



w.e.f. 2015-16 Admitted Batch (CBCS)

SIR C R REDDY COLLEGE (AUTONOMOUS), ELURU

(Affiliated to Adikavi Nannaya University, Rajamahendravaram)

III B.Sc. Degree Examinations, Apr. 2018

(At the end of VI Semester)

PHYSICS Cluster Paper-VIII(1)

Introduction to Microprocessors and Microcontrollers

Time : 3 Hrs.

Date: 09-04-2018

Max.Marks: 75

Pass Min: 26

SECTION -A

Answer any FIVE of the following

5×10=50M

1. Draw the pin diagram of 8085 microprocessor. Explain the operation of each pin in detail.
2. Draw the Architecture of 8085 microprocessor. Explain the operation of each block.
3. Explain arithmetic instructions with any eight examples using 8085 microprocessor.
4. Write an assembly language programme of BCD to binary conversion (8-bit of data) using 8085 microprocessor.
5. Draw the block diagram of 8051 microcontroller. Explain the register structure of 8051 micro controller.
6. What is an addressing mode? What are different types of addressing modes? Explain each addressing mode of 8051 with examples.
7. Explain the timers of 8051 micro controller.
8. Write an assembly language program of multiplication of two 8-bit number using 8051 microcontroller.

SECTION -B

Answer any FIVE of the following

5×5=25M

9. Draw the architecture of embedded system. Explain operation of each block in brief.
10. What are different types of interrupts are activated in 8085 microprocessor?
11. Draw the pin diagram of 8085 microprocessor. Explain the operation of each pin in detail.
12. Explain the concept of stack.
13. Write an ALP of "Multiplication of two 8-bit numbers" using 8085 microprocessor.
14. Explain data types and directive of 8051 micro controller.
15. Explain jump instructions.
16. Write an assembly language program of "Addition of two 8-bit numbers" using 8051 micro controller.