

## THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University) Re-accredited (2<sup>nd</sup> Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

## Backlog Arrear Examination, March 2021

Course Code: PHY 3495/3595/3575/3455 Time: 3hrs

Course Title: Microprocessor Max: 75 marks

## PART - A

## **Answer ANY FIVE questions**

 $(5 \times 15 = 75)$ 

- 1. Explain the architecture of 8088 microprocessor and discuss the functions of various pins by drawing its pin diagram.
- 2. With relevant examples, explain immediate and register addressing modes used in 8088 microprocessor.
- 3. Elaborately discuss about the arithmetic and logic instructions used in 8088 microprocessor.
- 4. Describe the minimum mode memory read and memory write bus cycles of 8088 microprocessor with necessary diagrams.
- 5. With a neat block diagram, explain the operation of the programmable direct memory access controller 8237 A.
- 6. Explain the operating sequence of a stepper motor with necessary diagram. How will you interface it with PIC microcontroller?
- 7. Write down programs in 8086/8088 microprocessor to arrange the given set of numbers in (i) ascending and (ii) descending orders.

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