

- NOTE : 1. Figure should be Neat and labeled.
 2. All Questions are compulsory.
 3. Right side indicates marks.

Q.1 Answer any 2 from following.

(10)

1. List and explain types of memories.
2. Explain the concept of memory organization with control lines.
3. Write a short note on Tristate devices.
4. Explain the function of buffers, encoder, decoder, latches.

Q.2 Answer any 2 from following.

(10)

1. Draw the functional block diagram of 8085 microprocessor.
2. Explain the working of following units of 8085:
 - a. ALU
 - b. Temporary register
 - c. Program counter
 - d. Instruction register
 - e. Data/ address register
3. Explain the functions of following pins of 8085:
 - a. X1 & X2
 - b. READY
 - c. HOLD
 - d. SOD
 - e. ALE

4. Draw the pin diagram of 8085 IC.

Q.3 Answer any 2 from following.

(10)

1. Trace the following program and fill in the blanks.

```

MVI A, 06H
MVI E, 05H
ADD E
MOV C, E
ADI 01H
STA 4001H
MOV D, A
RST1
  
```

RESULT:

- i) Reg. E=-----
- ii) Reg. C=-----
- iii) Reg. A=-----
- iv) Reg. D=-----
- v) 4001H=-----

2. Flag register contain data 3CH interprets its meaning.
3. Explain the working of following instructions of 8085:
 - a. STC
 - b. ADD r
 - c. DAA
 - d. XRA M
 - e. CMP r