



THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

BCH 1421

Biomolecules

Max Marks: 75

Time: 3 Hrs.

PART A

I. Answer any Five questions each not exceeding 4 pages:

(5 x 15 = 60)

1. Describe the structure of water, reactants and hydrogen bonding in water molecule.
2. Define carbohydrates. Explain various structures of glucose.
3. Define lipids. Describe classification of lipids with suitable examples.
4. Discuss the classification of amino acids based their structure.
5. Explain the Watson & Crick model of DNA and base pairing rule of nucleic acids.
6. Describe the structure, sources, RDA, functions and deficiency of vitamin D.
7. Explain the structure of proteins in detail with appropriate diagrams.