Part 1: Memory hierarchy and virtual memory.

You need to study well all lecture notes starting from lecture set 08- to lecture set 11.

a. Question about memory bandwidth (memory interleaving), AMAT components and effect on hit/miss rate. Block size consideration on performance.
b. One question about Cache parameters in direct mapped, n-way set associative caches , write policies and replacement policies comparison
c. Single level and multilevel cache performance as discussed in the example in lecture 10
d. Question about virtual memory – Page table size, PTEs fields and size , TLB parameters,

Go through all examples in lecture notes 11, solve all problems before you see the solution,

Solve HW4 problems, the solution is posted on the course main page.

Most of Part1 problems are similar to examples on notes 11 and HW4.