GURUDAS COLLEGE

DEPARTMENT OF BIOCHEMISTRY INTERNAL ASSESSMENT-2020

Semester-I Hons.

PAPER- CC1 (SET-A)

Total Marks-10

1. Which one of the following is insoluble in water?
(a) monosaccharides
(b) disaccharides
(c) polysaccharides
(d) none of these
2. Which one of the following is a nonreducing sugar?
(a) maltose
(b) sucrose
(c) lactose
(d) galactose
3. Invert sugar is
(a) maltose
(b) sucrose
(c) lactose
(d) galactose
4. Which of the following is a component of bacterial cell walls?
(a) maltose
(b) pectin
(c) starch
(d) peptidoglycan
5. A tripeptide has
a) 3 amino acids and 1 peptide bond
b) 3 amino acids and 2 peptide bonds
c) 3 amino acids and 3 peptide bonds
d) 3 amino acids and 4 peptide bonds

a) The loss of charge in the $\alpha\text{-carboxyl}$ and $\alpha\text{-amino}$ groups b) The interactions with other peptide R groups c) Other environmental factors d) Molecular weight 7. A polypeptide with a net positive charge at physiologic pH (~7.4) most likely contains amino acids with R groups of what type a) Acidic R groups b) Aromatic R groups c) Aliphatic R groups d) Basic R groups 8. Which of the following is a characteristic of both triacylglycerols and glycerophospholipids? a) Both contain carboxyl groups and are amphipathic b) Both contain fatty acids and are saponifiable. c) Both contain glycerol and ether bonds. d) Both can be negatively charged at cellular pH. 9. Which is a characteristic of sphingolipids? a) They all contain a fatty acid joined to glycerol. b) They all contain a long-chain alcohol joined to isoprene. c) They all contain ceramide joined to a polar group. d) They all contain a carbohydrate joined to a phosphate group. 10. What is a function of phospholipids? a) Being part of a drug delivery system in some pharmaceuticals b) Regulating cellular activities such as cell migration c) Forming the cell membrane and the membranes of other organelles in the cell d) All of the above

6. The factor which does not affect pKa value of an amino acid is ______