





12. (a) Discuss about Itanium processor and its IA 64 Instruction Set architecture.

Or

- (b) What is speculative execution? Compare and contrast hardware and software speculation mechanisms.

13. (a) Discuss in detail about the performance issues in symmetric and distributed shared memory architectures.

Or

- (b) What is the need of memory consistency model? Explain its various types.

14. (a) Describe the need of cache optimization scheme. Give a description about the advanced cache optimization schemes to reduce cache miss penalty and miss rate.

Or

- (b) Elaborate on the different methods to measure the performance of I/O.

15. (a) Compare and contrast Intel Multi core architecture and SUN CMP Architecture.

Or

- (b) What is hardware multithreading? Compare and contrast Fine grained Multi-Threading and Coarse grained Multi-Threading.

