**1. \_\_\_\_**External**\_\_\_\_\_\_ memory consists of peripheral storage devices, such as disk and tape.**

**2. One byte equals \_\_\_\_**8**\_\_\_\_\_\_ bits.**

**3. From a user’s point of view two the most important characteristics of memory are capacity and \_**performance**\_\_\_\_\_\_\_\_\_\_\_\_.**

**4. The three performance parameters for memory are: access time, transfer rate, and \_\_**memory cycle time**\_\_\_\_\_\_\_.**

**5. \_**memory cycle time**\_\_\_\_\_\_\_\_ is a random access type of memory that enables one to make a comparison of desired bit locations within a word for a specified match, and to do this for all words simultaneously, thus retrieving a word based on a portion of its contents rather than its address.**

**6. The \_\_**transfer**\_\_\_\_\_\_ rate is the rate at which data can be transferred into or out of a memory unit.**

**7. The most commonly used physical types of memory are: semiconductor memory, \_\_**magnetic surface**\_\_\_\_\_\_\_\_ memory (used for disk and tape), and optical and magneto-optical.**

**8. The three key characteristics of memory are capacity, access time, and \_\_\_**cost**\_\_\_\_.**

**9. External, nonvolatile memory is referred to as \_\_**secondary**\_\_\_\_\_\_\_\_\_ or auxiliary memory.**

**10. The cache consists of blocks called \_\_\_\_**lines**\_\_\_\_\_\_.**

**11. \_\_**Virtual**\_\_\_\_\_\_\_\_ memory is a facility that allows programs to address memory from a logical point of view, without regard to the amount of main memory physically available.**

**12. For set-associative mapping the cache control logic interprets a memory address as three fields: Set, Word, and \_\_\_**Tag**\_\_\_\_\_\_\_.**