

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

Course Code: PHY 3677 Time: 3Hrs

Course Title: Microprocessor & Communication Systems

Max: 75 marks

PART - A

Answer ANY FIVE questions

 $(5 \times 15 = 75)$

- 1. With necessary diagrams explain the architecture of 8088 microprocessor.
- 2. Explain the arithmetic instructions used in 8088 microprocessor with relevant examples.
- 3. Describe the frequency spectrum of an amplitude modulated wave.
- 4. With a neat block diagram describe the working of a tuned radio frequency receiver and superheterodyne receiver.
- 5. Explain Automatic Gain Control and describe the working of a simple diode detector with a neat circuit diagram.
- 6. Explain Orbital perturbations and Satellite stabilization.
- 7. Describe the different types of satellite orbits in detail.
