Computer Science: **Test #5**: Computers & MWP   Name: _____

(ref: comp.test5.04)   Date: Monday, June 7, 2004.

A) <u>Multiple-Choice</u>: Select the BEST answer to satisfy the following. Either (A, B, C or D). Completely **DARKEN** the letter at the end of this section in the ANSWER SECTION. (25 points)

1. In a word processing program, the symbol where the text will appear is the:
   A) paste
   B) cursor
   C) I-thing-ee
   D) command

2. The 'computer' used in ancient times was (the):
   A) Napier's bones
   B) The adding machine
   C) Punch cards
   D) The abacus

3. The Father of Modern Computing is:
   A) Ada Byron B) Joseph Jacquard   C) Charles Babbage D) Herman Hollerith

4. The Tabulating Machine Company became this company in 1912.

   A) Xerox   B) Apple   C) AMD   D) IBM

5. Name the Frenchman who made an adding and subtracting machine for doing taxes and later had a computer language named in his honor:

   A) Babbage   B) Pascal
   C) Fortran   D) Neumann

6. What number is associated with GIGA?

   A) million   B) billion   C) trillion   D) ones & zeroes

7. The amount of data the CPU can transmit at one time to main memory & input-output devices is termed......

   A) word size B) bus width   C) system clock rate   D) none of these

8. Which of these is not an output device?

   A) speaker   B) disk drive C) monitor   D) mouse

9. In an EVEN PARITY bit system, if 8 bits are on, the 9th extra bit will be...
    A) zero
    B) one
    C) on
    D) off

10. What does the following represent in terms of a number in base 10 ➜ 10001111

    A) 15   B) 30   C) 142   D) 143

11. What type of memory (on the computer) is nonvolatile?

    A) ROM   B) RAM   C) tertiary   D) DVD

12. If someone is talking about their C-drive, what does it contain?

    A) floppy disk   B) hard drive   C) CD   D) DVD-burner

13. The term MEGA means: (in general)

    A) 1 million   B) 1 billion
    C) 1 trillion   D) 1 dudezillion

14. Which of the following is not a basic computer function?

    A) input   B) output
    C) memory   D) printing

15. The following line in a procedure in MWP will draw what?

    Repeat 3 [FD 90 RT 120]

    A) square   B) triangle   C) equilateral triangle   D) Azkaban prison

16. The first generation of computers used:

    A) transistors   B) vacuum tubes   C) ICs   D) silicon chips

17. Most high density floppy disks can hold:

    A) 720 K   B) 64 K   C) 1000 K   D) 1.4 MB

18. The amount of information that a DVD can hold is measured in:
   A) KB   B) MB
   C) GB   D) CIAites

19. The current OS used in most PCs is:

   A) Linux   B) Windows
   C) Shutters   D) Apple

20. The microprocessor was used in which generation of computers?

   A) FIRST   B) SECOND
   C) THIRD   D) FOURTH

21. An example of a PCB is:

   A) your mouse   B) your sister   C) your motherboard   D)   your fatherboard

22. What name is given to a supercomputer?

   A) Ray   B) Cray
   C) Craig   D) Big-GUY

23. How a page will be displayed on the screen & is the same as what will be printed is
    termed:
   A) layout   B) clip art
   C) DTP   D) WYSIWYG

24. The most widely used computer application is:

   A) spreadsheets   B)   e-mail   C) babesites D) word processing

25. The path that any data bits travel is called the:

   A)   word size   B)   116   C)   CPU   D)   bus

ANSWER SECTION: COMPLETELY **DARKEN** THE LETTER.

1. (A)(B)(C)(D)   2. (A)(B)(C)(D)   3. (A)(B)(C)(D)   4. (A)(B)(C)(D)
5. (A)(B)(C)(D)   6. (A)(B)(C)(D)   7. (A)(B)(C)(D)   8. (A)(B)(C)(D)
9. (A)(B)(C)(D)   10.(A)(B)(C)(D)   11.(A)(B)(C)(D)   12.(A)(B)(C)(D)
13.(A)(B)(C)(D)   14.(A)(B)(C)(D)   15.(A)(B)(C)(D)   16.(A)(B)(C)(D)
17.(A)(B)(C)(D)   18.(A)(B)(C)(D)   19.(A)(B)(C)(D)   20.(A)(B)(C)(D)
21.(A)(B)(C)(D)   22.(A)(B)(C)(D)   23.(A)(B)(C)(D)   24.(A)(B)(C)(D)
25.(A)(B)(C)(D)

SECTION B: *Acronyms*: Fill in the blanks. Write what these letters stand for. (5 points)

1. CPU: …………………………………………………………………………..
2. RAM: …………………………………………………………………………
3. AMD: ………………………………………………………………………
4. CD-ROM: …………………………………………………………………………….
5. DVD: …………………………………………………………………………

6. BIOS:…………………………………………………………………………
7. OS:……………………………………………………………………………
8. HTML: ………………………………………………………………………….
9. GIGO:…………………………………………………………………………
10. ENIAC: …………………………………………………………………………

SECTION C: Write the output of these procedures; assume **:N is 5** in all questions(4 points)

1. TO DOWN :N   OUTPUT (do not necessarily use all the lines)
    IF :N = 25 [STOP]   ....
    PRINT :N   ....
    DOWN :N + 10   ....
    END   ....

2. TO SUB :N   OUTPUT (do not necessarily use all the lines)
    IF :N > 10 [STOP]   ....
    SUB :N + 1   ....
    PRINT :N   ....
    END   ....
                                 ....
                                 ....

3. TO EXTRA :N   OUTPUT (do not necessarily use all the lines)
    IF :N = 30 [STOP]   ....
    PRINT :N   ....
    EXTRA :N + 10   ....
    END   ....

SECTION D: Draw a telescopic model for the procedure and list the output at the side. (6 points) Assume that :X is 5.

```
TO SUB :X
IF  :X = 20 [STOP]
SUB :X + 5
PRINT :X
END
```

SECTION E: Computer Comprehension: ***PORTS O'PLENTY***. Read the attached article and answer the following questions. (10 points) (Article begins on page 8)

1.   What does USB stand for? _____

2.   What is the purpose of an Ethernet port?_____

        _____

3.   What does NIC stand for? _____

4.   What type of port uses an RJ-45 connector? _____

5.   How many USB connections can be made to a single USB PORT? _____

6.   What does 'hot-swappable' mean? (other than referring to Goldie & Jimmy!!)

        _____

7.   How fast is the new USB standard? _____

8.   What does Mbps stand for? _____

9.   What is another port that works similarly to a USB port? _____

10.   What does IEEE stand for? _____

11.   How many connected devices can a Firewire support? _____

12.   What do 3.5 mm mini-jacks support? _____

13.   What does VGA stand for? _____

14.   Is VGA for analog or digital? _____

15.   What can be connected to a VGA port? _____

16.   What does DVI stand for? _____

17.   What does LCD stand for? _____

18.   What makes a digital monitor better than an analog monitor? _____

19.   What port is commonly used to connect a printer? _____

20.   How fast or slow can a parallel port transmit data? _____

21.   What does MIDI stand for? _____

22.   Name 2 things that can be connected to a game/MIDI port: _____

23.   What is the oldest type of PC ports? _____

24.   How many pins does a PC port have? _____

25.   How long ago was the parallel port introduced to the PC? _____

26.   Why should you know something about ports on your computer? (give 2 reasons)

          _____

BONUS QUESTION: (3 extra marks)

Name this computer: _____ (not just an Apple)

Who developed the company that makes this type of Apple?_____

What OS do the newest Apple computers use? _____

Tidbits

Compiled by Christian Perry
Graphics & Design by Lori Garris

Ports O' Plenty

Like a mammoth block of Swiss cheese, the back of your PC is crowded with holes of various sizes, but unlike the holes in the cheese, these holes serve important roles. Called ports, they let you connect peripherals and other devices to your PC, adding functions such as mouse and keyboard input, video display, external storage, speaker output, and more. Today's motherboards include a wide variety of ports, and when you add a few expansion cards to your PC, you'll own even more ports.

Modern PCs deliver a mix of old and new port technology, such that you'll often find a venerable parallel port, which continues to grace the PC even more than 20 years after its introduction, just a few inches away from a hyper-fast FireWire or USB (Universal Serial Bus) 2.0 port. Although many external devices allow connection to only one type of port, it's nonetheless important to understand what all of your PC's ports do, both for proper configuration and future expansion planning.

Parallel. Most commonly used to connect printers, the parallel port uses a 25-pin connector and can transmit 50KB to 100KB of data per second. Despite these slower-than-USB speeds, the parallel port is still useful for connecting printers, particularly because most users won't notice a speed difference when printing, and many older printers don't have USB connections. This port is also useful for connecting older scanners and Zip drives.
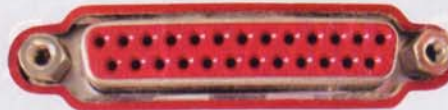
Serial. Serial ports are one of the oldest PC port types and are nearing the end of their lifecycle. Designed to connect mice, external modems, and older PDAs, most serial ports use a 9-pin connector. Some new motherboards don't even include a serial port.

Game/MIDI. Included on motherboards and some sound cards, the game/MIDI port uses a 15-pin connector to accommodate joysticks, gamepads, and other game controllers, as well as MIDI (Musical Instrument Digital Interface) instruments.
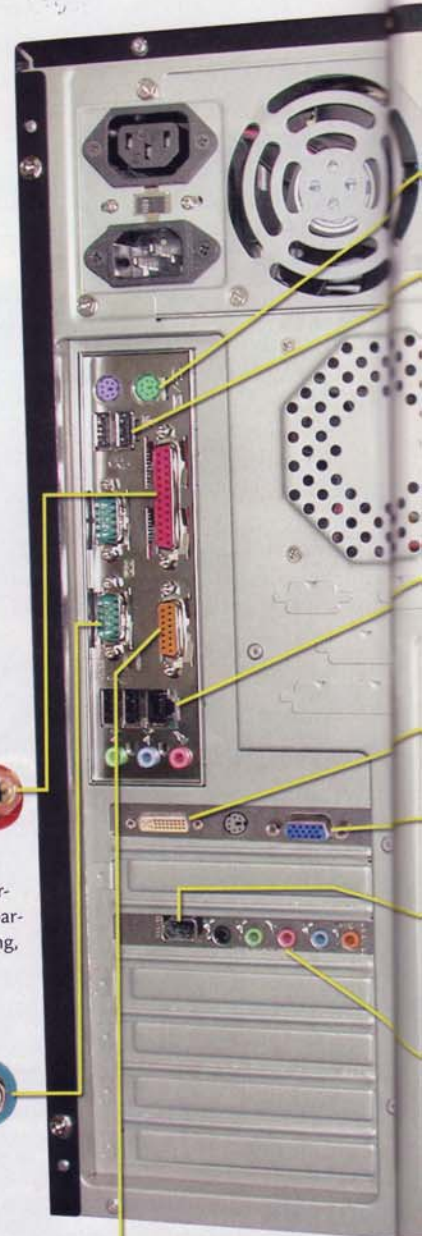
PS/2 (mouse and keyboard). These ports use a 6-pin connector to accommodate mice and keyboards. Although more peripherals today now use USB connections, many new motherboards still include these older ports, which manufacturers often color green, orange, blue, or purple for easy identification.

USB. Short for Universal Serial Bus, these ports accept the slim, rectangular USB connectors commonly found on peripherals ranging from mice, keyboards, and printers to game controllers, digital cameras, Web cams, and external hard drives. Unlike slower serial and parallel ports, a single USB port lets you daisy-chain up to 127 USB-enabled devices, which means you can use inexpensive extension hubs to supply all the USB ports you need. USB also differs from older ports in that USB devices are hot-swappable, meaning you can plug and unplug them at any time without damaging the devices or your motherboard, and when you plug in a USB device, Windows automatically recognizes and installs it. Most new motherboards include the newer USB 2.0 standard, which supports data rates of up to 480Mbps (megabits per second) and is backward compatible to the older, slower 1.1 specification.

Ethernet. This port is part of an integrated or expansion network interface adapter (or NIC [network interface card]) and uses an RJ-45 connector to join the PC with a LAN (local-area network) or a broadband modem.

DVI. The DVI (Digital Video Interface) port can support a fully digital connection between the computer's graphics hardware and a digital monitor (such as an LCD [liquid-crystal display]), allowing for increased image quality over an analog connection. Many modern video cards include a DVI port, as well as a VGA port.

VGA. Short for Video Graphics Array, the VGA port provides an analog display signal that supports analog monitors and projectors through a 15-pin connector. Most video cards and an increasing number of new motherboards include some sort of VGA port.

FireWire. Also known as IEEE 1394, this high-speed port rivals USB 2.0 speeds and supports up to 63 external connected devices using a single 6-pin connection. Like USB, FireWire provides a hot-swappable environment that's convenient for external hard drives, digital cameras, CD burners, and similar devices that can benefit from a flexible, high-speed connection. Although not all motherboards include FireWire ports, FireWire PCI (Peripheral Component Interconnect) expansion cards are widely available and continue to drop in price.

Audio input/output. These 3.5mm minijacks, included with an audio expansion card or the motherboard (if it has integrated audio), provide audio output via an external speaker connection through the output jack and microphone, instrument, and other input through the input jack. Depending on the hardware, separate minijacks could support left, right, and center/subwoofer output channels and separate line-in and microphone input channels.