G.S Mandal's Marathwada Institute of Technology Department of Computer Science and Engineering Subject: Microprocessor and Computer Organization

Class: SE A and B

2017-18 part II

Assignment 1

- 1. List the memory sizes for 8086 to Pentium microprocessor
- 2. What is the function of SI & DI registers?
- 3. Write the function of direction and overflow flag of 8086 microprocessor
- 4. What is the advantage of segment plus offset addressing mode?

5. If stack segment register contains 3245H and stack point r r gist r contains 3000H, what is the 20 bit physical address generated by 8086 microprocessor.

- 6. Explain the real mode memory addressing of 8086 microprocessor.
- 7. What is the difference between minimum mode and maximum mode operation of 8086
- 8. Explain the use of general purpose register of 8086 microprocessor with appropriate examples

Assignment 2

- 1. Explain shift and rotate instructions with suitable examples.
- 2. Write an assembly language program to check whether entered number is even number or odd number
- 3. Explain logical instructions of 8086 microprocessor.
- 4. Differentiate between JMP and CALL instruction.
- 5. Write an assembly language program to perform 16 bit by 8 bit division.
- 6. Explain Structure of Instruction

Assignment 3

- 1. What is ISR
- 2. Explain hardware and Software interrupt in detail
- 3. Explain IVT in Detail
- 4. Explain following interrupt related instructionsi) BOUND ii) INTO iii) INT3 iv) IRET
- 5. Explain DOS and BIOS Interrupts

Assignment 4

- 1 Explain Von Neumann Architecture
- 2 Explain Interconnection of components of computer and performance of computer
- 3 Differentiate RISC and CISC architecture.