CO IMPORTANT QUESTIONS

UNIT-1

1. Functional units.
2. Performance
3. Multiprocessors and multicomputer [differences]
4. Instructions and instruction sequencing [sub topics RISC and CISC].
5. Addressing modes.
6. Instruction types[1, 2, 3 address].
7. Basic input/output operations.

UNIT-2

1. Design of fast adders,
2. Fast multiplication.
3. Multiplication [+ve, -ve number multiplications].
4. Execution of a complete instruction.
5. Hard-wired control and multiprogramed control [differences].
6. Booth algorithm.

UNIT-3

1. RAM memories [synchronous, Asynchronous D-RAM].
2. Cache memories [Algorithm].
3. virtual memories [Algorithm] (or) virtual phase table.
4. Structure of large memories [sub topics].
5. Speed size cost, paging segment phase mapping, flash memory, Address translation.

UNIT-4

1. Interrupts.
2. Direct memory access [DMA], bus arbitration.
3. Standard I/O interface.
4. Synchronous, Asynchronous, bus computer enable handling [SUB TOPIC:(Types of interrupts, Cycle stealing).

UNIT-5

1. Data hazards.
2. Instruction hazard.
3. Pipelining [interleaving].
4. Parallel, Array processing.
5. Influence on instruction set.
6. Condition branch and branch prediction.
7. Instruction set.