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

Ans-10

Mechanism Of Glycolysis

Glucose

↓ Hexokinase

Glucose-6-Phosphate

↕ Phosphoglucoisomerase (ADP → ATP)

Fructose-6-Phosphate

↓ Phosphofructoisomerase

Fructose-1,6-biphosphate

Aldose

Dihydroxyacetone phosphate

Triosephosphate Isomerase

Glyceraldehyde-3-Phosphate

Glyceraldehyde-3-phosphate

Glyceraldehyde-3-phosphate dehydrogenase

NAD+

NADH

1,3-biphosphoglycerate

Glyceraldehyde-3-phosphate

NAD+

NADH

1,3-biphosphoglycerate

Phosphoglycerate kinase

ADP

ATP

3- Phosphoglycerate

3-Phosphoglycerate

Phosphoglycerate mutase

2- Phosphoglycerate

2-phosphoglycerate

Enolase

H_2O

Phosphophenol Pyruvate

Phosphophenol Pyruvate

Pyruvate kinase ↓ ADP → ATP ↓ ADP → ATP

Pyruvate Pyruvate.

This is the Complete Mechanism of Glycolysis 4½.

No of ATP – ?
No of NADH₂ – ?
Out put – ?

Ass (1) Enzyme Regulation :-

Content :-

1 Enzyme
1.1 Introduction

2. Theories of Enzyme
2.1 Lock and key model
2.2 Induced - fit model

3. Mechanism of Enzyme
3.1 Michael Menton - Equation

4. Factors Affecting enzyme

4.1 Environmental factors

4.2 Co-factors

4.3 Co-enzyme

4.5 Temperature

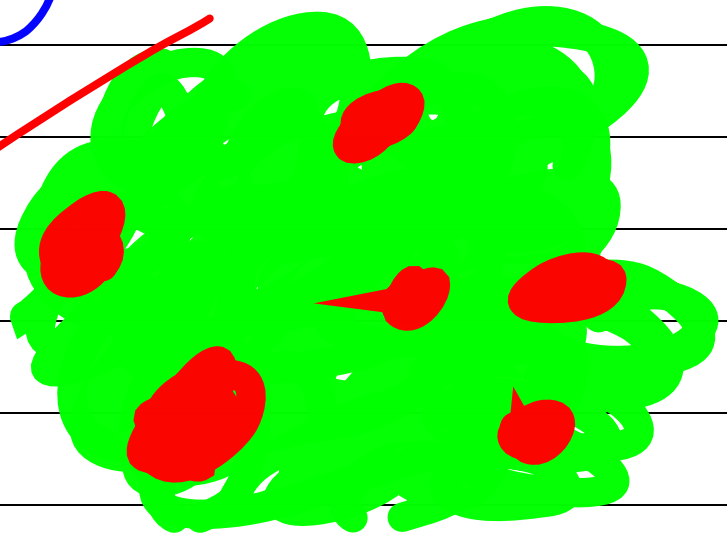
4.5 PH

* Enzymes :-

* All enzyme are proteins but all proteins are not enzyme.

* Enzymes acts as catalyst to accelerate a reaction.

* Enzymes are catalysts for what they will catalyse.



Enzyme of Protein

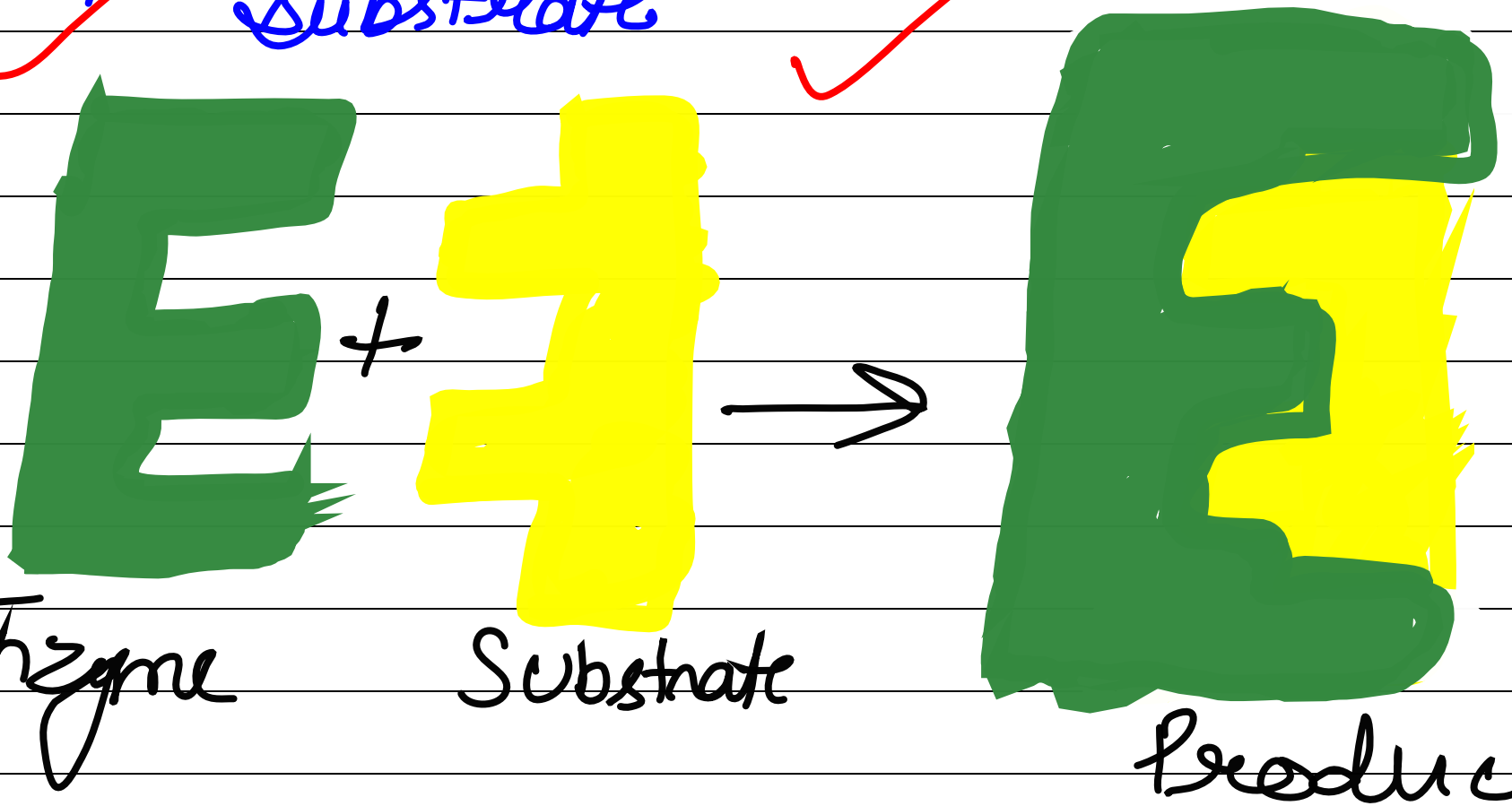
MECHANISM OF ENZYME:-

① Lock & key Mechanism:-

⇒ It is an old mechanism.

⇒ This mechanism is not accepted yet

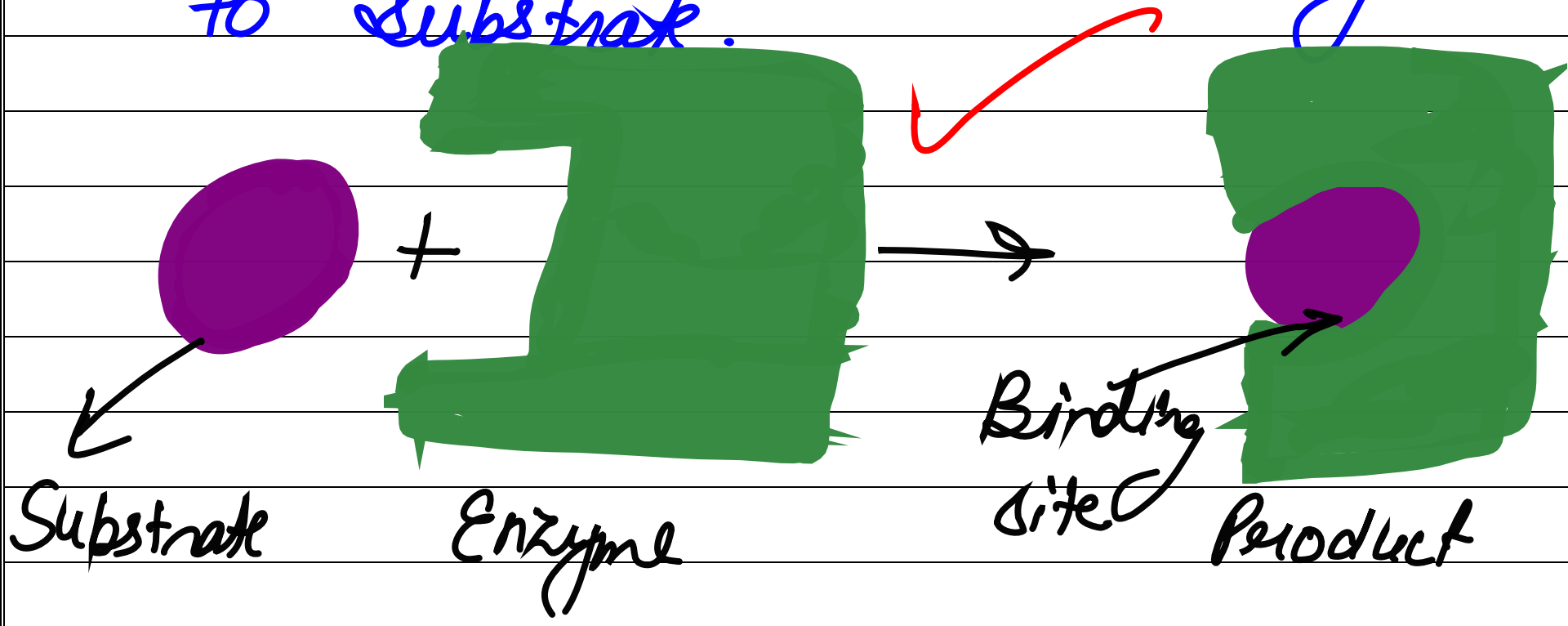
⇒ In this Mechanism, A enzyme can fit in their particular Substrate



② Induced-Fit Model :-

- Now, this model is accepted.

→ In this model Enzyme can change their Shape according to Substrate.



* MECHANISM OF Enzyme.

- **Michael - Menton Eqn :-**

$$V_0 = \frac{V_{max}[S]}{K_M + S}$$

V_0 = Initial velocity

V_{max} = Maximum Velocity

S = Substrate , K_M = Substrate con.

* Rate increases with rate level

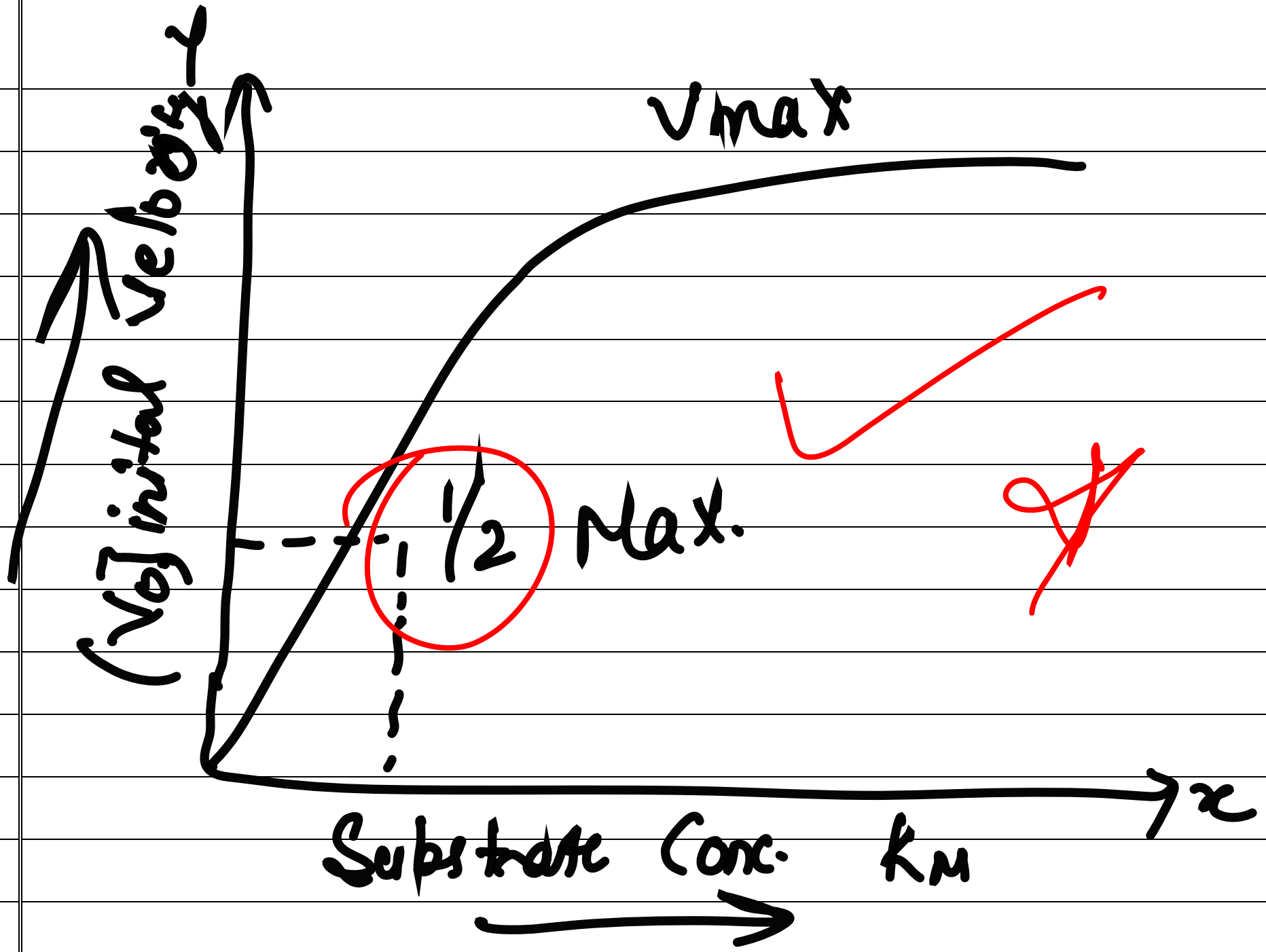
(S) off as approach Vmax.

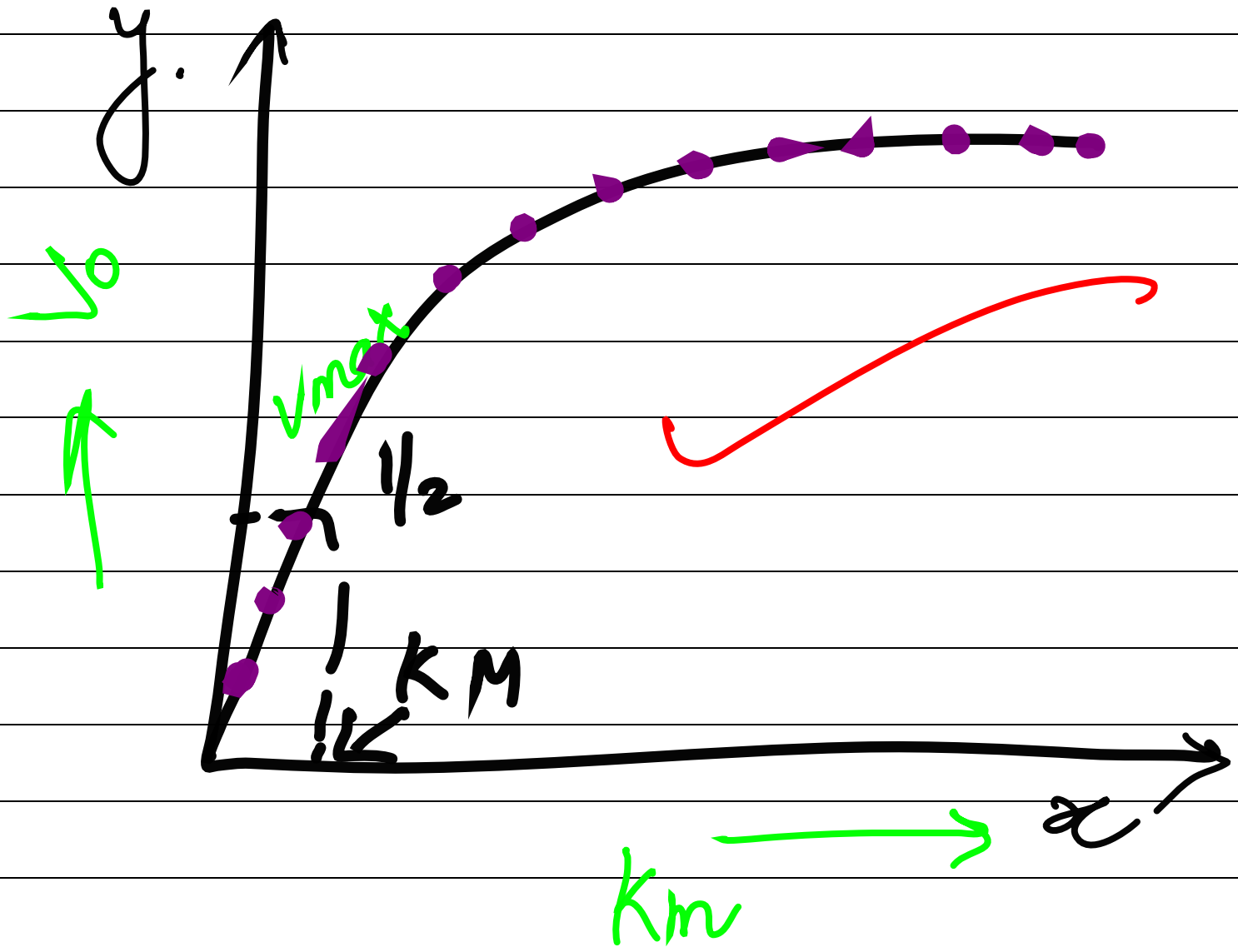
More (S) than active Site E.

Adding (S) have no effect on

$$V_0 = \frac{1}{2} \max$$

$$\boxed{S = K_m}$$


Vmax
(Vo) initial velocity
1/2 Max.
Substrate Conc.
KM
x
y



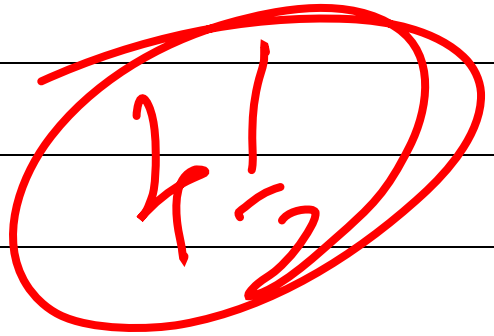
≠ Vmax occur at when enzyme active

are Saturated with Substrate.

+ Kmax reflects affinity on enzyme.

* Factors Affecting

1. Temperature
2. pH
3. Co-enzyme

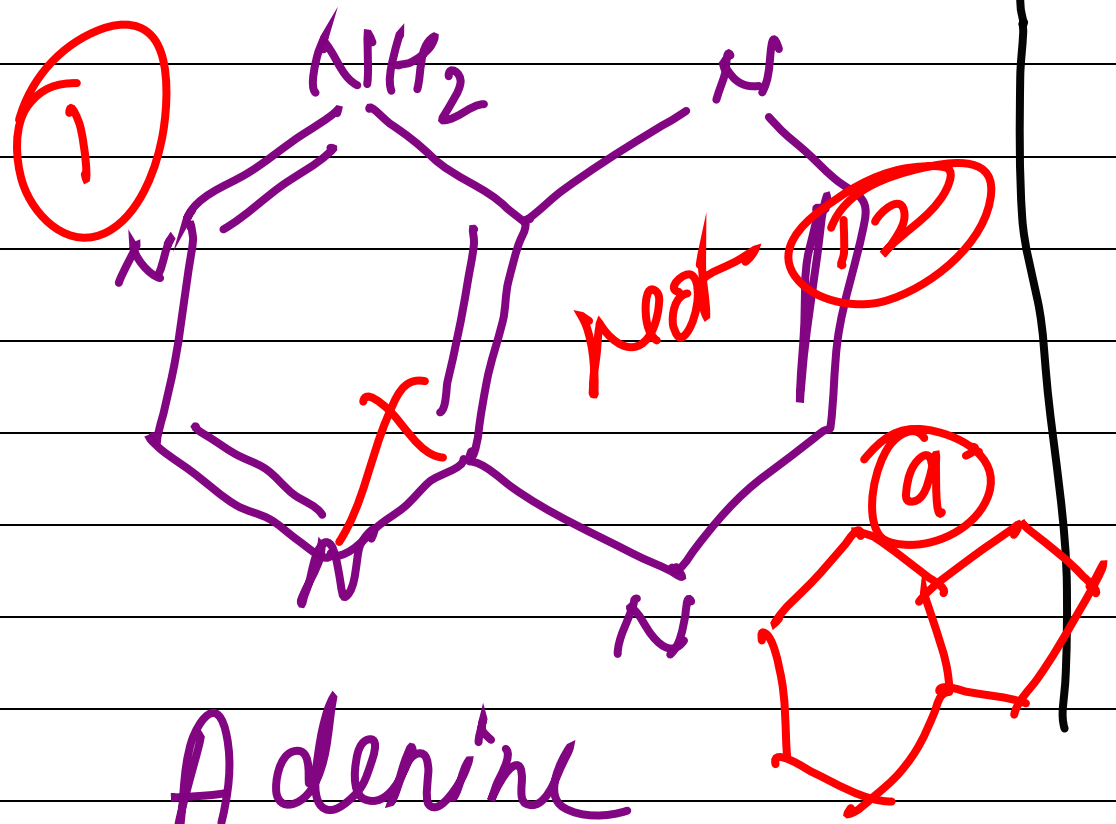


- Co-factor
- Environmental factors

Section- A

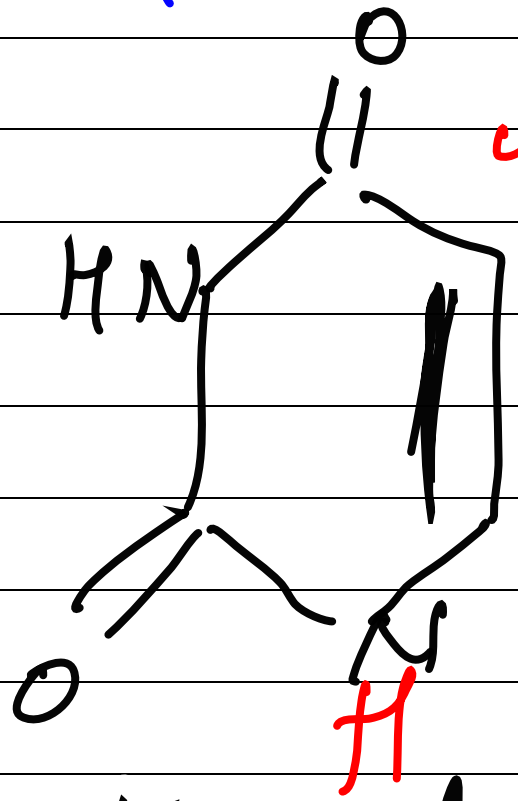
Acid	Purine	Pyrimidine
Nucleotide Bases		Nucleotide Bases
Contain Adenine & Guanine		Contain Thymine & Uracil.

• Adenin & Guanine present in DNA & RNA



Adenine

• Thymine & Uracil present in RNA. Ura / Thy present in DNA Ura



Uracil

Sec- B.

Ass-② pH role in Digestion

Content!—

1. Digestion

pH? its Role in Digestion and Digestion

Q. STEPS of Digestion

Q.1 Digestion In Buccal Cavity

Q.2 Digestion in Stomach

Q.3 Digestion in Small Intestine

∃ First Step of Digestion.

① Digestion In Buccal Cavity :-

- ∃ Digestion in Buccal cavity takes place only for protein.
- ∃ Only 30% of protein is digested in Buccal cavity.
- ∃ pH of Saliva is 1.5 – 2.5
- ∃ It is Slightly acidic.

Bolus :- (Saliva + chewed food) enter in the Stomach via Oesophagus.

⇒ There is no digestion takes place in Oesophagus

(2) **Digestion In Stomach**

⇒ pH Plays a very important role in digestion.

⇒ It is highly acid.

⇒ Gall bladder helps in Digestion.

⇒ pH in Stomach is 2.5 - 3.7

⇒ Then Chyme is transferred in Small intestine.

③ Digestion in Small Intestine.

② In 3rd step digestion is takes place in Small Intestine.

⇒ Maximum digestion takes place in Small Intestion.

⇒ Bile Juices increases the pH. which helps in the Digestion.

Sec - A.

Ans - (3)

Vitamins	enzymes.
1) Proteins are not vitamins.	All enzymes are protein.
2) They do not enhance the rate of reaction.	Enzymes enhance the rate of reaction.

Ans- (3)

Co-factor	Enzyme
⇒ Co-factor is the factor affecting the enzyme.	⇒ Enzyme are the protein which catalyses the reaction.

Ans - (5)

Glucogenesis	Gluconeogenesis
→ Glucogenesis is the breakdown of Glucose.	→ Gluconeogenesis is the build-up of Glucose into fructose.
a) Gluco → means Glucose	
b) genesis → breakdown	

Sec-B

AB&B Blood as a Buffer.

→ Blood is a colloidal liquid.

⇒ It is made up of two type of substance

(1) Plasma

(2) Formed elements.

(c) Plasma :- Contain. Gases, Nucleotides wastes, Amino Acids etc.
and protien also :- Globulin Fibrinogen, Albumin.

e) It is the non-living part of the Blood.

Formed elements :- It

Coint :- Platelets,

Erythrocytes, Leukocytes.

- Agranulocytes
- Granulocytes
- Lymphocyte
- Monocytes.

→ So, we can say that Blood is a buffer Solution, because in this have the presence of colloidal substance.

Ans- (c) cDNA is the complementary DNA.

cDNA ⇒ coding DNA.