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Reg. No. :

Name :

V Semester B.Tech. Degree Examination, June 2009

(2003 Scheme)

Mechanical

03-506 : INDUSTRIAL ELECTRONICS (M)

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions. **Each** question carries **4** marks.

1. What is the use of an ignitron contactor ?
2. What is a photo resistive device ?
3. Distinguish between micro processor and micro controller.
4. Explain the general purpose registers of 8086.
5. Discuss the Hardware interrupts of 8086.
6. List and explain the conditional flags of 8085.
7. Explain what operation is performed when following is executed
a) ROR AX₁₂ b) DAA
8. What is the purpose of queue in 8086.
9. What are the different types of shift registers ?
10. What are the differences between 8085 and 8086 microprocessor ?

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PART – B

Answer **any two** questions from **each** module. **Each** question carries **10** marks.

Module – I

11. Explain with circuit diagram and necessary waveforms, the working of a single phase full wave rectifier.
12. What is photo electric theory ? Explain the constructional details and working of
 - a) Photoemissive cell
 - b) Photomultiplier
13. Write notes on :
 - a) JK flip flop
 - b) Photo voltaic cell
 - c) Counters.

Module – II

14. Explain the internal architecture of 8085 microprocessor using block diagram.
15. a) Explain the terms Instruction cycle, and Machine cycle with examples.
b) Draw and explain the timing diagram for a Read operation.
16. What are the different operating modes of 8255. Explain using control word used.

Module – III

17. What are the different types of instructions used in 8086. Explain any three from each group with examples.
 18. With block diagram explain the internal architecture of 8051.
 19. Write notes on :
 - a) 8086 addressing modes
 - b) 16 bit micro controllers.
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