2008 ANDHRA UNIVERSITY

B.E/B.TECH DEGREE EXAMINATIONS

MICROPROCESSOR AND APPLICATIONS

(ELECTRONICS AND COMMUNICATION ENGINEERING)

TIME: 3 HOUR
MARK: 70

Question No.1 Is Compulsory And Answer Any Other 5 Questions
All Questions Carry Equal Marks

a)What is the function of READY signal of 8085 microprocessor ?

b)List the non-maskable interrupts of 8085

c) What is the status of Flag register after the execution of the following:
MVI B<55H
MVIC,AAH
MOV A,B
OR A,C
ADD,C

d)What do you mean by memory mapped I/o?

e)what are the different modes of operation of 8523 timer?

f)What are the main differences between 8086 and8088 microprocessors?

g)Give the register set of 80386 microprocessor

2)Explain the effect of execution of the following instructions of 8085 microprocessor

i)POP B

ii)RST 7

iii)STAX B

iv)CALL 2000H

b)Draw and explain the timing diagrams of the following instructions

i)JMP Addr and

ii)OUT port

3)
a)Writer an ALP for 8085 to multiply two 8-bit numbers by shift left and add method

b)Ten 8-bit numbers are stored in memory location starting from 4000H . Write an ALP for 8085 to store all the even numbers from 4500H location onwards and odd numbers from 4600 H onwards.

4)
a) Explain interrupt driven data transfer scheme with an example

b)A microprocessor has 8K X 8 memory divided into 4 K X 8 ROM and 4 K X *8 RAM .The addresses starts from 0000 H onwards . The following chips are available

i)2 K X 8 bit EPROM

ii)1 KX 8 bit SRAM

iii)1 out of 8 decoder Draw the memory map and explain

5)
a)show the block schematic diagram of 82555 PPI and explain its operation in MODE 1

b)Design an I/O interface to interface an 8-bit ADC to 8085 using 8255 PPI. Write an ALP for 8085 to initialize ADC and get data from ADC. Assume any data required

6)
a)Explain with a neat diagram how a matrix key-board is interfaced to 8085 . Write a program to read a key pressed

b)Explain the operation of USRT 8251 with a neat block schematic diagram

7)
a) Explain the salient features of 8086 microprocessor in “minimum mode “ and “maximum mode “
b)Explain the addressing modes of 8086 with examples

8)
a)Draw the architecture of 80386 microprocessor and explain the memory management unit of it

b)Explain the enhanced features of pentium and pentium as compared to 80486 microprocessor

c) What is meant by cache memory? How doe it increase the speed of operation of the processor system?