**Chapter6 MULTIPLE CHOICE**

1. Greater ability to withstand shock and damage, improvement in the uniformity of the magnet film surface to increase disk reliability, and a significant reduction in overall surface defects to help reduce read-write errors, are all benefits of \_\_\_\_\_\_\_\_\_\_\_.
2. magnetic read and write mechanisms
3. platters
4. the glass substrate
5. a solid state drive
6. Adjacent tracks are separated by \_\_\_\_\_\_\_\_\_.

A. sectors B. gaps

C. pits D. heads

1. Data are transferred to and from the disk in \_\_\_\_\_\_\_\_\_\_.

A. tracks B. gaps

C. sectors D. pits

1. In most contemporary systems fixed-length sectors are used, with \_\_\_\_\_\_\_\_\_ bytes being the nearly universal sector size.

A. 64 B. 128

C. 256 D. 512

1. Scanning information at the same rate by rotating the disk at a fixed speed is known as the \_\_\_\_\_\_\_\_\_.

A. constant angular velocity B. magnetoresistive

C. rotational delay D. constant linear velocity

1. The disadvantage of \_\_\_\_\_\_\_\_\_ is that the amount of data that can be stored on the long outer tracks is only the same as what can be stored on the short inner tracks.

A. SSD B. CAV

C. ROM D. CLV

1. A \_\_\_\_\_\_\_\_\_\_ disk is permanently mounted in the disk drive, such as the hard disk in a personal computer.

A. nonremovable B. movable-head

C. double sided D. removable

1. When the magnetizable coating is applied to both sides of the platter the disk is then referred to as \_\_\_\_\_\_\_\_\_.

A. multiple sided B. substrate

C. double sided D. all of the above

1. The set of all the tracks in the same relative position on the platter is referred to as a \_\_\_\_\_\_\_\_\_.

A. floppy disk B. single-sided disk

C. sector D. cylinder

1. The sum of the seek time and the rotational delay equals the \_\_\_\_\_\_\_\_\_, which is the time it takes to get into position to read or write.

A. access time B. gap time

C. transfer time D. constant angular velocity

1. \_\_\_\_\_\_\_\_\_\_ is the standardized scheme for multiple-disk database design.

A. RAID B. CAV

C. CLV D. SSD

1. RAID level \_\_\_\_\_\_\_\_ has thehighest disk overhead of all RAID types.

A. 0 B. 1

C. 3 D. 5

1. A \_\_\_\_\_\_\_\_\_ is a high-definition video disk that can store 25 Gbytes on a single layer on a single side.

A. DVD B. DVD-R

C. DVD-RW D. Blu-ray DVD

1. \_\_\_\_\_\_\_\_ is when the disk rotates more slowly for accesses near the outer edge than for those near the center.

A. Constant angular velocity (CAV) B. Magnetoresistive

C. Constant linear velocity (CLV) D. Seek time

1. The areas between pits are called \_\_\_\_\_\_\_\_\_.

A. lands B. sectors

C. cylinders D. strips

**SHORT ANSWER**

1. A \_\_\_\_\_\_\_\_\_\_ is a circular platter constructed of nonmagnetic material, called the substrate, coated with a magnetizable material.
2. Data are recorded on and later retrieved from the disk via a conducting coil named the \_\_\_\_\_\_\_\_\_.
3. Data is organized on the platter in a concentric set of rings called \_\_\_\_\_\_\_\_.
4. To increase density in a straightforward CAV system, modern hard disk systems use a technique known as \_\_\_\_\_\_\_\_\_\_, in which the surface is divided into a number of concentric zones.
5. In a \_\_\_\_\_\_\_\_\_ disk there is one read-write head per track and all of the heads are mounted on a rigid arm that extends across all tracks.
6. In a \_\_\_\_\_\_\_\_\_\_ disk there is only one read-write head mounted on an arm that can be extended or retracted to be able to be positioned above any track.
7. The \_\_\_\_\_\_\_\_\_ disk is a small, flexible platter and the least expensive type of disk.
8. \_\_\_\_\_\_\_\_\_\_ heads are used in sealed drive assemblies that are almost free of contaminants and the head is actually an aerodynamic foil that rests lightly on the platter’s surface when the disk is motionless.
9. On a movable-head system, the time it takes to position the head at the track is known as \_\_\_\_\_\_\_\_\_\_.
10. The time required to move the disk arm to the required track is the \_\_\_\_\_\_\_\_\_\_.
11. The \_\_\_\_\_\_\_\_\_ strategy employs multiple disk drives and distributes data in such a way as to enable simultaneous access to data from multiple drives, thereby improving I/O performance and allowing easier incremental increases in capacity.
12. RAID levels 2 and 3 make use of a \_\_\_\_\_\_\_\_\_ access technique in which all member disks participate in the execution of every I/O request.
13. A \_\_\_\_\_\_\_\_\_ drive is a memory device made with solid-state components that can be used as a replacement to a hard disk drive.
14. The typical recording technique used in serial tapes is referred to as \_\_\_\_\_\_\_\_\_ recording.
15. RAID levels 4 through 6 make use of an \_\_\_\_\_\_\_\_\_\_ access technique that allows separate I/O requests to be satisfied in parallel.