Reg. No. :

Question Paper Code: 31403

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Fourth Semester

Computer Science and Engineering

(Common to Information Technology)

01UEC423 **-** MICROPROCESSORS AND MICROCONTROLLERS

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. List out the general purpose register in 8085.

2. What is the use of ALE?

3. How clock signal is generated in 8086? What is the maximum internal frequency of 8086.

4. State the significance of LOCK signal in 8086.

5. Give the necessity for numeric data processor.

6. What is the need of co-processors? Give example?

7. What is a programmable peripheral device?

8. Differentiate between half duplex and full duplex transmission.

9. Write an assembly code segment to load accumulator, DPH, DPL using 8051 controller.

10. List the features of 8051 microcontroller.

PART - B (5 x 16 = 80 Marks)

11. (a) With block diagram explain a logical functions of 8085 micro-processors.   (16)

Or

(b) Explain the direct addressing modes and indirect addressing modes of 8085 with example. (16)

12. (a) Describe any five addressing modes of 8086 with suitable examples. (16)

Or

(b) Explain the physical memory organization in an 8086 system. (16)

13. (a) Explain in detail about closely coupled and loosely coupled configuration of multi-processors. (16)

Or

(b) Write the important registers and functions designed in 8089. (16)

14. (a) Explain the block diagram of the 8279 keyboard/display interface and its operations. (16)

Or

(b) With block diagram explain the role of direct memory access controller in mass data transfer. (16)

15. (a) Explain the functional pin diagram of 8051 microcontroller. (16)

Or

(b) Describe about memory and I/O addressing by 8051. (16)

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