



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 3440

Nanobiology

Max. : 75 marks

Time: 3 hours

Answer any **FIVE** questions.

5 X 15 = 75

1. Give a detailed account on emergence, scope and advantages of nanotechnology.
2. Write detailed note on the following: (i) Quantum dots, (ii) Dendrimers & (iii) Nanotubes.
3. Explain the working principle of (a) Atomic Force Microscopy; (b) Confocal microscopy
4. Describe the design and functioning of DNA nanomotor.
5. Enlist the advantages of Nano Electro Mechanical System.
6. Discuss the types and applications of nano biosensors.
7. Explain any three methods for producing nanofibers.
