

2021
B.A./B.Sc. Semester 5 Examination
University of Calcutta
CHEMISTRY – GENERAL
INTERNAL EXAMINATION
Paper : SEC-A2
F.M. – 10

FAKIR CHAND COLLEGE CENTRE (C551)

Choose the correct option in each case and report (no need to write the answer in sentence):

1x10

ANSWER ALL THE QUESTIONS

1. The tertiary structure of proteins is stabilized by
 - a) hydrogen bonding
 - b) disulphide bridge
 - c) both (a) and (b)
2. Denaturation of protein means
 - a) its quarternary and tertiary structures are broken down
 - b) its quarternary, tertiary and secondary structures are broken down
 - c) all the constituent amino acids are separated out
3. Isoelectric point of an amino acid is that where
 - a) the amino acid has no net charge
 - b) both the α -amino and carboxyl groups exist in non-ionic form
 - c) none of the above
4. Myosin is
 - a) a globular protein
 - b) a fibrous protein
 - c) an intermediate protein
5. The prosthetic groups of conjugate proteins may be
 - a) metal ions
 - b) phosphoric acids
 - c) both (a) and (b)
6. The function of Actin is
 - a) transportation of materials in cells
 - b) force generators of muscles
 - c) storage of metal ions and amino acids in cells
7. Sephadex can be used as a stationary phase in
 - a) Gel filtration chromatography
 - b) Affinity chromatography
 - c) Ion-exchange chromatography
8. In SDS-PAGE of proteins, β -mercaptoethanol is used
 - a) to disrupt disulphide bridges necessary for protein denaturation
 - b) to disrupt hydrogen bonds
 - c) to break electrostatic interactions
9. Protein motifs are the
 - a) super secondary structures of proteins
 - b) quarternary structures of proteins
 - c) active sites of proteins
10. Tay-Sachs disease occurs from the
 - a) disorder in protein metabolism
 - b) disorder in ganglioside breakdown
 - c) disorder in cerebroside breakdown