

M.M. Imp

Unit-1 : 1. Conversion (12 types)

2. Logic gates

3. draw logic gate circuit

Unit-2 : 1. Functional unit

2. Single bus / Double bus / types of bus with Adv. & Disadv.

3. What is Pipelining & Super Scalar operation

4. diff between CISC / RISC

5. Data Representation:

6. Fixed & Floating Point Representation

7. Error Detection codes

8. SIW & its types.

Unit-3 : 1. What is Register Transfer logic, & what is Register transfer Language, mention an micro operation, what is micro-operation

2. Explain Register Transfer Language with diagram & what is source & destination Register, Explain, with

* Using multiplexer

* Enable signal of Register

3. give basic symbol used for Register Transfer

4. What is Tri-state Buffer

5. What is BUS & memory transfer using

* common bus using multiplexer

* common bus using tri-state Buffer

Unit-3 :

6. What is memory transfer, Explain with diagram
7. Explain with diagram:

- * Binary Adder — half adder —
— full adder —
— Parallel adder

- * Binary Subtractor — half subtractor —
— full subtractor —
— Parallel subtractor

* Addition / Subtraction logic unit

* Binary Incrementer

8. Explain Logic micro operation

9. Application of logic micro-operation

* Selective set / complement / mask / clear /

10. Explain Shift micro operation insert

11. What are computer instruction, mention and list all content

12. Explain Instruction Cycle (Fetch - Decode - Execute)

13. What is I/O configuration

14. Explain Interrupt

15. Explain Instruction format

16. Explain Addressing mode

Unit-4

1. Flow chart for multiplication algorithm

2. Decimal Arithmetic unit with BCD adder

3. Explain 1. Restoring

2. Non-Restoring division algorithm

with flowchart

4. $10's$ & $10's$ complement * Arithmetic Addition
5. Booth Algorithm with flowchart & example * 11 Subtraction
6. Flow chart for Add & subtract operation
- ⇒ Booth Algorithm? It can be used for
 - + signed
 - + unsigned
7. Floating Point Arithmetic operation:
 - Example - Addition - Subtraction - Multiplication
 - Division
8. BCD Addition, Division, multiplication

Unit - 5

1. What is memory? Explain Primary & Secondary memory with adv. & disadv
2. What is semiconductor memory? Explain types of semiconductor memory with adv & disadv
3. Concept of virtual & cache memory, adv & disadv for both
4. Explain Rom & types - Rom - P Rom - EProm - } m.
EEProm } sm.
5. Write a short note on RAID