

Topic :- Biomolecules

- Glucose and fructose differ in:
 - Taste
 - Action of heat
 - Action of Tollens' reagent
 - Direction of optical rotation
- Digestion of fat in intestine is aided by:
 - Diffusion
 - Protection
 - Peptization
 - Emulsification
- Tributyrin is a fat present in butter. It is formed by combination of butyric acid with:
 - Glycerol
 - Oleic acid
 - Stearic acid
 - Chloroform
- The nucleic acid base having two possible binding sites is:
 - Thymine
 - Cytocine
 - Guanine
 - Adenine
- An achiral amino acid:
 - Alanine
 - Valine
 - Leucine
 - Glycine
- Insulin regulates the metabolism of:
 - Minerals
 - Amino acids
 - Glucose
 - Vitamins
- In glycine, the basic group is:
 - $-\text{COO}^-$
 - $-\text{COOH}$
 - $-\text{NH}_2$
 - $-\text{NH}_3^+$
- Rice has deficiency of the essential amino acid:
 - Alanine
 - Glycine
 - Lysine
 - Leucine
- Mammal's fats are hydrolysed to release fatty acids by:
 - Amylase
 - Lactase
 - Lipase
 - Insulin
- Which of the following has an imino (>NH) group instead of amino group ($-\text{NH}_2$)?
 - Proline
 - Isosleucine
 - Tryptophan
 - Serine

11. Molecular weight of a protein is:
a) 10,000 b) 1,000-10,000 c) 100-1,000 d) >10,000
12. Fehling's solution and benedict's solution are reduced by glucose to form:
a) CuO b) Cu₂O c) Cu(OH)₂ d) Cu
13. The product formed in the reaction of glycine with benzoyl chloride + aq. NaOH is
a) PhCOCH₂ NH₂ b) PhCH₂NH₂ c) PhCONHCH₃ d) PhCONHCH₂CO₂H
14. Proteins when heated with conc. HNO₃ give a yellow colour. This is
a) Hoppe's test b) Acid-base test c) Biuret's test d) Xanthoprotic test
15. Detergents are usually made from products obtained by cracking of petroleum like:
a) Chloroalkanes
b) Sulphur compounds of benzene
c) H₂S
d) Polyethylene derivatives
16. Night-blindness may be caused by the deficiency of vitamin
a) A b) B c) C d) D
17. Which of the following sugars is present in genetic factor DNA molecule?
a) Glucose b) Maltose c) Ribose d) Deoxyribose
18. Point out the wrong statement about proteins.
a) They are nitrogenous organic compounds of high molecular mass
b) They on hydrolysis by enzymes give amino acids
c) Many of them are enzymes
d) They do not contain polypeptide linkages
19. Gums are:
a) Polysaccharides of more than one type of monosaccharides
b) Used as thickening agent
c) Used for improvement of texture in food industry
d) All of the above
20. Which of the following are all disaccharides?
a) Maltose, sucrose, lactose
b) Maltose, lactose, glucose
c) Glycogen, lactose, sucrose
d) Starch, maltose, lactose