SCHOOL OF ENGINEERING AND TECHNOLOGY

D.C. COURT JUNCTION, DIMAPUR

END TERM EXAMINATIONS, June 2016

Course Code:	EC4T03	**Semester:**	IV	**TotalMarks**	60
Course Name:	Microprocessor			**Time:**	3 hr

Section A

I. **Answer the following questions** **4×5=20m**

1. a. With a neat sketch explain the pin configuration of 8085.

OR

b. Explain about the architecture of 8085.

2. What are interrupts? Explain about the different interrupts present in 8085.
3. a. Interface 2KB RAM to 8085 using 1K×4 chips using 74LS138 decoder. Also draw the address bit map and memory map. Assume the starting address of the RAM as 1000H

OR

b. Draw the timing diagram of write cycle and explain in detail.

4. Write an Assembly language program to add the contents of two memory location 7FEC H and C76D H and store the result in a memory location 7654 H.

II. Write a Short note on **5x2=10**

1. Conditional Jump
2. CMP M
3. SHLD address
4. PCHL
5. Find the PSW if 84H and 74H are added

Section B

I. **Answer the following questions** **4×7=28m**

1. Explain about the different Data transfer techniques?

2. Draw the interfacing of 8251 with 8085 in I/O mapped I/O mode. Select 8251 in synchronous mode as a receiver with
   6 bit character
   Even parity
   One sync character E0
   Active DTR
   Write an ALP to receive 300 bytes of data and store it in memory location 8000H onwards.

3. a. Explain the operating modes of 8255 in MODE 0 and MODE 1

OR

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b. Explain the operating modes of MODE 3 and MODE 5 of 8253/8254

4. Draw the interfacing of DAC 0808 with 8085 through 8255. Write a program which will generate a square wave of 50 KHz .Assume the port address as 0A H, 0B H, 0C H and 0D H of port A, port B, port C and control word register respectively

II. Explain the control word register format for 8253/ 8254 **2m**

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