M.Sc DEGREE EXAMINATION,APRIL 2019
II Year IV Semester
Microprocessor 8086 and Micro controller 8051

Time : 3 Hours **Max.marks :75**

Section A $(10 \times 2 = 20)$ Marks

Answer any **TEN** questions

1. Mention any two differences between 8253 and 8254.
2. What is the necessity of the programmable interval timer?
3. What do you mean by pipelining in an 8086 microprocessor?
4. What are the different type of interrupts in 8086?
5. What is the function of T and D flags in 8086?
6. Classify Data Transfer instructions in 8086.
7. What is jump range in 8051?
8. Show the format of PSW register in 8051 microcontroller.
9. What do you mean by input port and output port?
10. How sensors are interfaced to microcontroller?
11. What do you mean by interrupt priorities in 8051?
12. Differentiate a microprocessor and a microcontroller.

Section B $(5 \times 5 = 25)$ Marks

Answer any **FIVE** questions

13. Explain the bit set/reset mode of 8255.
14. Explain the minimum mode of 8086 microprocessor.
15. Write an assembly language program for 8086 that finds Binary to BCD.
16. Discuss about the special function registers in 8051.
17. Give the comparison between memory mapped I/O and I/O mapped I/O.
18. Explain the RAM memory space allocation in 8051.
19. Name the various segment registers and their usage in 8086 processor.

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Discuss about the internal registers of DMA controller in detail.
21. With the neat sketch explain the architecture of an 8086 processor.
22. Explain the various addressing modes used in 8086 with examples.
23. Give the PIN detail of an 8051 microcontroller and explain its pin functions.
24. Describe the interrupt structure of 8051 microcontroller.

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