

## QUESTION:

Which of the following reactions of glucose can be explained only by its cyclic structure?

- A Glucose forms pentaacetate
- B Glucose reacts with hydroxylamine to form an oxime
- C Pentaacetate of glucose does not react with hydroxylamine
- D Glucose is oxidised by nitric acid to gluconic acid

## ANSWER:

Correct option is C)

Pentaacetate of glucose does not react with hydroxylamine

The pentaacetate of glucose does not react with hydroxylamine indicating the absence of free  $-CHO$  group. This property of glucose can be explained only by its cyclic structure.