

Name: _____	ID No. _____
Date : _____	Section : _____

Problem Set 3

1. MULTIPLE CHOICES (MCQs)

1)

Storage system can be located inside the system unit, i.e. _____, or located outside the system unit, i.e. _____.

- device, medium
- internal, external
- RAM, ROM
- volatile, non-volatile

2)

Fill-in the appropriate storage capacity of each of the following media:

- Floppy Disk _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- SuperDisk _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- CD-R _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- Zip Disk _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- Typical DVD-R _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- Blue-ray Disk _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]
- HD-DVD _____ [1.44MB, 240MB , 650MB, 750 MB, 4.7GB, 25GB, 15GB]

3)

The circular rings on a magnetic disk on which data is stored are called _____.

- tracks
- sectors
- clusters
- pits

4)

A _____ consists of the collection of tracks located in the same location on a set of hard disk surfaces.

- cartridge
- sector
- cluster
- cylinder

5)

A _____ is a high-performance storage server individually connected to a network to provide storage for computers on that network.

- network attached storage (NAS)
- storage area network (SAN)
- RAID
- Cylinder

6)

EIDE is

- a high-capacity magnetic storage medium.
- a rewritable optical storage medium.
- a hard drive standard.
- all of the above.

7)

Disk access time is influenced by:

- seek time
- rotational delay
- data movement time
- All of the above

8)

One of the reasons for partitioning a hard drive is to

- be able to use different operating systems.
- increase RAM.
- make circuits closer.
- all of the above

9)

All of the following is true about smart card, except:

- It is credit-card-sized piece of plastic that contains some type of computer circuitry.
- It holds less than a few gigabytes of data.
- It is commonly used to store prepaid amounts of digital cash or personal information.
- Smart card readers are attached to a PC or built into a cell phone, keyboard, or other device.

10)

In addition to speed and expense, the factors to consider when comparing storage alternatives also include

- portability
- storage capacity
- compatibility
- all of the above

2. TRUE OR FALSE (T / F)

1)

Storage devices are identified by names and/or letters (e.g. "C" for first hard drive).

True

False

2)

The difference between random access and sequential access is in the order in which data can be retrieved.

True

False

3)

Logical file representation refers to the actual physical way the data is stored on the storage media as viewed by the computer.

True

False

4)

A CD-R disc can be written to and rewritten, similar to a magnetic floppy disk.

True

False

5)

In optical disc systems, data is stored using Laser beams on a single continuous spiral track from the center of the disk outward.

True

False

6)

RAID is used for increased performance and/or fault tolerance.

True

False

7)

Holographic storage uses blue-laser beams to store data in 3D and can have 300 GB per cartridge.

True

False

QUESTIONS

- a) Compare between magnetic and optical storage systems. Give examples of each.
- b) What is RAID? What it is used for?
- c) Discuss briefly the meaning of “logical file representation” as compared to “physical file representation.”
- d) What are the main factors to consider when comparing among storage alternatives?