Chapters: 1-6, 9,10

Chapter 2:
Registers:
describe the function of following registers: SI, DI, IP, FLAG bits: S, C, A
-2.13 : In real mode, show the start and end address of each segment located by these segment registers:
1234H
E000H
AB00H

Chapter 3:
Addressing modes:
-Describe the operation of following instructions:
MOV [BX+SI],BP

-3.33 : 3.29
If EAX=00001000, EBX=00002000H and DS=0010H, what is the address accessed by following instructions:
MOV ECX, [EAX+EBX]
MOV [EAX+2*EBX],CL
MOV DH,[EBX+4*EAX+1000H]

Chapter 4:
PUSH and POP
STRING data transfers

4.36, 4.28
4.36:
a sequence of instructions that copies 12 byte from an area of memory addressed by SOURCE to another addressed by DEST

Chapter 5:
5.36, 5.51
5.36: a sequence of instructions that sets three leftmost bits of DX to zero without changing the other bits.
Save the result in BH

Chapter 6:
Procedure calls .. conditional instructions
6.39, 6.24
6.24: store 00H into 150H location of Memory starting at extra segment location DATAZ.

Chapter 9:
-Pin descriptions: HOLD/HLDA, INT/INTA, DT/R, DEN
-Address demuxing: design an address decoder for activating memory in addresses between 00000H and 01FFFH

-Bus Timing:
Show the timing diagram for a read operation, include ALE, RD, DT/R, AD bus and CLK. Assume one Wait state

Chapter 10:
-Memory types and differences
-Draw connection diagram for memory chips, for example for TMS4016, for a given address range for a given address range.

-Address decoding and bus-low and high enabling

-Design the address decoders and WE signals for a 2 byte memory system, 64KW, address from 00000 to 0FFFFH. Use two 64KB memory modules. Draw the connections for address bus, data bus, CS, WE..