



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

PGZ 4426

MOLECULAR BIOLOGY

MAX. :75 MARKS

Time: 3 Hrs

Answer any **FIVE** questions

5x15=75 Marks

1. Explain the different types of DNA conformations.
2. Discuss the rolling circle model of DNA replication.
3. Elaborate on the different stages of protein synthesis.
4. Give an account on excision repair mechanisms.
5. Discuss the salient features of a genetic code.
6. Describe the genetic map of lac operon and explain its role in gene regulation.
7. What is a transposon? With a suitable illustration, explain the mechanism involved in replicative transposition.
