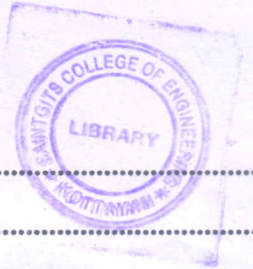


G 1551

(Pages : 2)

Reg. No.....

Name.....



B.TECH. DEGREE EXAMINATION, MAY 2015

Fourth Semester

Branch : Computer Science and Engineering

CS 010 405—MICROPROCESSOR SYSTEMS (CS)

(New Scheme—2010 Admission onwards)

[Regular/Improvement/Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. Explain the function of timing and control unit of UP 8085. ,
2. Explain the function of subroutine.
3. What is synchronous data transfer scheme ?
4. What are the various hardware interrupts of 8085 μ P ?
5. What are various operating modes of 8253 programmable interval Timer.

(5 \times 3 = 15 marks)

Part B

Answer all questions.

Each question carries 5 marks.

6. Explain arithmetic and logic group of instructions with example.
7. Explain memory mapped I/O scheme of μ P 8085.
8. Discuss the function of programmable interrupt controller.
9. Discuss interrupt driven data transfer scheme with example.
10. Discuss different applications of 8253 Programmable Interval Timer.

(5 \times 5 = 25 marks)

Part C

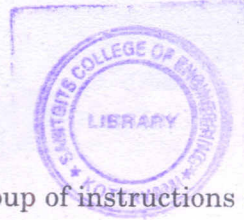
Answer all questions.

Each full question carries 12 marks.

11. With a neat diagram, explain the architecture of 8085 μ P.

Or

Turn over



12. (a) Explain Data transfer and branch control group of instructions of μP 8085.
(b) Explain what operations are performed when following instructions are executed :—
(i) DAA ; (ii) CMP M ; (iii) CMA ; (iv) RAL ; (v) RAR.
13. Write a program to find larger of two numbers using 8085 μP .

Or

14. Draw and explain the timing diagram of memory read and memory write operation.
15. Explain enabling, disabling and masking of interrupts. Discuss with suitable examples how to transfer data using interrupts.

Or

16. Explain various hardware and software interrupts.
17. Explain programmed data transfer scheme of μP 8085.

Or

18. Discuss the various operating modes of 8255 programmable peripheral interface.
19. Discuss various operating mode of 8253 programmable interval timer.

Or

20. Explain the working principle of 8251 USART.

(5 × 12 = 60 marks)