THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2^{nd} Cycle) by NAAC with Grade "A", CGPA - 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

PGZ 5430 Nanobiology Max.: 75 marks
Time: 3 hours

Answer any **FIVE** questions.

 $5 \times 15 = 75$

- 1. Enlist the unique properties of matter at nanoscale.
- 2. Describe any three techniques used to analyse nanoparticles.
- 3. Give a detailed account on the properties and fabrication of Quantum Dots.
- 4. Strand displacement energizes DNA nanomotors and DNA tweezers substantiate.
- 5. List out the classes and types of biosensors. Add a note on any two applications of the biosensors.
- 6. Explain the uses of nanostructures in diagnosis and therapy of cancer.
- 7. Write down the properties and uses of any three bionanoproducts.
