MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF COMUPTER SCIENCE AND ENGINEERING
2040577 COMPUTER ORGANIZATION &MICROPROCESSORS LAB
USING MASAM

B.Tech.II Year-II Sem   **L / T / P / C**
                                                              0 / 0 / 2 / 1

VISION

To empower the students to be technologically adept, innovative, self-motivated and responsible global citizen possessing human values and contribute significantly towards high quality technical education with ever changing world.

MISSION

M1	To offer high-quality education in the computing fields by providing an environment where the knowledge is gained and applied to participate in research, for both students and faculty.
M2	To develop the problem solving skills in the students to be ready to deal with cutting edge technologies of the industry.
M3	To make the students and faculty excel in their professional fields by inculcating the communication skills, leadership skills, team building skills with the organization of various co-curricular and extra-curricular programmes.
M4	To provide the students with theoretical and applied knowledge, and adopt an education approach that promotes lifelong learning and ethical growth.

LIST OF EXPERIMENTS

1. Write assembly language programs to evaluate the expressions:

   i) a = b + c –d * e ii) z = x * y + w – v +u / k

   a. Considering 8-bit, 16 bit and 32-bit binary numbers as b, c, d, e.

   b. Considering 2-digit, 4 digit and 8-digit BCD numbers.

   Take the input in consecutive memory locations and results also Display the results by using "intxx" of 8086. Validate program for the boundary conditions.

2. Write an ALP of 8086 to take N numbers as input and do the following operations on them. a. Arrange in ascending and descending order.

3. Find maximum and minimum a. Find average Considering 8-bit, 16-bit binary numbers and 2- digit, 4 digit and 8-digit BCD numbers. Display the results by using "int xx" of 8086. Validate program for the boundary conditions.

4. Write an ALP program to print the Fibonacci series.

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF COMUPTER SCIENCE AND ENGINEERING
2040577 COMPUTER ORGANIZATION &MICROPROCESSORS LAB
USING MASAM

5. Write an ALP Program to find even or odd number using macros.

6. Write a simple program in ALP using procedures with arguments.

7. Write an ALP program to find prime no in a list.

8. Write an ALP of 8086 to take a string of as input (in „C" format) and do the following Operations on it. a. Find the length b. Find it is Palindrome or not

9. Write an ALP of 8086 to do following operations.

    a) Find whether given string substring or not.

    b) Reverse of a string

    c) Concatenate by taking another sting Display the results by using "int xx" of 8086.

10. Write the ALP to implement the above operations as procedures and call from the main procedure.

11. Write an ALP of 8086 to find the factorial of a given number as a Procedure and call from the main program which display the result.

COURSE OUTCOMES

CO	Course Outcome
C228.1	Understand and apply the MASM software.
C228.2	Write Assembly language program to evaluate the expressions
C228.3	Write ALP program to get the input and use 8086 ALP for basic operations.
C228.4	Write ALP program using macros and procedures.
C228.5	Write ALP program for string manipulation.

PROGRAM EDUCATIONAL OBJECTIVES

PEO1	To induce strong foundation in mathematical and core concepts, which enable them to participate in research, in the field of computer science.
PEO2	To be able to become the part of application development and problem solving by learning the computer programming methods, of the industry and related domains.
PEO3	To gain the multidisciplinary knowledge by understanding the scope of association of computer science engineering discipline with other engineering disciplines.
PEO4	To improve the communication skills, soft skills, organizing skills which build the professional qualities, there by understanding the social responsibilities and ethical attitude.

MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section2(f) & 12(B)of the UGC act,1956

DEPARTMENT OF COMUPTER SCIENCE AND ENGINEERING
2040577 COMPUTER ORGANIZATION &MICROPROCESSORS LAB
USING MASAM

PROGRAM SPECIFIC OUTCOMES

PSO1- APPLICATIONS OF COMPUTING:

Ability to use knowledge in various domains to provide solution to new ideas and innovations.

PSO2- PROGRAMMING SKILLS:

Identify required data structures, design suitable algorithms, develop and maintain software for real world problems.

PSO3-EXECUTIVE SKILLS:

Make use of computational and experimental tools for creating innovative career paths, to be an entrepreneur and desire for higher studies.

Do's & Don'ts

➢ Switch off the power and unplug equipment before performing service.

➢ Know where the fire extinguisher is located and how to use it.

➢ Report fires or accidents to your lecturer/laboratory technician immediately.

➢ Avoid food and drinks from your workspace.

➢ Systems operate under normal room temperature.

➢ Computer lab room's floor should be clean, dry and dust free.

➢ No one is allowed to delete information from the computer.

➢ Enter the computer lab quietly and work quietly.

➢ Do not change computer settings or backgrounds.

➢ Don't plug in external devices without scanning for computer viruses.

➢ SAVE all unfinished work to a cloud drive or jump drive.