SH II Answers :

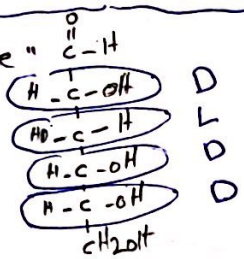
Q1 : D → Back to sheet page I " storage + structure + cell-cell Recognition + communication" ✓

Q2 : B → Glucose : aldose "aldehyde group" $R\overset{O}{\overset{\|}{C}}H$ + 6C "hexose" + Blood Sugar"

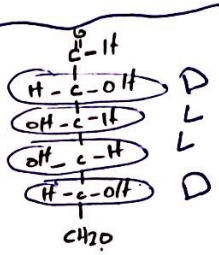
Q3 : B → Hemi acetals → $R-\underset{H}{\overset{OH}{C}}-\underset{\text{ether}}{OR}$ ⇝ 1-OH with 1-ether with 1-R

Hemi ketal → $R-\underset{R}{\overset{OH}{C}}-OR$ ⇝ 2-R with 1-ether with 1-OH

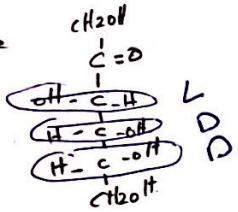
Q4 : D-Glucose "



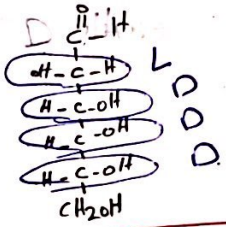
D-galactose



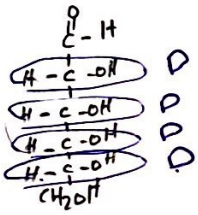
D-Fructose



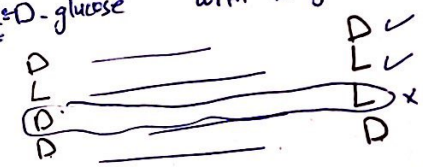
D-allrose.



D-allose



A = D-glucose with D-galactose.



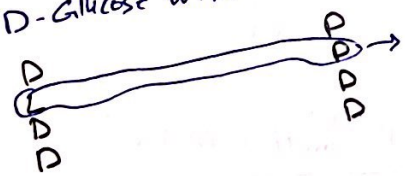
↳ Diastereoisomers "Epimers"

B : D-Glucose with D-Fructose.

6-C ↓ 5-C ↓

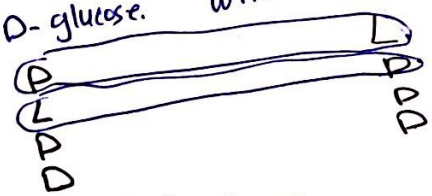
constitutional "structural"

C = D-Glucose with D-allose



↳ Epimers "diastereoisomers"

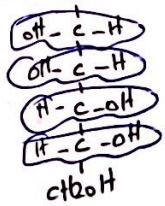
D = D-glucose. with D-allrose.



↳ diastereoisomers

Q5 : With previous Question but.

① D → mannose



② D-glucose ↑ ③ D-galactose ↑

① + ② ⇒ epimers.

① + ③ ⇒ diastereoisomers

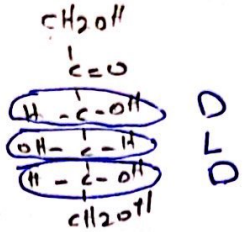
② + ③ ⇒ Epimers

C

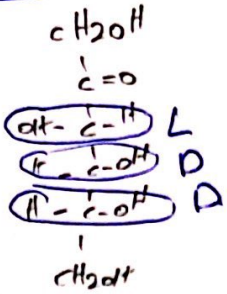
Q6: pyranose more stable than furanose → A
"1→5" "1→4"

Q7: D, D, L → Flip → L, L, D "enantomers"

Q8: D-sorbose



D-Fructose



→ differ in 2-C: "Not all" + Not 1 → it is only diastereoisomers
Not enantomers Not epimers

B

Q9: D-sorbose → enantomers with L-sorbose at all chiral carbon.

P L D enantomers with L D L

D important Question.

Q10: D-sorbose (5-C) with D-glucose (6-C)

Same chemical formula "constitutional (structural)"