

26

JUN
FRIDAY

2015

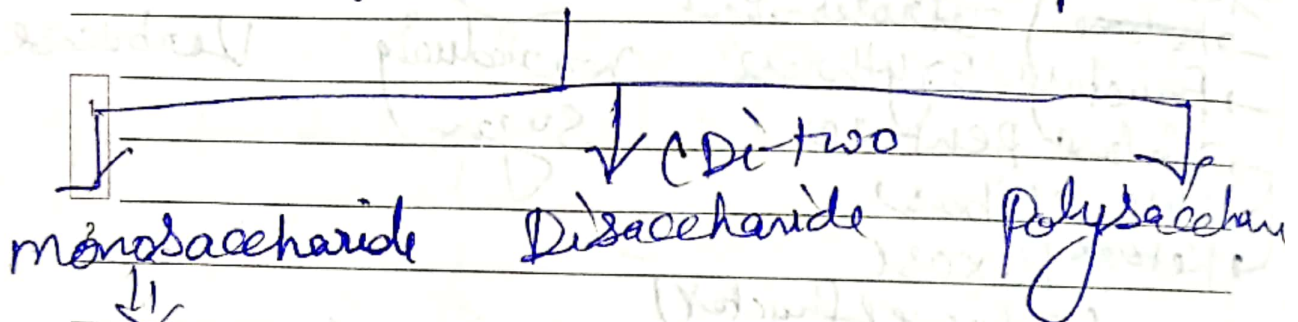
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23	1	2	3	4	5	6	7
24	8	9	10	11	12	13	14
25	15	16	17	18	19	20	21
26	22	23	24	25	26	27	28
27	29	30					
Wk	M	T	W	T	F	S	S

Carbohydrates

Definition - Polyhydroxy aldehyde
or ketones or compounds
which produce them on hydrolysis

Classification of carbohydrates

Classified into 3-group



→ simplest group of carbohydrates &
are often referred to as simple
sugar which

⇒ Can not be further hydrolysed.

ex Glucose, fructose, lactose

monosaccharides consists of a
single polyhydroxy aldehyde or
ketone units. They are simplest
monosaccharides which cannot be

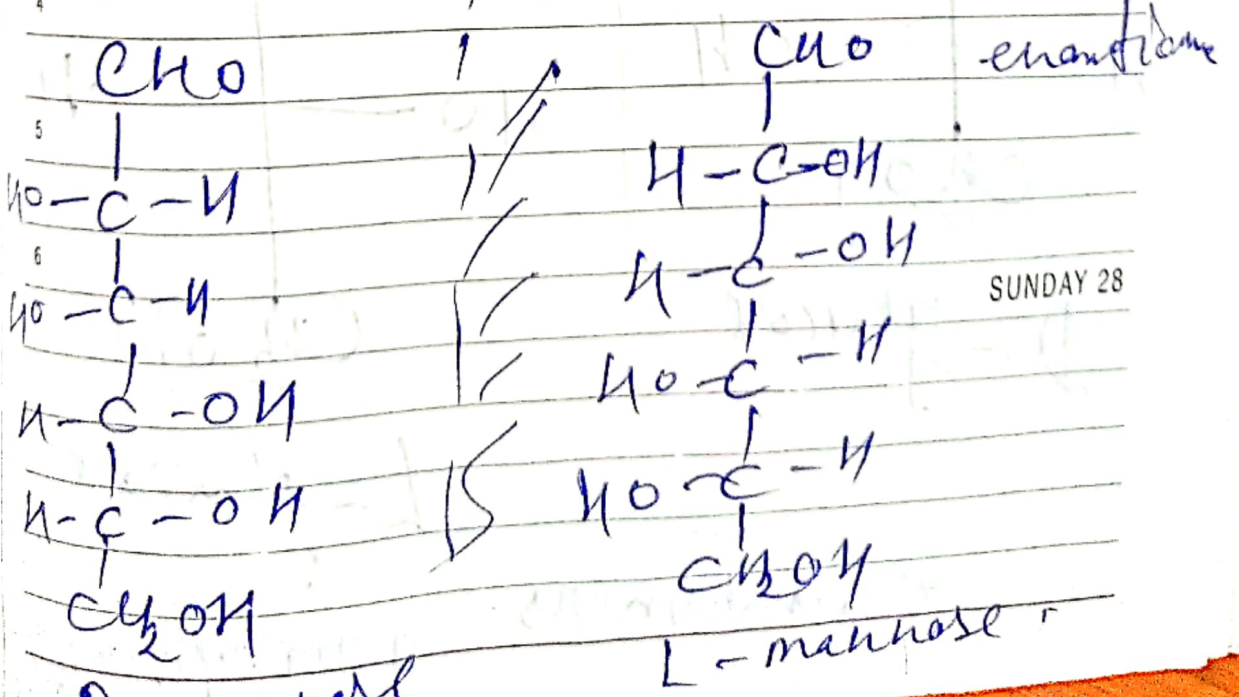
further hydrolysed.
 ex glucose, fructose, ~~sucrose~~
 Disaccharide Galactose

on hydrolysis produce two molecules
 of the same or different
 mono saccharides

ex Sucrose, Lactose, mannose
 ↓
 glucose + fructose glucose + galactose
 ↓
 Glucose + Glucose

poly saccharides :- (poly-many)

structure of D-mannose



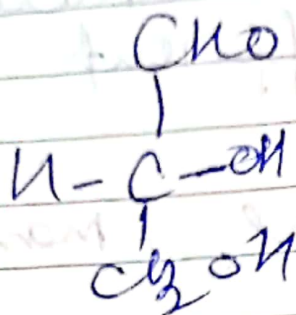
29

JUN
MONDAY

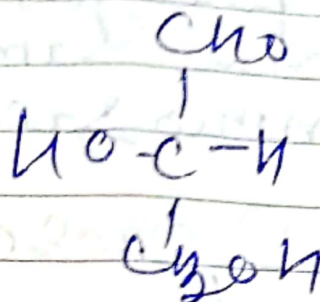
2015

JUNE 2015													
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Wk	M	T	W	T	F	S	S						

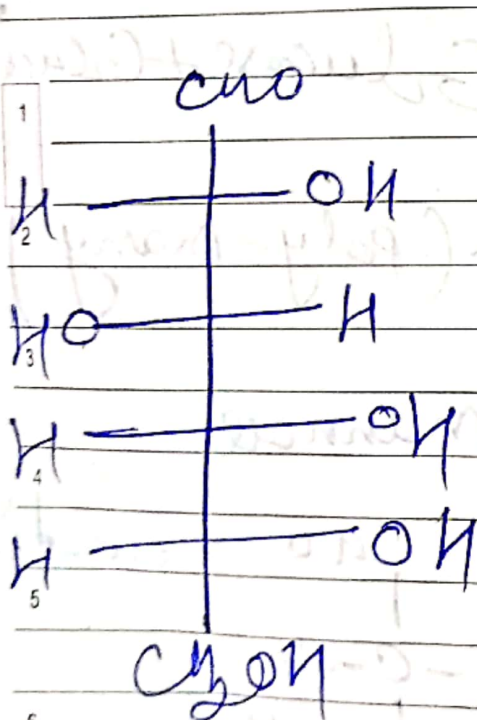
Structure of glucose?



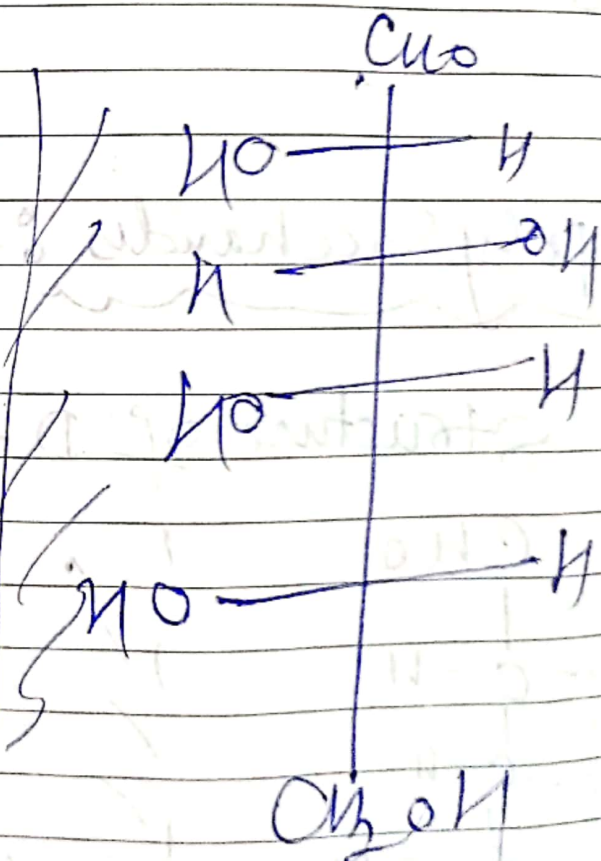
D-glyceraldehyde



L-glyceroldehyde



D-glucose



L-glucose:

Enantiomers - non superimposable mirror image

→ ~~diastere~~ Diastereomers are stereoisomers that are not mirror images of each other not superimpose

→ Enantiomers are mirror image of each other but not superimpose.

→ If mirror image and superimpose then meso compound.

1 Heteropolysaccharides :-

2 When polysaccharides are composed
3 of different type of sugar their
4 derivatives, they are referred as
5 heteropolysaccharides.

6 mucopolysaccharides :-

→ They are heteroglycons made up of repeating units of sugar derivatives namely,