CS2252 – Microprocessors & Microcontrollers

## UNIT 1 - THE 8085 AND 8086 MICROPROCESSORS

1. Explain the architecture of microprocessors 8085
2. Explain the addressing modes of 8085 with example.
3. Explain the pin diagram of 8085.
4. Write an ALP to multiply two 8 bit numbers
5. Explain the following
   a. Procedures
   b. Macros
   c. Interrupt service Routines
6. (Any 8086 assembly language program)

## UNIT 3 - MULTIPROCESSOR CONFIGURATIONS

1. Describe in detail about the Architecture of 8089 I/O Processor.
2. Describe in detail about the Architecture of 8087 I/O Processor.
3. Explain briefly about loosely Coupled Configuration.
4. Explain briefly about tightly coupled configuration.

## UNIT 4 - I/O INTERFACING

1. Memory interfacing and I/O interfacing with 8085
2. Draw the Block diagram of DMA controller and explain its operations
3. With a neat block diagram, explain in detail the internal architecture of 8255 and its registers
4. Explain the block diagram of the 8279 Keyboard/Display interface and its operations
5. Draw the Block diagram and explain the operations of 8251 serial communication interface.
6. Draw the block diagram of programmable interrupt controller and explain its operations.

## UNIT 5 - MICROCONTROLLERS

1. Describe the architecture of 8051 with neat diagram
2. Explain the interrupt structure of 8051 microcontroller
3. With neat sketch explain the function of A/D converter.
4. Explain the functional pin diagram of 8051 Microcontroller.