

BRAIN INTERNATIONAL SCHOOL

SUBJECT: CHEMISTRY

CLASS XII

JULY, 2021

CH: Biomolecule

1. Name one monosaccharide .
2. What structural feature is required for a carbohydrate to behave as reducing sugar?
3. Give the significance of (+)-sign in the name D-(+)-glucose
4. Give the significance of prefix 'D' in the name D-(+)-glucose.
[Hint : 'D' Signifies that –OH group on C-5 is on the right hand side]
5. Give the structure of simplest optically active amino acid
6. How would you explain the amphoteric behavior of amino acids.
7. Give reason : Amylase present in the saliva becomes inactive in the stomach.
8. What type of linkage holds together the monomers of DNA and RNA
9. Mention the number of hydrogen bonds between adenine and thymine.
10. Assertion: Amylose easily dissolve in water.
Reason: As weaker 1-4 linkage present in it.
11. Assertion: α -aminoacid easily form zwitter ion.
Reason: As acidic and basic both groups are present on same molecule.
12. Starch is polymer of the following:
 - (a) Amino acids
 - (b) α -D glucose
 - (c) β -D glucose
 - (d) Fructose
13. α -Helix protein has following type of bond.
 - (a) H- bond
 - (b) 1-4 bond
 - (c) 1-6 linkage
 - (d) All type of bonds