_____ is a permanent physical defect such that the memory cell or cells affected cannot reliably store data but become stuck at 0 or 1 or switch erratically between 0 and 1.
hard failure

_____ is a random, nondestructive event that alters the contents of one or more memory cells without damaging the memory
soft error

Which of the following factors determines the effectiveness of the cache?
hit rate

External memory consists of the following peripheral storage devices EXCEPT
register

_____ logical operation yields true (binary value 1) if and only if both of its operands are true.
AND

Which of the following allows speculative execution?
direct mapped cache

_____ automatically retains a copy of some of the recently used words from the DRAM
cache memory

Hard errors can be caused by the following EXCEPT.
alpha particles

Which of the following is faster to access?
Cache memory

_____ is the number of bits read out of or written into memory at a time.
Unit of transfer