

EC1303-MICROPROCESSORS AND ITS APPLICATIONS

(Common to B.E (Part-time) Fourth Semester Regulation 2005)

Time:Three hours Maximum:100 marks

Answer ALL questions

PART A –(2\*10=20marks)

1. What are the classifications of instruction set according to word size?
2. Name the modes available in 8255 A control word format.
3. What are the methods used for communication in 8055?
4. List the control words of RS-232 C.
5. What are the segment registers of 8086?
6. Name any four flags of 8086.
7. What are the addressing modes of 8051?
8. List the interrupts in 8051.
9. What are the functions of assembler and linker in 8051?
10. What are the commonly used ADC's and DAC.

PART-B(16x5=80)

11.(a) Draw and explain the pin details of 8085A briefly. [Marks 16]

Or

(b)(i) What are the flags affected by ALU in 8085? Explain briefly. [Marks 10]

(ii) Draw the schematic diagram of memory interfacing in 8085. [Marks 6]

12.(a)(i) Draw and explain the control word format of 8255A for ADC operation. [Marks 8 ]

(ii) Give a brief note on the following [Marks 8 ]

(1) 8251 I/O device

(2) GPIB Bus

Or

(b) Draw and explain the logic diagram of 8279 [Marks 16]

13.(a)(i) Draw the pin diagram of 8086 CPU with its control signals. [Marks 8 ]

(ii) Explain how an interrupt is responded by 8086 CPU. [Marks 8 ]

Or

(b)(i) Write a program in 8086 to find an average between two temperatures. [Marks 8 ]

(ii) Describe data transfer instructions of 8086 CPU. [Marks 8 ]

14.(a)(i) Explain the features of 8051 microcontroller [Marks 6]

(ii) Draw and explain the connection diagrams of 8051 with external ROM. [Marks 10]

Or

(b)(i) Explain the basic structure of assembly language program of 8051. [Marks 8 ]

(ii) Explain the memory organization of 8051. [Marks 8 ]

15.(a)(i) List and explain conditional jump instructions of 8051 [Marks 6]

(ii) Draw and explain briefly the connection diagram of ADC with peripheral device with one example. [Marks 10]

Or

(b)(i) What are the features of LCD? How it is interfaced with 8051? [Marks 2+6]

(ii) Write a program in 8051 to transfer letter 'A' serially at 4800 baudrate, continuously . [Marks 8 ]