B.Sc. DEGREE EXAMINATION,APRIL 2019
III Year VI Semester
Microprocessor Interfacing and Applications

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

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

Answer any **TEN** questions

1. What is meant by timing diagram?
2. Define T state.
3. Define interfacing.
4. Why interfacing is needed for I/O devices?
5. What is a port?
6. If an input and output port can have the same 8-bit address how does the 8085 differentiate between the ports?
7. Define maskable interrupts.
8. List the software interrupts.
9. What is a programmable peripheral device?
10. What is microcontroller?
11. What is to be remembered while interfacing LED?
12. What is an instruction?

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

Answer any **FIVE** questions

13. What is meant by opcode fetch cycle? What do IO/$\overline{M'}$, S_0 and S_1 indicate?
14. How many types of interfacing are there? Define any one of them.
15. Write short notes on I/O mapped method of designing I/O port.
16. What is RIM instruction and what does it do? How many hardware interrupts are there? What are they?
17. Draw the block diagram of PPI 8255 indicating different ports.
18. Draw and explain the timing diagram for MOV B,A instruction.
19. Do the interrupts of 8085 have priority? Specify them. Write down the level triggering interrupts.

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

Answer any **THREE** questions

20. Define instruction and machine cycles. How many types of machine cycles are available in 8085 microprocessor? What are they?
21. Compare ROM and RAM.
22. Draw and explain the timing diagram for IN instruction.
23. Show the SIM instruction format and discuss the same.
24. Write down the differences between microcontroller and microprocessor.

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