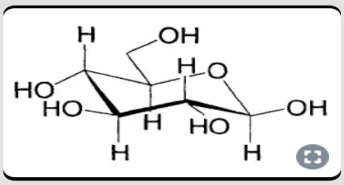
Q1)

The following carbohydrate is:



A a ketohexose

B an aldohexose

C an α-furanose

D an α-pyranose

Solution

Verified by Toppr

Correct option is B)

Hint: There is hydrogen at first carbon (Anomeric C) for aldohexose whereas alkyl group for ketohexose.

Explanation

Since there are six carbons in the carbohydrate, it is a hexose. Also, there is hydrogen at anomeric carbon that is the first carbon.
Anomeric C is the new chiral center formed after cyclization.
It is the cyclic form of D-glucose and as glucose has aldehyde functionality so it is the aldohexose.

Correct Option: B