



Reg. No. :

Name :

**Sixth Semester B.Tech. Degree Examination, March 2015
(2008 Scheme)**

Branch : Electrical and Electronics

**08.602 : MICROPROCESSORS AND APPLICATIONS
(Special Supplementary)**

Time : 3 Hours

Max. Marks : 100

PART – A



Answer **all** questions.

1. What are buses ? Explain about different type of buses.
2. Explain the following instructions of 8085 μ p.
 - a) LHLD 2050 H
 - b) CMP M
3. Differentiate between CALL and JUMP instructions of 8085.
4. Write a delay subroutine for 1 sec. if clock frequency is 3 MHz.
5. Draw the timing diagram of memory read machine cycle with one wait state.
6. What are various interrupt lines of 8085 ? Discuss their features.
7. Differentiate between vectored and non-vectored interrupts.
8. Discuss how to determine control words of 8255.
9. Show the interfacing of 8 bit ADC to 8085; show the important signals.
10. What is pipe lining ? How is it achieved in 8086 ?

(10×4=40 Marks)



PART – B

Answer **one full** question from **each** Module.

Module – I

11. a) Draw the internal architecture of 8085 microprocessor. Explain the conditional flags of 8085. 10
b) Write an ALP to find $P * Q + R * S$, where P, Q, R and S are eight bit numbers, use subroutine. 10
12. a) Define the stack, stack pointer and program counter and describe their uses. 6
b) Draw the timing diagram of the instruction MOV A, M. 8
c) Write an ALP for converting binary to BCD. 6

Module – II

13. a) Show the interfacing of 2 K ROM and 4 K RAM with 8085 microprocessor using 2K byte chips. Show the address of each memory chip if the starting address is 2000 H. 10
b) Draw the internal block diagram of 8255 PPI and explain each block in detail. 10
14. a) Explain the different data transfer schemes used in 8085. 10
b) Draw and explain the interfacing circuit for LEDs and switches with 8085 μ p. 10

Module – III

15. a) Draw and explain the architecture of intel 8086. 10
b) Describe various general purpose registers of 8086. Write the special functions carried out by them. 10
16. a) Explain various flags used in 8086 μ p. 8
b) Explain different addressing modes used in intel 8086 μ p. 12