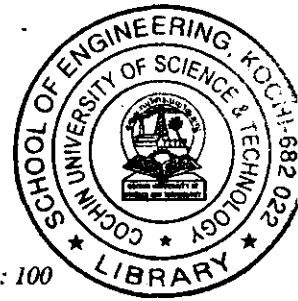


**B.Tech. Degree V Semester (Supplementary) Examination in
Electronics and Communication Engineering, June 2002**



**EC 501 MICROPROCESSORS
(1995 Admissions)**

Time: 3 Hours

Max. Marks: 100

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|-----------|-----------|---|------|
| I | a) | Explain the architecture of 8085 microprocessor with a neat block diagram. | (10) |
| | b) | Explain the flag bits of 8085 microprocessor. | (5) |
| | c) | What is the instruction format of an assembly language program? Explain. | (5) |
| OR | | | |
| II | a) | Explain the organization of a typical microcomputer with a neat sketch. | (10) |
| | b) | Explain the organization of memory used in a microcomputer. | (10) |
| III | a) | Illustrate with neat timing diagram, the execution of the instruction
2500 MOV A,M 7E ; (HL) = 4500 H | (10) |
| | b) | Write an assembly language program to find out the smallest number from a series of 100 numbers. | (10) |
| | OR | | |
| IV | a) | Explain the concept of subroutines with example. | (10) |
| | b) | Write an assembly language program for 8085 for evaluating the expression
(X/2 * Y/4)
and displaying the result. Assume that X and Y are single byte two's complement integers. | (10) |
| V | a) | What are the different types of data transfer schemes? Explain any one. | (10) |
| | b) | What is meant by memory interfacing? Explain with a neat sketch. | (10) |
| OR | | | |
| VI | a) | What is memory mapping? Differentiate between memory mapped I/o and I/o mapped I/o. | (10) |
| | b) | Explain the address space partitioning schemes. | (10) |
| VII | a) | Discuss the different interrupts of 8085. | (10) |
| | b) | Explain the function of programmable interrupt controller with a neat block diagram. | (10) |
| OR | | | |
| VIII | a) | Explain the different operating modes of the general purpose programmable peripheral interface. | (10) |
| | b) | Explain the interfacing of an A/D converter with a neat sketch. | (10) |
| IX | a) | Explain the functional organization of 8086 with a neat block diagram. | (10) |
| | b) | Explain the bus structure and timing of 8086 microprocessor. | (10) |
| OR | | | |
| X | a) | Explain the organization of 68000 with a neat sketch. | (10) |
| | b) | Explain multiprocessing with diagram. | (10) |