

## QUESTION :

### Assertion

Deoxyribose  $C_5H_{10}O_4$  is not a carbohydrate.

### Reason

Carbohydrates are hydrates of carbon so, compounds which follow  $C_x(H_2O)_y$  formula are carbohydrates.

Deoxyribose  $C_5H_{10}O_4$  is not a carbohydrate.

- A Both Assertion and Reason are correct and Reason is the correct explanation for Assertion
- B Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion
- C Assertion is correct but Reason is incorrect
- D Both Assertion and Reason are incorrect

## ANSWER:

Correct option is D)

2-Deoxyribose  $C_5H_{10}O_4$  is a carbohydrate. It is a monosaccharide.

It is a deoxy sugar, derived from the sugar ribose by loss of an oxygen atom.

Carbohydrates are optically active polyhydroxy aldehydes or polyhydroxy ketones or the compounds that can be hydrolysed to polyhydroxy aldehydes or polyhydroxy ketones.

Some carbohydrates like Rhamnose do not follow the formula  $C_x(H_2O)_y$ .

Both Assertion and Reason are incorrect.