# 2005  ANDHRA UNIVERSITY
## II B.TECH II SEMESTER DEGREE EXAMINATION
## B.TECH INFORMATION TECHNOLOGY
### MICRO PROCESSOR

TIME : 3 HOUR

MARK : 70

FIRST QUESTION IS COMPULSORY

ANSWER ANY FOUR FROM THE REMAINING QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

ANSWER ALL PARTS OF ANY QUESTION AT ONE PLACE

1. (a) Distinguish between CPU and microprocessor

(b) Does fetch and execute overlap occur in 8085 microprocessor. Justify your answer.

(c) Draw the neat sketch showing demultiplexing of address bus and data bus in 8085 microprocessors.

(d) How do you set Zero and CARRY flags of 8085?

(e) What is the use of LOCK bar signal of 8086 microprocessor?

(f) What is the number of T states in 8086 and 8088?

(g) Give the instruction format of 8086 microprocessor.

2. (a) Write the complete specifications of 8085. Explain how Instruction Execution Process occurs in 8085 for any one of stack related instructions.

(b) If hold and interrupt inputs of 8085 occur simultaneously. which one is accepted first? Justify your answer.

3. (a) Give the basic system timing diagram of 8085.

(b) Write complete 8085 assembly language programming requirements and then write a program to find the GCD of two 8-bit numbers with a flowchart.

4. (a) Explain the complete interrupt structure of 8085.

(b) Give the hardware and software for testing the interrupt logic of RST5.5 interrupt.

5. (a) Explain maximum mode and minimum mode interfaces of 8086.

(b) Is the instruction format and instruction set of 8086 and 8088 same? Justify your answer by format and example instructions with detailed instructions.

6. (a) Write a program to transfer a string of characters from a given location to a destination location. Consider all the cases of overlapping. Assume the data necessary.

(b) Write in brief about interrupts in 8086.

7. (a) Describe how BIU and EU interact for instruction execution with a suitable instruction sequence.

(b) Write 8086 program with minimum number of instructions for resetting a flag register.

8. (a) What are Prefix instructions of 8086? Explain with examples.

(b) Discuss about Coprocessor and Mutliprocessor environment with 8086

(c) Idents the addiess modes of each of the following 8086 instructions

(i) MOV AH, [MP+2], (ii) MOV AH, 47H,

(iii) MOV AH, [XRAY], (iv) MOV AH, [BP+SI],

(v) MOV AH, TEMP[BS]