COMPETENCY BASED ASSESSMENT
DECEMBER 2023
CLASS XII

Q NO	CHAPTER	QUESTION	ANSWER	EXPLANATION
1	BIOMOLECULES	A disaccharide is formed when two monosaccharides are bonded together by a bond.	Glycosidic	Explanation: When two monosaccharide units come together, they lose a molecule of water and form an oxide bond. The glycosidic linkage is a bond formed by an oxygen atom between two monosaccharide molecules.
2	BIOMOLECULES	Sucrose is a _____ chemical, and the hydrolysis product combination is _____in nature.	dextrorotatory ; laevorotatory	Explanation: Sucrose is a dextrorotatory sugar that produces a combination of dextrorotatory glucose and laevorotatory fructose when hydrolyzed. The resultant mixture is laevorotatory because the specific rotation of fructose is larger than that of glucose.
3	BIOMOLECULES	Which of the following statements about maltose is incorrect?	It is a non-reducing sugar	Explanation: The free aldehyde group, which has reducing capabilities, can be formed at the C1 carbon of the second -D-glucose unit in solution. As a result, it decreases sugar.
4	BIOMOLECULES	Assertion : D(+)– Glucose is dextrorotatory in nature. Reason : 'D' represents its	Assertion is True Reason is False	

		dextrorotatory nature.		
5	BIOMOLECULES	Assertion : Sucrose is called an invert sugar. Reason : On hydrolysis, sucrose bring the change in the sign of rotation from dextro (+) to laevo(–).	Both are True but NOT correct explanation	
6	BIOMOLECULES	Assertion : Vitamin D cannot be stored in our body Reason : Vitamin D is fat soluble vitamin and is excreted from the body in urine	Assertion is False But Reason is True	Vitamin D is a fat soluble vitamin and can be stored in the body since it is not excreted out of the body.
7	BIOMOLECULES	Assertion : At isoelectric point, the amino group does not migrate under the influence of electric field. Reason : At isoelectric point, amino acid exists as a zwitterion.	Both are correct	
8	BIOMOLECULES	RNA lacks the nitrogen base of _____	Thymine	In RNA Uracil is Present
9	BIOMOLECULES	Which of the following statements about metabolism is false?	It is due to this process that biomolecules do not have a turnover	Explanation: Metabolism entails the breakdown of biomolecules as well as the creation of new ones. It entails a number of chemical processes. It is in charge of the biomolecule turnover.

10	**BIOMOLECULES**	**Which of the following chemical classes does not belong to the vast group of carbohydrates?**	**Polyhydroxy Ketones**	**Explanation: The OH group is absent from polyamino and polyhalo aldehydes. There is no CHO or keto group in polyhydroxy carboxylic acids. When they are hydrolyzed, they do not form OH substituted compounds.**