

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

MCA 4412 Microprocessor Fundamentals / Assembly Language Programming

Time : 3 hrs

Marks: 75

Answer any FIVE questions.

5 X 15 = 75

- 1. Explain in detail along with the block diagram the 8086/88 Microprocessor architecture.
- 2. With the necessary block diagram explain in detail the Bus interface unit and Execution unit of 8086/88.
- 3. With suitable example explain the Data transfer instructions and Arithmetic instructions.
- 4. Discuss in detail the various Addressing modes of 8086/88.
- 5. With the block diagram explain the Programmable peripheral Interface and give its significance.
- 6. Write an Assembly language program to sort numbers in a given array.
- 7. Comment on Micro controllers for embedded systems.