



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

ZOO 3442/3641

rDNA TECHNOLOGY

MAX: 75 MARKS

Answer any FIVE questions

5x15=75

1. Explain the steps involved in isolation and purification of plasmid DNA.
2. What are restriction enzymes? Explain the different types of endonucleases.
3. Describe any two methods of introducing genes into cells.
4. Elaborate on *E.coli* based cloning vectors.
5. Discuss the procedure involved in the production of recombinant insulin.
6. Give an account on polymerase chain reaction. Highlight the applications of PCR.
7. Explain any one method of DNA sequencing.
