



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

MIC 1502

Microbial Biochemistry

Time: 3 hrs.

Max: 75 Marks

Answer any FIVE questions

(5 x 15 = 75)

1. Discuss about the physical and chemical factors required for microbial growth.
2. Describe the metabolic reactions involved in the production of ATP from pyruvic acid through Krebs cycle.
3. Compare and contrast the chemistry and structure of Gram positive and Gram negative bacteria with suitable illustrations.
4. Give a detailed account of bioluminescence in microbes.
5. Explain the mechanisms of active and passive transport of nutrients in bacteria.
6. Highlight the steps involved in the process of sporulation in *Bacillus* sp.
7. Classify the various types of antimicrobial drugs and explain their mode of action.
