M.Sc. DEGREE EXAMINATION,NOVEMBER 2019
II Year IV Semester
Microprocessor and Micro Controller

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

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

Answer any **TEN** questions

1. Draw the pin diagram of 8254.
2. What are the ports used in 8255 interfacing?
3. Specify the size of data and memory capacity of 8086 microprocessor.
4. How is the memory segment accessed by 8086 microprocessor identified?
5. Explain the 8086 signal: RESET
6. How do you find the machine code for conditional JUMP instructions?
7. What is the use of EA pin?
8. What is the purpose of PSW register?
9. Mention the timers of 8051.
10. What is the use of interfacing?
11. What is meant by interrupt pointer?
12. What type of architecture 8086 has?

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

Answer any **FIVE** questions

13. Write the differences between IC 8253 and IC 8254.
14. What is the difference between maximum and minimum modes of 8086? How are these modes are selected?
15. Compare CALL and JMP instruction of 8086 microprocessor.
16. Explain the structure of assembly language of 8051 microcontroller?
17. With the interfacing diagram explain the operation of delay using 8051 timer.
18. Explain any two addressing modes of 8086?
19. What are the registers used for serial communication in 8051. Explain how it works?

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

Answer any **THREE** questions

20. Explain the various modes of operation involved in 8255?
21. Explain what 8086 does when an interrupts occurs regardless of the source?
22. Write a program in 8086 assembly language to convert BCD to Binary.
23. List out the salient features of 8051 Microcontroller.
24. With the diagram explain how 8051 interfaced to external memory?

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