

- (b) Design a memory system that contains 2K byte of EPROM, immediately followed by 1K byte of RAM. The EPROM starts at address 0000H and it is implemented by using 1K byte of EPROM .The RWM is implemented using 1K byte RAM chips. Use decoder and gates (if required) for the interfacing circuit. **10**
- Q-5** **Attempt all questions** **(14)**
- (a) Some of the pins of 8085 are listed below .For each pin show whether it is an input line or an output line and mention its function. **06**
 1. ALE 2. READY 3. IO / M' .
- (b) Explain the following instructions with examples **08**
 1. LDA 2. INR 3. ADI 4. XRA
- Q-6** **Attempt all questions** **(14)**
- (a) What do you mean by addressing modes? Enlist the addressing modes and explain each of them in detail with examples.
- (b) Two 8-bit numbers are stored in memory locations D000H and D001H. Write an assembly language program to multiply them and store the result in memory locations E000H (LSB) and E001 (MSB). **07**
- Q-7** **Attempt all questions** **(14)**
- (a) Write an assembly language program to add an array of data bytes. Assume that result is more than 8-bit. **07**
- (b) Write an assembly language program to find out largest data byte from the given array of data bytes **07**
- Q-8** **Attempt all questions** **(14)**
- (a) Explain in detail IC 8255A with block diagram. Also explain in brief its control word. **07**
- (b) Write a note on IC 8254. **07**

