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6408

Register Number
Name of the Candidate:

M.Sc. DEGREE EXAMINATION, May 2015

(ELECTRONIC SCIENCE)

(FIRST YEAR)

530: MICROCONTROLLER AND ADVANCED MICROPROCESSORS

Time: Three hours

Maximum: 100 marks

SECTION-A

(5×4=20)

Answer any FIVE questions

1. Mention the word length and memory capacity of 8086 microprocessor.
2. How many general purpose registers are there in 8086 microprocessor? Mention the use of Base register.
3. State the main difference between the 8086 and 80186 timing diagram.
4. How many 16-bit timers are there in 80186 microprocessor? Mention its uses.
5. Mention the key features of 8051 micro controller.
6. Explain the method of configuring I/O port in 8051 micro controller.
7. Explain the immediate addressing mode.
8. Explain the principle of stepper motor.

SECTION-B

(5×16=80)

Answer any FIVE questions

9. Explain the function of stack pointer, program counter and flag register of 8086 microprocessor.
10. Explain the maximum mode functions of 8086 microprocessor.
11. Discuss the internal architecture of 80286 microprocessor.
12. Explain the function of SCON and PCON registers.
13. Explain in detail the interrupts of 8051 microcontroller.
14. Discuss on detail the logical and data movement instructions.
15. Write an assembly language program to find the smallest number in an array using 8051 microcontroller.
16. Discuss in detail the method of interfacing a key board to a microcontroller.
