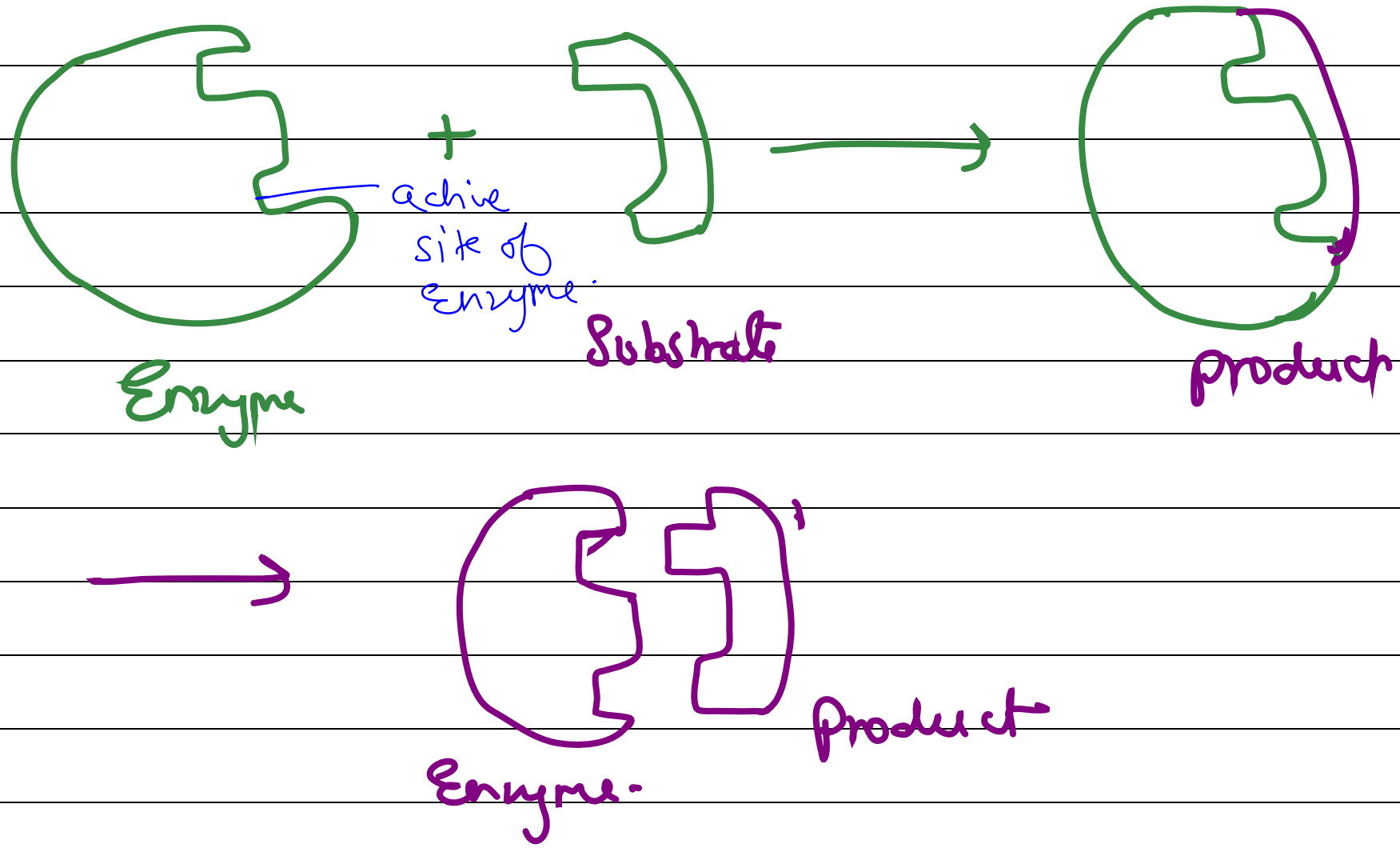
Enzymes Active site.

Bindings site

Bind the substrate with Enzyme

Catalyst site.

For Catalyst regulation



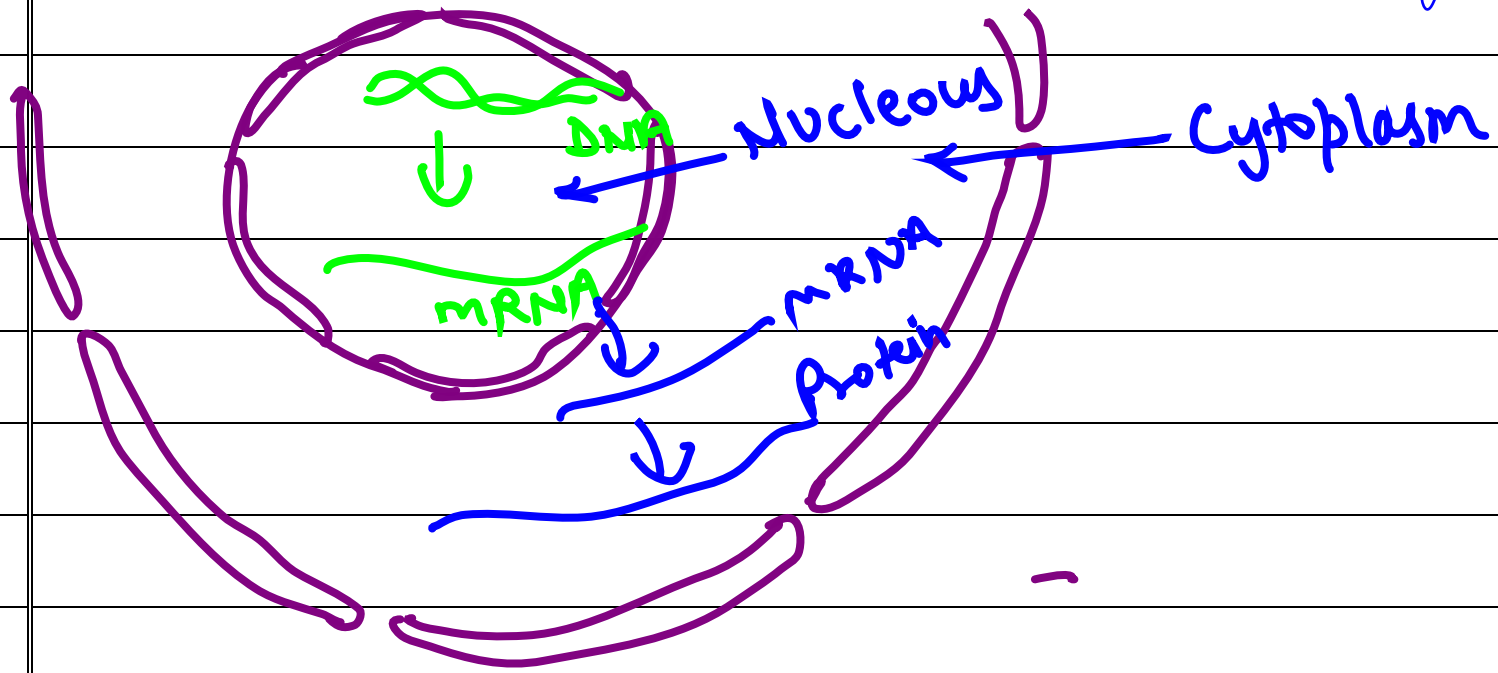
Substrate bind to the achive site on an enzyme.
Enzyme their site according to substrate
and when product are formed.
then enzyme changed own shape and product

are released from enzyme. then Enzyme normalise own their shape.

(9) Conformation of protein

Summary:-
- Protein
- Protein synthesis
  Transcription and Translation
- structure of protein
- Primary structure
- Secondary structure
- Tertiary structure
- Quaternary structure.
- Function of protein and properties.

- These are yield amino acid upon hydrolysis
- Protein are natural polymer of aminoacid.
- They formed from or contain Carbon, Hydrogen, Nitrogen and Oxygen.
- Proteins are biological catalyst.

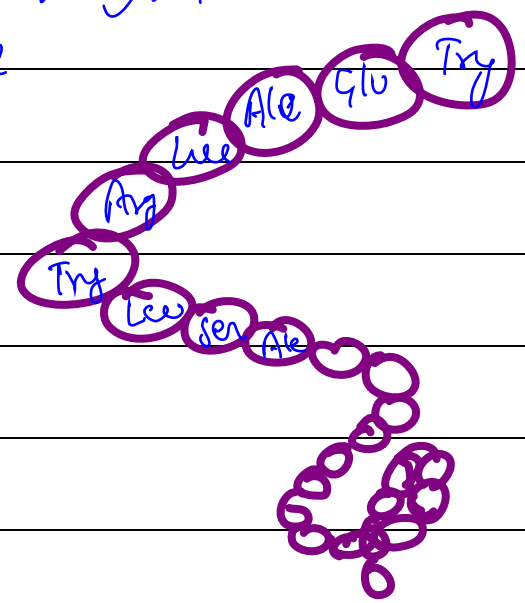


DNA $\xrightarrow{\text{Transcription}}$ RNA $\xrightarrow{\text{Translation}}$ Protein

Structure of protein

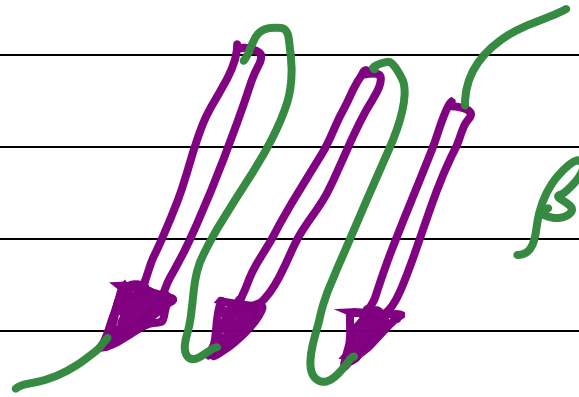
Primary structure of Protein:-

- The sequences of amino acid in polypeptide chain called primary structure of protein.
- Amino acid are joined to one another through peptide bond.



- **Secondary structure:-** The Aquired Squiral shaped and may be in zig-zag manner.
- The coiling of polypeptide chain
- due to hydrogen bond

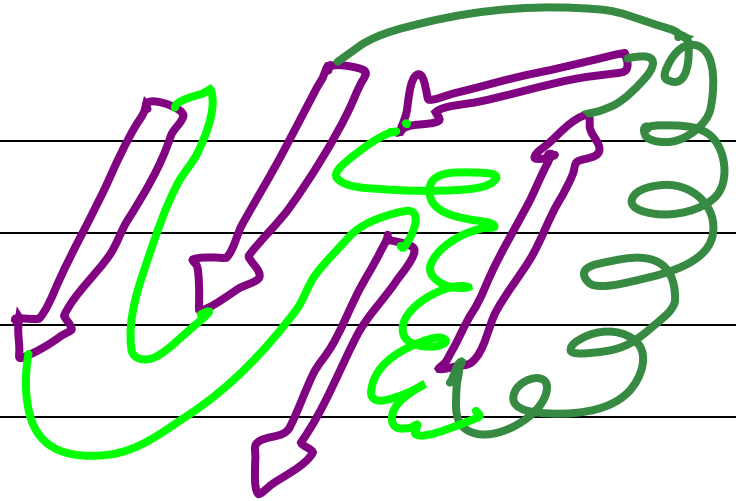
α-helix



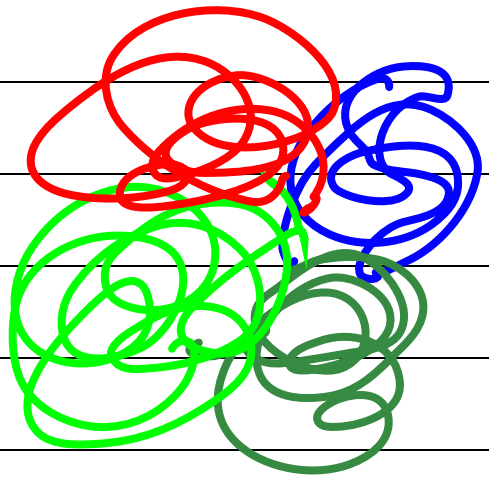
β-helix.

- **Tertiary structure :-** Twisting and folding of polypeptide chain are called Tertiary structure of protein.

- These are formed by interaction of many bond
  - hydrogen bond.
  - hydrophobic interaction
  - Covalent bond
  - Esteramic interaction.



:- **Quatary structure** it mean four folding and coiling of peptide bond by interation of complex molecule and disulphide bond, salt bridge and hydrogen Vanderwaal force.



Functions:

- found in the cell of living.
- natural polymer of aminoacid
- hemoglobin is a globular protein with carries O_2.
- Nucleoprotein is a complex protein act as hereditary material on to another.
- play important role in the formation of protoplasm.
- Enzymes are the catalyst. which Inhance the rate of reacⁿ.

Sec-B

(2) ① **Mouth :-** **PH :-** The entry point for food. have 2 PH.

② **Esophagous :-** by Esophagous food entered into the stomach.

③ **Stomach :-** bollus reached into the stomach. that mixed with Gastric juice. (Contain, Hcl, H_2O mucus, U_2)

our stomach have 2.5 - 3 PH.

Hcl - breakdown bolus and killed bacteria which entered with food.

Small Intestine :-

90% of food digestion occured their.

Gall bladder and pancrease secreate many enzymes and salt in Small Intestine which help in the digestion.
and PH of Small Intestine is high which help in digestion.

Large Intestine:- after that food liquied passed into cecum then passed out from the body.

---

(8) Buffer:- That's a solution which maintain the same PH. called Buffer.

Blood as a buffer:- Blood also act as a buffer in the body of living.

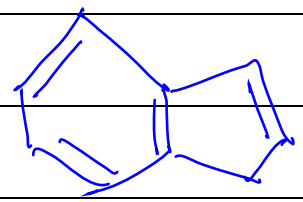
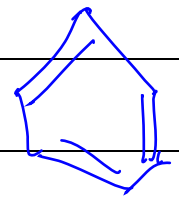
which maintain the Body temprature under any Condition.

human body Temperature is 37°C. which regulate and maintain by blood.

when our body temperature increased in points: human suffered by fever. after some time blood maintain body and normalise the body temprature.

SEC-A

(1)

Purine	Prymedine
• These are double ring structure. 	• These are the single ring structure. 
• Contain. Adenine and Guanine	• Contain Cytosine, Thymine and Uracil. Uracil found in RNA only not in DNA.

	CDNA	CDNA
2	CDNA is a Complementary DNA which artificially prepared in laboratary.	CDNA is a type of DNA.

	Vitamens	Enzymes.
7	• Some vit. are formed inside the body but mostly vit. we take from outside. • In the form of food.	• These are made inside the body by protein

• Our whole body required vitamins.	• These are work at their production site.

Ans (4)

Co-factor	Enzyme
• These are non-protein.	• These are made up from protein
• Co-factor are the part of Enzyme which help that for ~~at~~ binding the substrate	• They speed up the rate of reacn by some energy.
• without co-factor enzyme are inactive.	

(5)

Glucogenesis	Gluconeogenesis.
The formation of Glucose from carbohydrate sources.	The formation of Glucose from non - carbohydrate sources.