

**SUBJECT:**

**COMPUTER TECHNOLOGY**

**OBJECTIVE(S)**

For candidates to obtain the knowledge and understanding of how computers operate, components and peripherals.

**PREREQUISITES**

None.

**INSTRUCTORS/EVALUATORS**

- Teachers responsible for computer education
- Computer technologists

**REFERENCES AND MATERIALS**

- Internet sites
- Technical manuals
- Manufacturers' promotional materials
- Instructional CD ROMS, cassettes, and videos
- Trade publications/magazines

**CONTENT**

1. Give a short history of the evolution of computer hardware.
2. Describe the major parts of a computer system.
3. Identify five major companies that manufacture computer hardware.
4. Describe three means by which computers can exchange data with other computers.
5. Do the following:
  - Visit a business or industry that uses computers. Study what the computer hardware accomplishes and be prepared to discuss what you observed;
  - Identify five jobs in the computer hardware field and discuss briefly what each one does.

6. Be prepared to discuss several terms used in each of the following categories:

- Input/output devices
- Storage media
- Memory
- Processors and co-processors
- Modems
- Networks
- Robotics

7. Define 15 of the following terminology:

- Baud
- Boot
- Byte
- C.
- CD-ROM (compact Disc Read-Only Memory)
- CPU (Central Processing Unit)
- Dot matrix
- DPI (dots per inch)
- GB (Gigabyte)
- Interrupt
- Java
- LAN (Local-area network)
- Laser printer
- Low level or Machine code
- Magnetic memory
- Mainframe
- MIPS (Millions of Instructions Per Second)
- Modem (Modulator Demodulator)
- Mother Board
- Optical storage
- Pixel
- Plotter
- QWERTY
- RAM (Random-Access Memory)
- ROM (Read-Only-Memory)
- Scanner
- Source Code
- WAN (Wide-area Network)
- Web/www
- WORM device (Write Once Read Many)

#### *Written Test*

8. Choose one of the following “projects” and submit it to the Instructor/Evaluator for assessment:

- A futuristic view of the use of computer hardware in our society.
- Other approved topic by the Instructor/Evaluator.

#### **DURATION**

No set time.

#### **CERTIFICATION**

The Instructor/Evaluator must be satisfied that the candidate has acquired an appropriate level of knowledge and skill.

**CERTIFICATION OF SUCCESSFUL COMPLETION OF PROFICIENCY SUBJECT**  
**COMPUTER TECHNOLOGY**

Instructors/Evaluators should carefully consider the age, ability and accessibility to resource materials of each candidate.

The candidate has completed the above content and meets the requirements to the satisfaction of the Instructor/Evaluator.

Name of Instructor/Evaluator: \_\_\_\_\_

Agency: \_\_\_\_\_

Address: \_\_\_\_\_ Tel #: \_\_\_\_\_

Instructor qualifications: \_\_\_\_\_

I certify that

\_\_\_\_\_ of \_\_\_\_\_  
(candidate's name) (Division #)

meets the criteria of this proficiency subject, as laid out on the previous page(s).

\_\_\_\_\_  
Instructor/Evaluator (signature) Date

\_\_\_\_\_  
Divisional Superintendent (signature) Date