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

PHY 1415
Waves
Time: 2Hrs
Max.Marks:60

Answer any FOUR questions:

(4 X 15 = 60)

- 1. Explain the terms: a.) Frequency and Wavelength b.) Transverse and longitudinal waves c.) Phase angle & wave velocity
- 2. Discuss about Simple Harmonic Motion with an example in detail.
- 3. Write notes on: a) Huygens' principle b.) Diffraction c.) polarization
- 4. Draw a neat diagram of a camera and explain the principle and working.
- 5. Give a detailed description on the electromagnetic spectrum and mention their applications.
 - 6. Write a note on Waveguide and also explain about Satellite communications.