* Explain pipelining technique. Draw the general structure of four segment pipeline.
* Explain RISC. List its characteristics.
* Discuss four-segment instruction pipeline with diagram(s).
* Explain the Instruction Pipelining with example.
* Explain the following terms

1) PSW

2) Delayed load

3) Pipeline conflict

4) Memory Interleaving

* Draw the space time diagram for six segment pipeline showing the time it takes to process 8 tasks.
* Differentiate SIMD and MIMD.
* Explain (i) Vector Processing (ii) Vector Operations. Explain how matrix multiplication is carried out on a computer supporting Vector Computations.
* Explain the working of a pipelined processor, which is having four pipeline stages, with proper space time diagrams. Under which conditions this computer’s speed up can be 4? Explain mathematically how it is so.
* Explain arithmetic pipeline with example.
* What are the pipeline conflicts? Explain the hardware techniques to handle the branch instructions
* Considering three segment instruction pipeline, illustrate the concepts of delayed load and delayed branch with example.
* Explain Memory Interleaving.
* Explain Array Processor with it’s types.
* Considering three segment instruction pipeline, illustrate the concepts of delayed load and delayed branch with example.