

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 2433/ 2445 Genetics Time: 3 hrs

Max: 75 marks

Answer any Five questions

(5X15=75)

- 1. Explain Dihybrid cross citing suitable examples.
- 2. Explore the dosage compensation in drosophila.
- 3. Describe any two diseases related to Inborn error of metabolism.
- 4. Elaborately discuss the mechanism, types and significance of crossing over.
- 5. Furnish the genetics behind the nest cleaning behaviour in honey bees.
- 6. Explain how gene transfer occurs in bacteria with the help of bacteriophage.
- 7. a) Depict any five symbols used in pedigree analysis.
 - b) List out the various positive eugenic measures.
