

The following questions are examples of *short answer* questions of the type that may appear in the final exam. No solutions are provided. Instead, you are encouraged to attempt the questions and to then compare your answers with those from the course text, slides, lecture recordings, or additional sources.

1. Describe how **'Data is written to RAM'** in your own words.

2. Describe how **'Data is read from RAM'** in your own words.

3. Describe in your own words how **'Memory Cards'** and **'Flash Drives'** work.

4. Explain in your own words the following terms:

- a. **'Core Memory' or 'Main Memory':**

- b. **'Access Time':**

c. **'Average Latency':**

d. **'Buffer':**

e. **'Cyclic redundancy check':**

f. **'Cluster':**

g. **'DMA';**

h. **'Data transfer rate';**

i. 'FAT';

j. 'Fragmentation';

k. 'Optical Storage';

l. 'Read/write head';

m. 'Sector';

n. **'Seek time';**

5. How does a disk drive use an **'Electromagnetic field'** to carry data?

6. Describe in your own words how a **'Drive writes and reads bits on a disk'**.

7. Describe in your own words how a **'Drive maps a disk's surface'**.

8. Describe in your own words how a **'PC saves files to a disk'**.

9. Describe in your own words how a **'PC retrieves files from a disk'**.

10. Describe in your own words how a **'Floppy drive stores data'**.

11. Describe in your own words how a **'Hard drive stores data'**.

12. Describe in your own words how a **'Mirrored Drive array protects files'**.

13. Describe in your own words how a **'Striped Drive array increases performance'**.

14. Describe how a **'CD-ROM'** works.

15. Describe how a **'Recordable CD-ROM (CD-R)'** works.

16. Describe how a **'Double-Layer DVD'** works.

17. Describe how a **'DVD'** works.

18. Describe how a '**HD-DVD**' and '**Blu-Ray**' work.