

Microprocessor

Microprocessor & interfacing-

- 1) Programmable Parallel Ports and Handshake Input/output
- 2) Methods of parallel Data Transfer
- 3) Implementing Handshake data transfer
- 4) 8255 internal Block Diagram
- 5) 8255 Pin Configuration
- 6) 8255 Operation Modes and Initialization
- 7) Constructing and Sending 8255A Control Words
- 8) Sending Control words
- 9) 8255A Handshake Application Examples
- 10) Data reading from tape recorder, Timing Diagram
- 11) Interfacing a Microprocessor to Keyboards
- 12) Software Key board Interfacing
- 13) Keyboard Interfacing with Hardware
- 14) Dedicated Microprocessor Keyboard Encoders
- 15) Interfacing LED Displays to Microcomputers
- 16) Software-multiplexed Led Displays
- 17) Liquid-Crystal Display Interfacing.

8085 mp-

- 18) Definition? Advantage of it?
- 19) Internal architecture of 8085 mp
- 20) 8085 system bus
- 21) 8085 pin description
- 22) 8085 functional description
- 23) Programming model of 8085 mp
- 24) Addressing modes
- 25) Instruction set classification
- 26) Instruction format

27) Sample programs, applications?

28) Working of 8085 mp

29) Functional units of it

30) 8-bit internal data bus

Microcontroller-

31) What is DMA? Discuss operation?

32) What is interrupt? Name of the different types of interrupt.

Explain 8259 PIC with block diagram?

33) What is peripheral, interface? 8255 PPI pin diagram and functional operation?

34) Explain function of bits of control register of 8255 PPI?

35) What is microcontroller? Draw the basic block of m.controller?

36) What are the applications of m.controller?

37) Difference between microprocessor & microcontroller?

38) Von-neumann , Harvard architecture? Difference between them?

39) Modified Harvard architecture? Von-neumann bottleneck?

40) Advantage of microcontroller?

Embedded System-

41) What is embedded system?

42) Characteristics of it?

43) Advantage, disadvantage, Basic structure of it?

8086 microprocessor-

44) Architecture of 8086 mp? Discuss operation of EU, BIU?

45) Discuss the register structure of 8086 mp?

46) Explain addressing modes?

47) Explain different kinds of instruction of 8085 mp?

48) Memory interfacing of 8086 mp?

49) Function of FLAG register bit?

- 50) List of 8086 max and min mode signals? How are these modes selected?
- 51) What happens to the contents of AX,BX,DX registers execution of the following 8086 mp?
- 52) 20 bit physical address example?
- 53) Draw and explain the control word format of 8255 PPI?