



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 M.Sc (Name of Exam) वर्ष 20 19 (Year 20.....) भाग/सेमेस्टर II Sem 6/5/19 (Part / Semester)  
विषय Zoology (Subject) प्रश्न-पत्र/पाठ्यक्रम Biochemi stry (Paper /Course) पेपर कोड नं H-2065 (Paper Code No.)  
परीक्षा का दिन Monday (Day of Examination) दिनांक 6/05/19 (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	1/2	1/2	1/2								1 1/2
2	1	1/2									2 1/2
3	1	1									2
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											

poonam Tomar

प्राप्तांक (शब्दों में)	अंकों में



चौधरी चरण सिंह विश्वविद्यालय, मेरठ

R

आवश्यक निदेशों हेतु पृष्ठ भाग देखें

Date Stamp to be affixed here

मास/दिनांक

(परीक्षार्थी द्वारा भरा जाए)

परीक्षा का नाम M.Sc (Name of Exam) भाग/सेमेस्टर II Sem  
विषय Zoology (Subject) प्रश्न-पत्र/पाठ्यक्रम Biochemistry (Paper /Course) पेपर कोड नं H-2065 (Paper Code No.)  
परीक्षा का दिन Monday (Day of Examination) दिनांक 6/05/19 (Date)

परीक्षार्थी का अनुक्रमांक (Roll Number)

उत्तर-पुस्तिका क्रमांक

1	8	P	0	1	8	2	3	4	0		
M	A	0	0	0	0	0	0	0	0	0	0
B	1	1	1	1	1	1	1	1	1	1	1
C	2	2	2	2	2	2	2	2	2	2	2
D	3	3	3	3	3	3	3	3	3	3	3
E	4	4	4	4	4	4	4	4	4	4	4
F	5	5	5	5	5	5	5	5	5	5	5
G	6	6	6	6	6	6	6	6	6	6	6
H	7	7	7	7	7	7	7	7	7	7	7
I	8	8	8	8	8	8	8	8	8	8	8
J	9	9	9	9	9	9	9	9	9	9	9
K											
L											
P											
S											
T											
U											
V											
W											

KM-I-01-

कालेज कोड

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

(परीक्षार्थी की श्रेणी)

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

नामांकन संख्या (Enrollment Number)

पेपर कोड

M	1	5	5	3	3	8	6	0		
0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9

H-2065

परीक्षार्थी का पूरा नाम

poonam Tomar

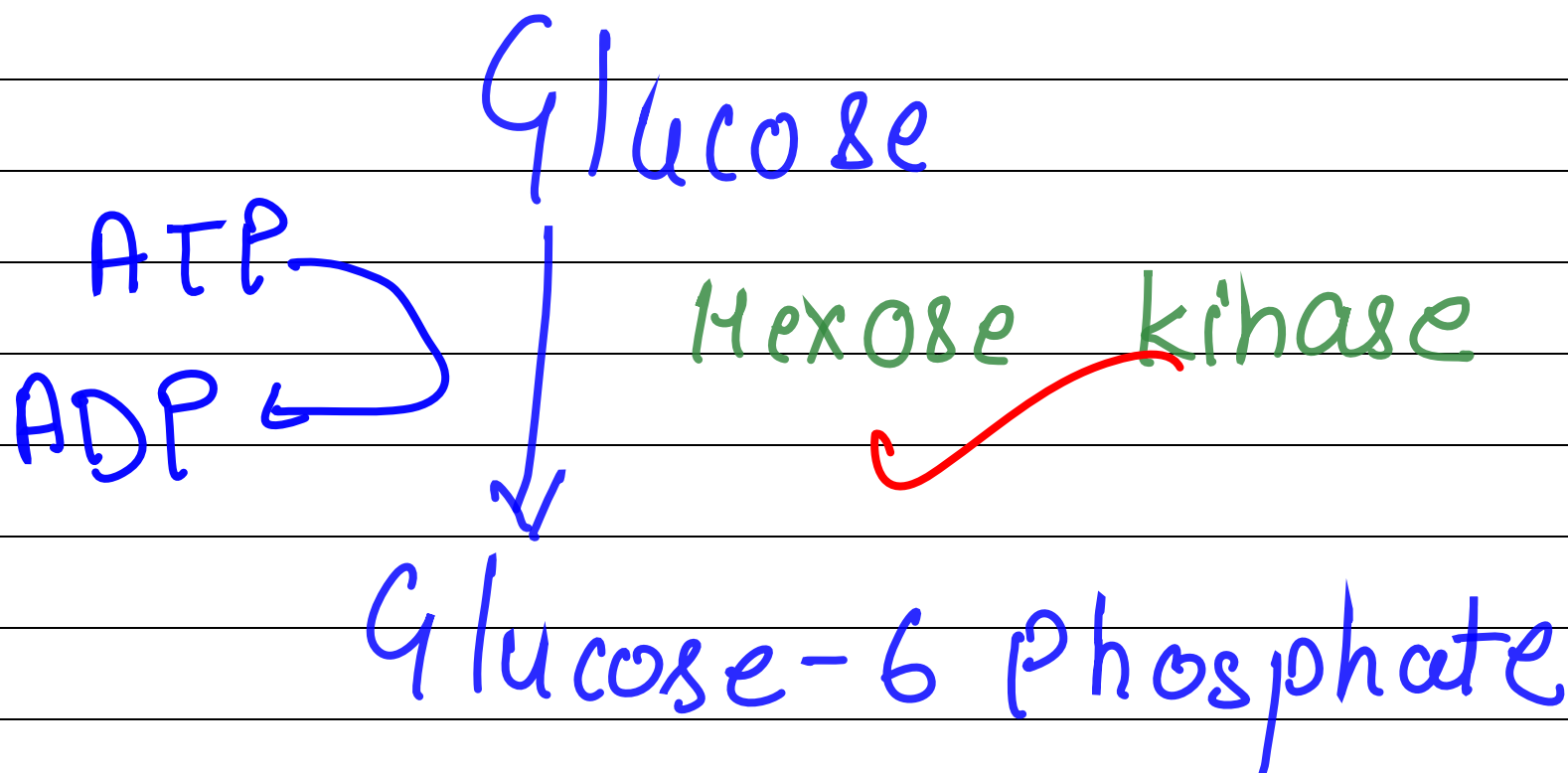
कक्ष निरीक्षक का नाम

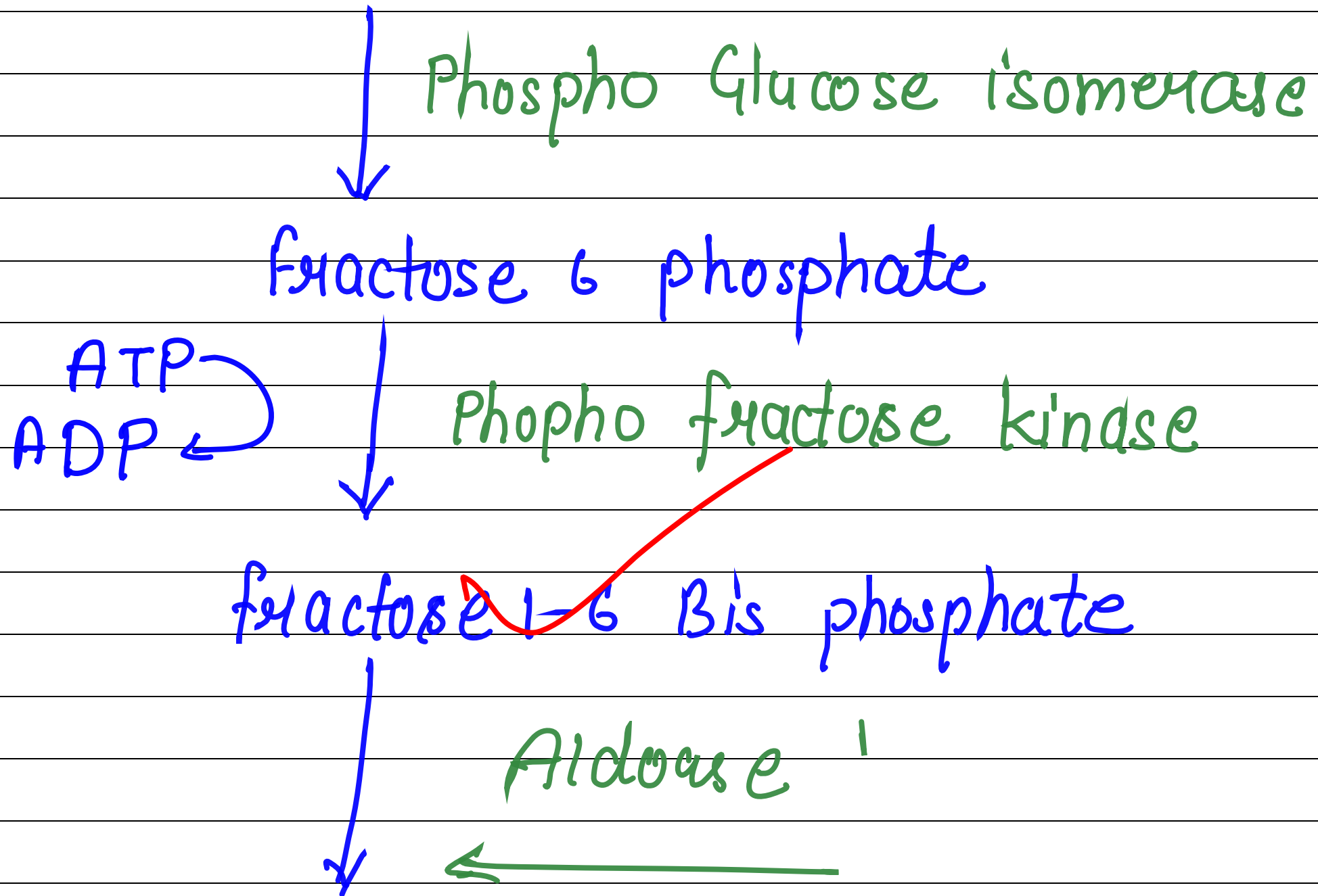
Azmi

Section  $\Rightarrow$  C

Ans = 10

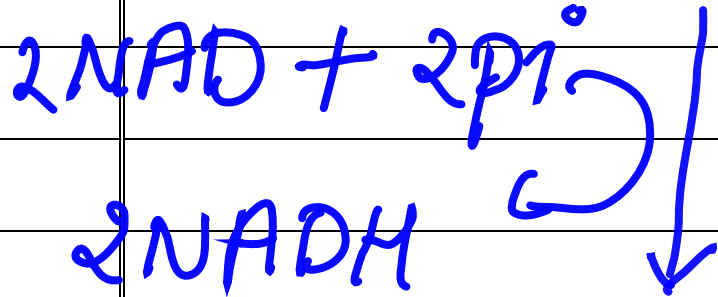
Mechanism of Glycolysis





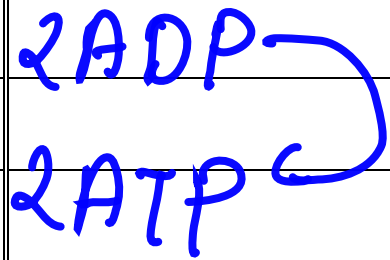
GLAP

DHAP



GLAP Hexogenase

1,3, Bis Glycerate phosphate

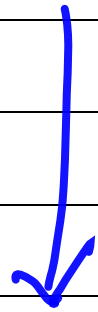


phospho Glycerate kinase

3-glycerate phosphate

phospho Glycerate Mutase

2 - Glycerate phosphate



Enolase

Glycerate pyruvate

2 ADP

2 ATP



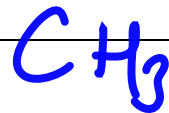
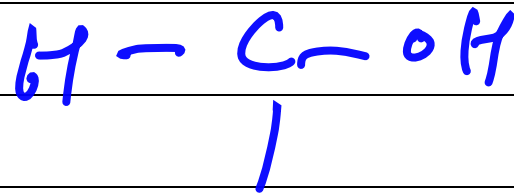
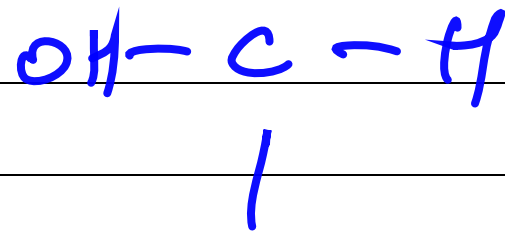
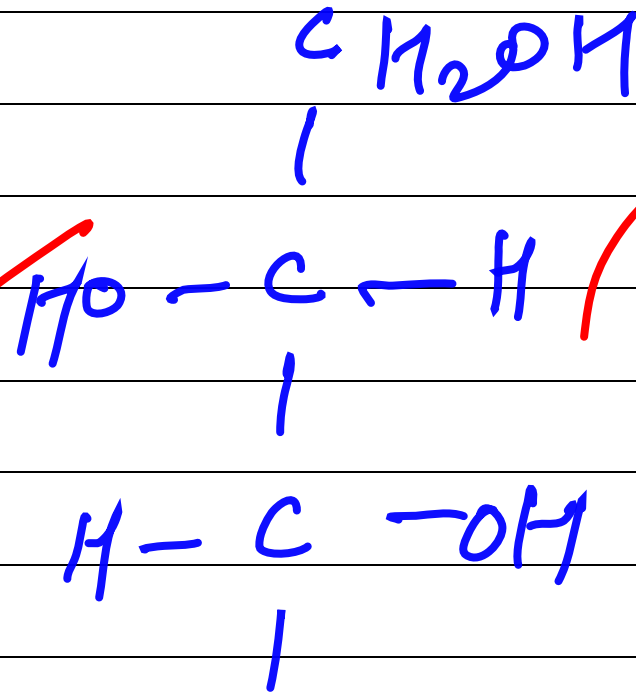
phosphoenol pyruvate kinase

Pyruvate

# The glycolysis cycle started have  
 glucose and 1 NADH = 3 Molecules.  
 2 NADH composed has 2 ATP  
 and 4 NADH composed has  
 8 ATP.

- Glucose has changed glucose 6  
 phosphate and reaction with Hexose  
 kinase and composed glucose 6  
 phosphate

organic structure  
drawing



Glucose

# Ans = 9 Conformation of Protein

⇒ All protein are 20 different amino acid. In which 9 essential of protein.

• All enzymes are protein.

• protein are essential and



no essential protein.

⇒ protein has 3 subunit particle.

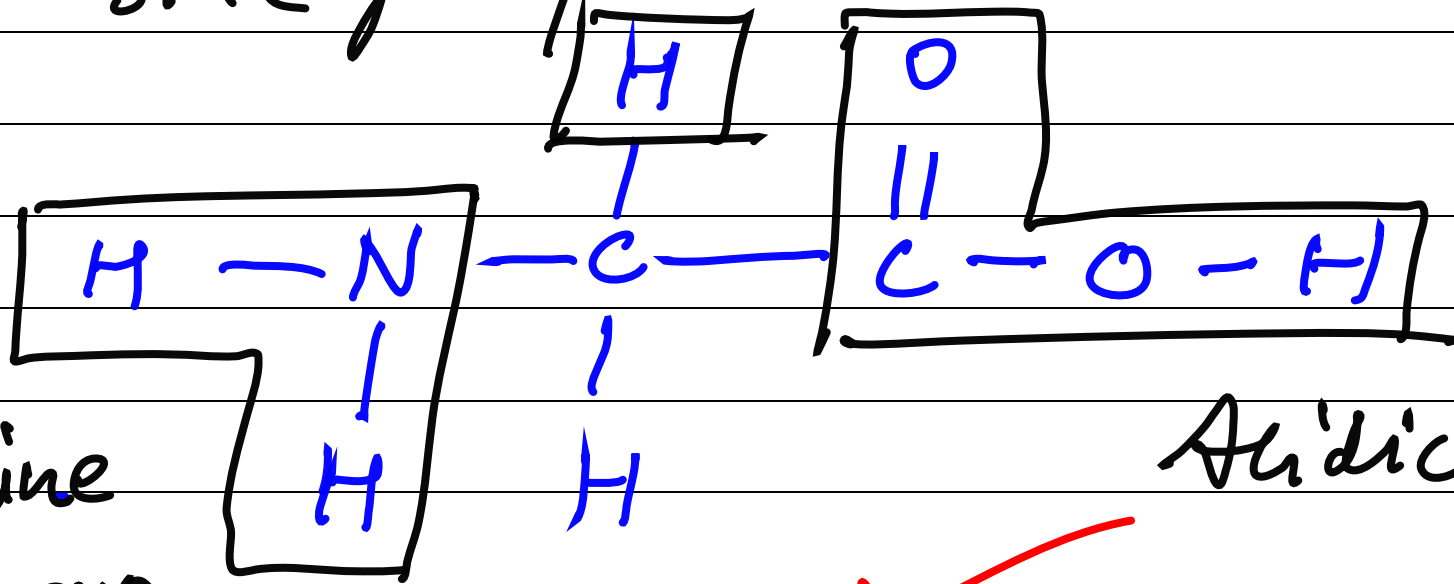
1. Sucrose

2. Lactose

3. Maltose

⇒ Non essential protein has include:-  
glutamic acid, Aspartic acid,  
serine, cytosine, lysine,  
Alanine, glycine.

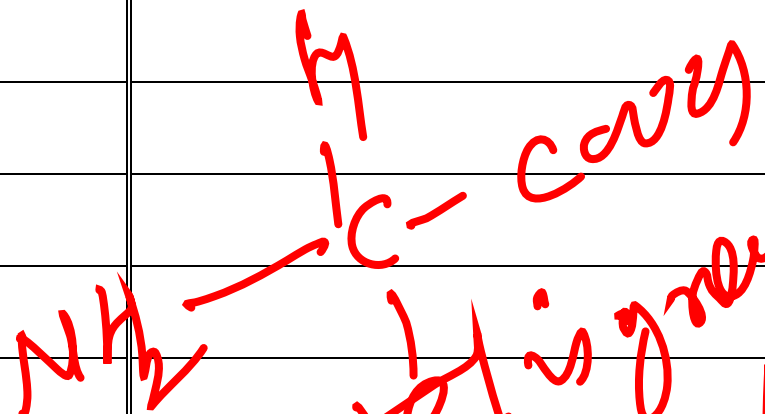
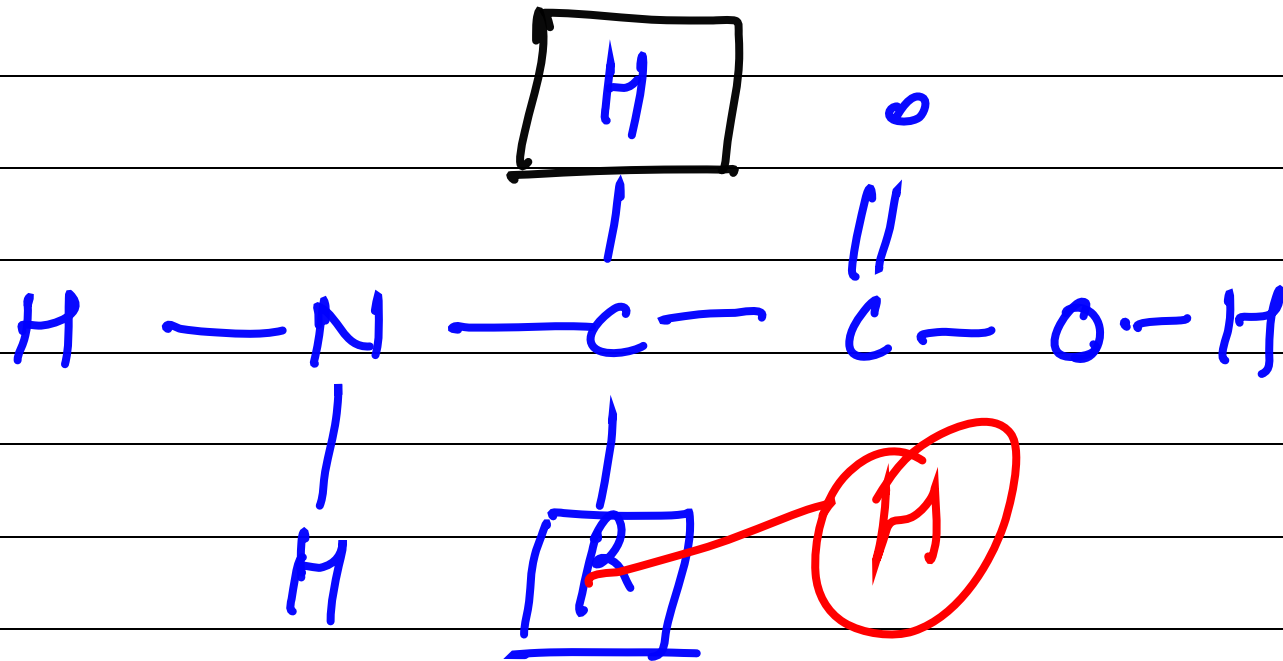
side group



• Each amino acid has the

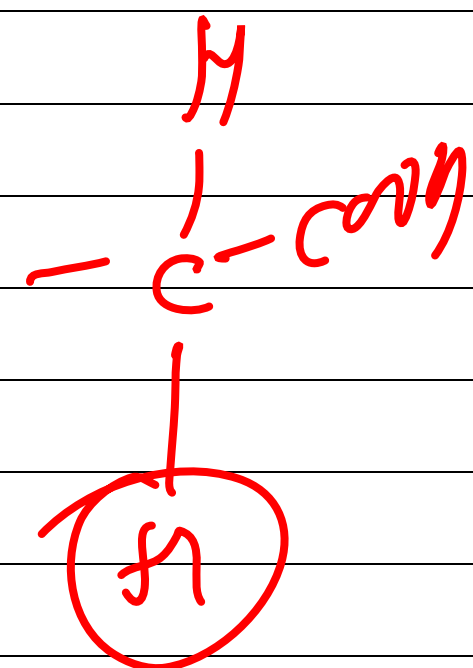
side group, Amine group, Acidic group and Hydrogen bond.

①

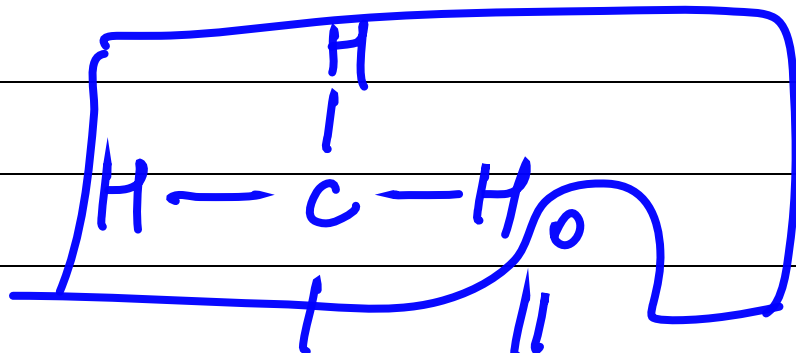
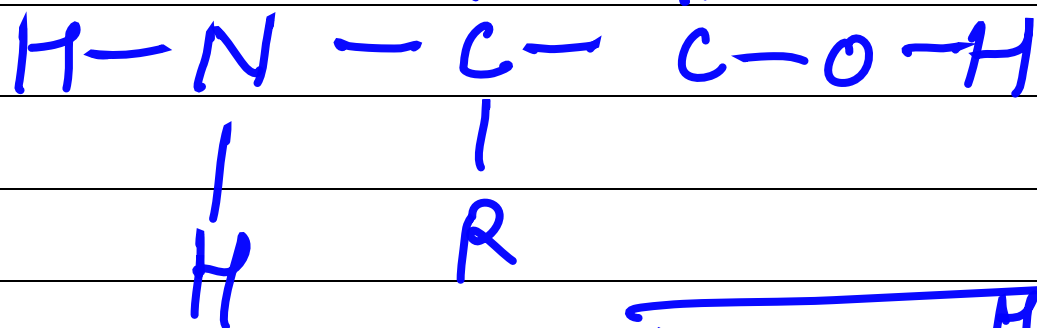


is group  
in glycine is  $\boxed{H}$

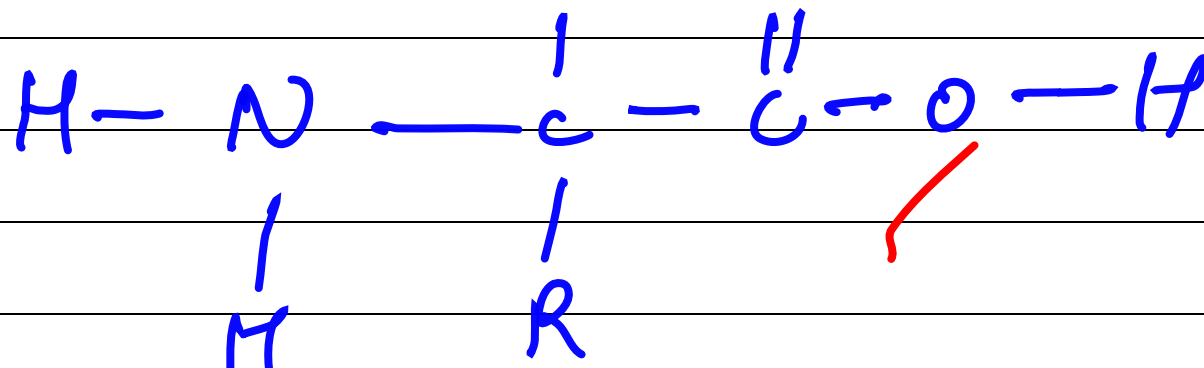
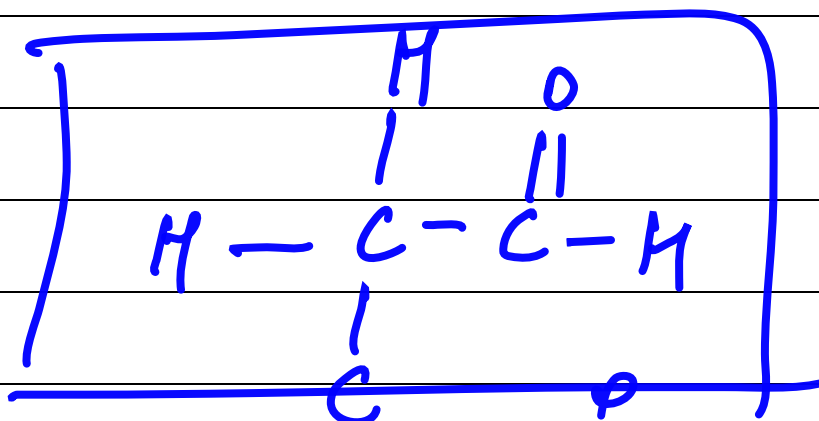
$\uparrow$  glycine  $\downarrow$



②

Alanine

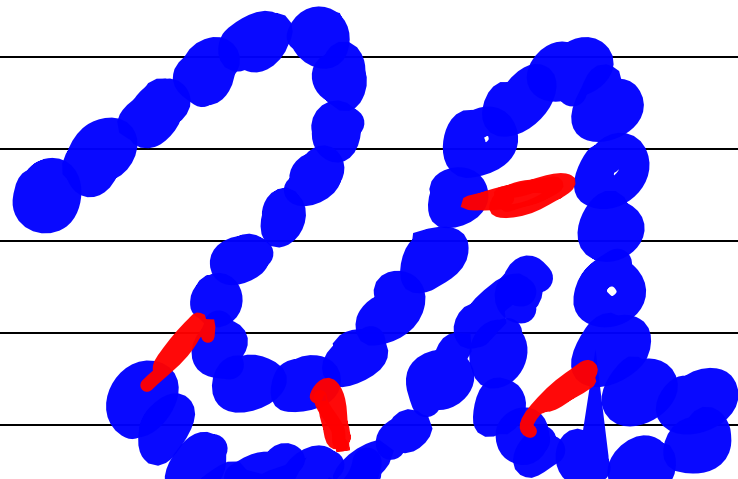
③



Conformation of Protein has  
Super Secondary structure.

# protein are four type structure

① Primary structure  $\Rightarrow$



## ② Secondary structure <sup>127</sup>

Initial folding structure

Detail explanation

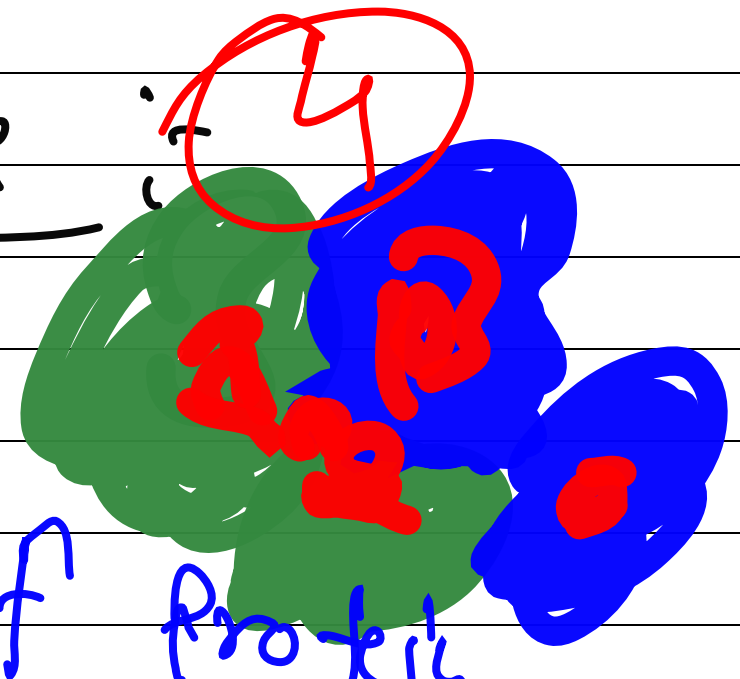


③ Tertiary structure  $\Rightarrow$



④ Quaternary structure  $\Rightarrow$

Hemoglobin found in  
quaternary structure of protein



# Section = A

Ans = 1 Purine  $\Rightarrow$  Purine found in  
DNA and RNA. Diff. ?

Pyrimidine :- Pyrimidine found in  
DNA and RNA.



Ans=3 Vitamin  $\Rightarrow$  Vitamin are consist of two:- 1. fat soluble and water soluble.

2. fat soluble :- A, D, E, K

enzyme  $\Rightarrow$  All enzymes are protein.

Enzyme are Digest of food in stomach.

Ans = 2

cDNA  $\Rightarrow$  It is a Complementary DNA.

(1/2)

C DNA  $\Rightarrow$  It is a no Complementary DNA.

~~Alternative of DNA~~

Ans = 3 Co-factor  $\Rightarrow$  A Co-factor is a non-protein chemical compound.

enzyme  $\Rightarrow$  Enzyme is a protein chemical compound.

Ans = 5. Difference b/w Glucogenesis &

Gluconeogenesis:-

Glucogenesis has composed only  
Glucose and glucogenesis  
has composed Glucose to  
fructose.

# Section $\Rightarrow$ B

Ans: pH  $\Rightarrow$  It is the negative log of Hydrogen concentration.

$$pH = pK_a \frac{[A^-]}{[HA]} \left[ \frac{\text{Proton acceptor}}{\text{Proton donor}} \right]$$

## Its role in Digestion $\Rightarrow$

- PH is the most important for our digestion.
- PH is the help digestion of food
- When the food in the stomach which are the salt, enzyme, and mucus in the digest food and PH is the help of the

good digestion. PH is the most important role in the digestion in our body.

Digestion to three main types:

1. Mouth

2. Stomach

3. Intestine (small & large)

PH in parts of A.C. oral food

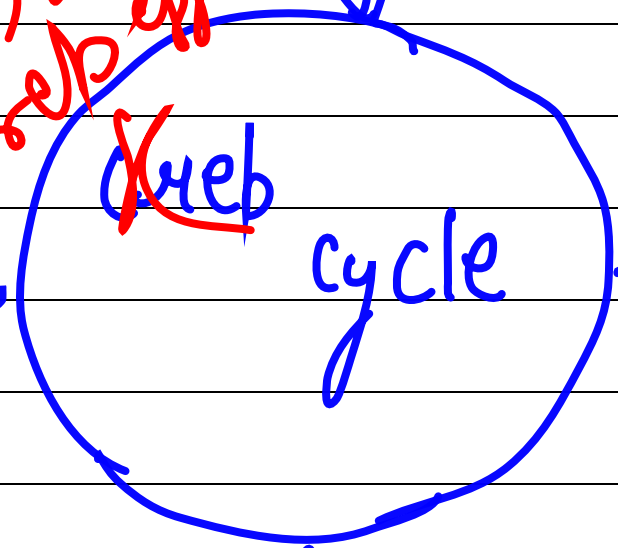
Ans = 6 fatty acid

Glucose

Amino acid

ACytle Co-A

Intermediary  
but not  
faces in  
Krebs cycle



GTP

Krebs

cycle

2 Co<sub>2</sub>

4 e<sup>-</sup>









































