

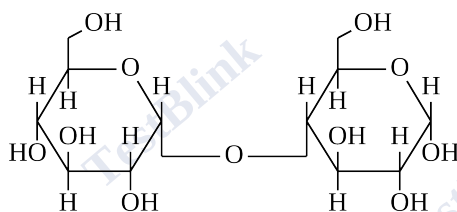
## JEE MAIN BIOMOLECULES — DISACCHARIDES AND OLIGOSACCHARIDES — PYQS

**Max. Marks:** 20

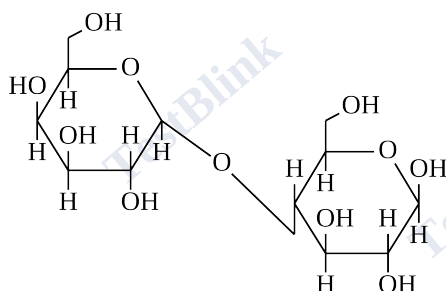
**Questions:** 5

### Section A (MCQ) — 5 questions

**Q.1** Given below are two statements :

**Statement-I:** The structure of Maltose is given below:


Maltose is a non-reducing sugar.

**Statement-II:** The structure of Lactose is given below :


Lactose is a reducing sugar.

 In the light of the above statements, choose the **correct** answer from the options given below :

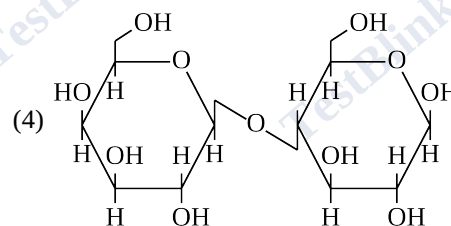
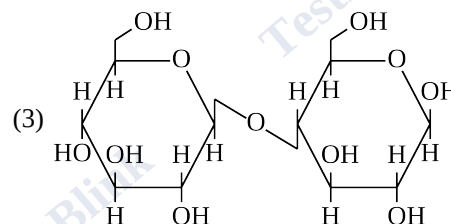
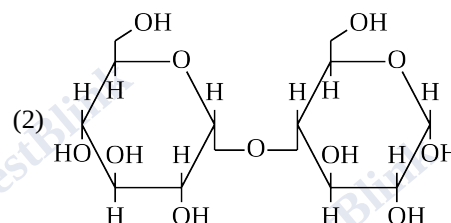
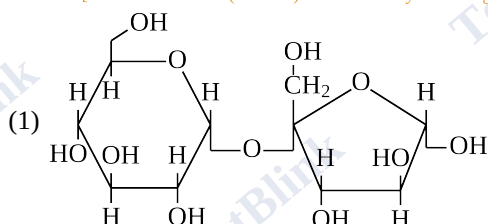
[JEE Main 2026 (Online) 4th April Morning Shift]

- (1) Both Statement-I and Statement-II are true
- (2) Both Statement-I and Statement-II are false
- (3) Statement-I is true but Statement-II is false
- (4) Statement-I is false but Statement-II is true

Scan or tap for the full solution


**Q.2** Structures of four disaccharides are given below. Among the given disaccharides, the non-reducing sugar is :

[JEE Main 2026 (Online) 28th January Evening Shift]



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**Q.3** Given below are two statements :

**Statement-I:** Sucrose is dextrorotatory. However, sucrose upon hydrolysis gives a solution having mixture of products. This solution shows laevorotation.

**Statement-II:** Hydrolysis of sucrose gives glucose and fructose. Since the laevorotation of glucose is more than the dextrorotation of fructose, the resulting solution becomes laevorotatory.

In the light of the above statements, choose the correct answer from the options given below :

[JEE Main 2026 (Online) 22nd January Morning Shift]

- (1) Both Statement-I and Statement-II are false
- (2) Both Statement-I and Statement-II are true
- (3) Statement-I is true but Statement-II is false
- (4) Statement-I is false but Statement-II is true

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**Q.4** Given below are two statements:

**Statement-I:** D-(+)-glucose + D-(+)-fructose  
 $\xrightarrow{-H_2O}$  Sucrose  
 sucrose  $\xrightarrow{\text{hydrolysis}}$  D-(+)-glucose + D-(+)-fructose

**Statement-II:** Invert sugar is formed during sucrose hydrolysis

In the light of the above statements, choose the correct answer from the options given below

[JEE Main 2025 (Online) 7th April Morning Shift]

- (1) Both Statement-I and Statement-II are false
- (2) Statement-I is false but Statement-II is true
- (3) Both Statement-I and Statement-II are true
- (4) Statement-I is true but Statement-II is false

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**Q.5** Match **List-I** with **List-II**.

| List - I<br>(Saccharides) |             | List - II<br>(Glycosidic-linkages found) |                                   |
|---------------------------|-------------|------------------------------------------|-----------------------------------|
| A.                        | Sucrose     | I.                                       | $\alpha$ 1 – 4                    |
| B.                        | Maltose     | II.                                      | $\alpha$ 1 – 4 and $\alpha$ 1 – 6 |
| C.                        | Lactose     | III.                                     | $\alpha$ 1 – $\beta$ 2            |
| D.                        | Amylopectin | IV.                                      | $\beta$ 1 – 4                     |

Choose the **correct** answer from the options given below :

[JEE Main 2025 (Online) 28th January Evening Shift]

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (3) (A)-(II), (B)-(IV), (C)-(III), (D)-(I)
- (4) (A)-(IV), (B)-(II), (C)-(I), (D)-(III)

Scan or tap for the full solution



### ANSWER KEY

| Ques. | 1 | 2 | 3 | 4 | 5 |  |  |  |  |  |  |
|-------|---|---|---|---|---|--|--|--|--|--|--|
| Ans.  | 4 | 1 | 3 | 2 | 1 |  |  |  |  |  |  |