Reg. No. :

Question Paper Code: 34423

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

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 the flags of 8086 microprocessor.

2. What is the use of ALE?

3. Why status signals are provided in microprocessor?

4. State the significance of LOCK signal in 8086.

5. Write the functions of I/O processor.

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

7. What is a programmable peripheral device?

8. List six modes of timer.

9. Specify the call statement in 8051 with its significance.

10. List the features of 8051 microcontroller.

PART - B (5 x 16 = 80 Marks)

11. (a) Describe in detail with the neat diagram of the 8085 architecture with its functions
(16).

Or

(b) Explain in detail the addressing modes of 8085 with suitable examples. (16)

12. (a) Draw the pin descriptions for 8086 and status signal defined in 8086. (16)

Or

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

13. (a) With necessary diagram describe the signals necessary for performing communication between CPU and IOP. (16)

Or

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

14. (a) Describe in detail about the operation of programmable timer (8253) under different modes. (16)

Or

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

15. (a) Discuss the registers available in 8051 for serial communication. (16)

Or

(b) Describe the different modes of operation of timers/counters in 8051 microcontroller
(16).

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