xiii) What are main features of 8051 microcontroller?

xiv) What is compiler? What is use of Compilers?

xv) What are different flags used in 8051 microcontroller?

SECTION-C

Note: Long answer type questions. Attempt any three questions.   3x10=30

Q.3   Draw and explain block diagram of 8085 microprocessor.

Q.4   What do understand by interrupts? What are different types of interrupts in 8085 microprocessor?

Q.5   Draw block diagram of 8255 and explain different blocks 0f 8255.

Q.6   Write comparison between microcontroller and microprocessor.

Q.7   Draw pin configuration of 8051 microcontroller and explain its pin details.

4 th Sem./ Instrumentation & Control

Subject : Microprocessors, Microcontrollers and their applications.

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts.   (15x2=30)

Q.1   a)   8085 microprocessor is 16 bit microprocessor. (True/False)

b)   What is function of bus ?

c)   Clock speed of 8085 microprocessor is _____.

d)   What is ALU ?

e)   Define program counter.

f)   What is auxiliary flag?

g)   Stack pointer is _____ bit register.

h)   INTR interrupt has lowest priority. (True/False)

i)   What is function of ALE pin ?

j)   What is Opcode in instruction "MOV C, A"?

k)   What is machine code?

l)   Give two examples of arithmetic group instructions.

m)   Give example of immediate addressing mode.

n)   What is memory mapped I/O scheme ?

o)   I C 8257 is used for _____.

p)   Internal RAM of 8051 is _____.

q)   Function of SCON is _____.

r)   What is assembler ?

SECTION-B

Note: Short answer type questions. Attempt any ten parts   10x4=40

Q.2 i)   What are the main applications of microprocessor ?

ii)   What are main features of 8085 microprocessor?

iii) What is stack ? What is function of stack pointer?

iv)   Explain Serial I/O section of 8085 microprocessor.

v)   Explain the concept of multiplexing of address-data bus in 8085 microprocessor.

vi)   What do you understand by assembly language? Where assembly language is used ?

vii) Give two examples of register indirect addressing modes of 8085 microprocessor.

viii) Explain the concept of instruction set. Write about the instruction set of 8085 microprocessor.

ix)   Write an assembly language program for addition of two 8-bit numbers.

x)   Compare hardware and software interrupts.

xi)   How priority of interrupts is decided in 8085 microprocessor?

xii) Draw block diagram of IC 8259.