计算机专业英语

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中等职业学校 21 世纪计算机规划教材

计算机专业英语

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内 容 简 介

计算机专业英语综合了计算机知识和英语运用能力，是计算机学科的一门重要基础课程。本书共分8章，24篇课文。内容主要包括计算机的基础知识、计算机系统、计算机硬件、办公自动化、多媒体、程序设计、计算机网络和计算机病毒等相关知识。

本书内容丰富，覆盖面广。书后给出了每一篇课文的参考译文，附录中还含有本书相关的各种材料，包括计算机专业英语的基础知识、应用、词汇列表等。各章习题的参考答案及阅读材料的译文都可在相关网站上免费下载。

本书适合于中等职业学校计算机相关专业学生使用，也可供计算机相关专业技术人员学习和参考。

前　言

一、关于本书

随着全球信息化的高速发展，掌握计算机专业英语已经成为 21 世纪技术人才、管理人才的基本要求。

直接从外文资料和文献中获取有效的参考信息是每个计算机技术人员乃至于学员必备的基本技能之一。本书旨在使读者能够熟悉并掌握计算机方面的基本词汇，以提高在计算机专业英语文献方面的阅读能力。

作为计算机专业英语的初级教材，本书涵盖了计算机技术各个方面的内容，包括计算机硬件、软件、网络与通信、程序设计步骤和语言、计算机病毒等，系统、全面地介绍了计算机专业英语的基础知识。

完成本书的学习后，读者可以掌握一定数量的计算机英语单词，熟悉计算机专业英语的常见句型，能够阅读简单至中等水平的计算机英语材料，处理工作中的问题。

二、本书结构

本书共分 8 章，具体结构安排如下：

第 1 章主要介绍了计算机基础知识和计算机发展。

第 2 章主要介绍了计算机系统的种类、操作系统和数据结构相关知识。

第 3 章主要介绍了计算机硬件组成和外部设备。

第 4 章主要介绍了办公室自动化原则和办公软件。

第 5 章主要介绍了多媒体的基础知识、多媒体硬件设备和软件。

第 6 章主要介绍了程序设计步骤和语言。

第 7 章主要介绍了计算机网络中数据通信、因特网、局域网和密码技术。

第 8 章主要介绍了计算机病毒种类和危害。

书后附有各章的参考译文、词汇表，另外还以附录的形式列出计算机专业英语基础知识，供读者参考。

建议本教材课时为 84 课时。

三、本书特点

本书中对一些难翻译的句子和单词进行了注释，每一篇课文后面列出关键词汇，配有相应的练习题，每一课后还附有与课文内容相关的阅读材料，以便提高读者计算机英文的阅读水平。

本书内容丰富，覆盖面广，讲解由浅入深。通过本书的学习，读者可以掌握到一定数量的专业英语词汇以及常用的计算机专业英语语法、句法知识。

四、本书适用对象

本书是中等职业学校计算机相关专业基础课程的理想教材，也可供计算机相关专业技

术人员学习和参考。

　　本书由陈俊宇、辛燕清主编，郑彦树参编。

　　由于作者水平有限，书中难免存在疏漏及不当之处，恳请读者批评指正，联系方法如下：

　　电子邮箱：service@cnbook.net

　　网址：www.cnbook.net

　　本书电子教案、练习题参考答案、阅读材料参考译文可从该网站免费下载。此外，该网站还有一些其他相关书籍的介绍，可以方便读者选购参考。

编　者

2006 年 5 月

目　　录

Chapter 1   Computer Knowledge

Text 1   Introduction to Computer

What does a computer look like? Have you got a personal computer? Figure 1-1 is a picture of a typical computer system. Speak out the names from the picture.
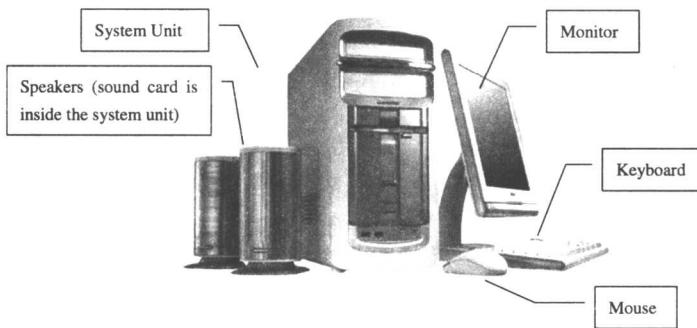
Figure 1-1   A typical desktop computer

This text introduces some basic knowledge about computer.

Hardware

Computer hardware is made up of several parts. It is an electronic machine that performs the following four operations: input, processing, output and storage.

Input

The input hardware allows you to enter data into the computer. The main input devices used are the keyboard, mouse and other devices such as scanner, as shown in Figure 1-2. etc.

Processing

The Central Processing Unit (CPU) is the "brain" of your computer. It contains the electronic circuits that cause the computer to follow instructions from ROM(Read-Only Memory) or from a program in RAM (Random Access Memory). By following these instructions information is processed.

Output

Output devices such as monitor or printer shown in Figure 1-3 make information you input available for you to view or use.
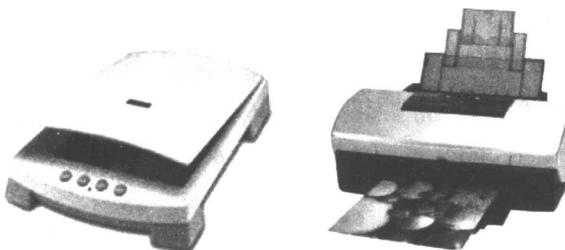
Figure 1-2   Scanner   Figure 1-3   Printer

Storage

Hard Disk - A hard disk stores your data files such as text, spreadsheets, and graphics, as shown in Figure 1-4.

Flash Disk - A flash disk is a plug-and-play storage device widely-used today, as shown in Figure 1-5.

CD-ROM Storage - each CD can store 600 million bytes of data or 300,000 pages of text, as shown in Figure 1-6.
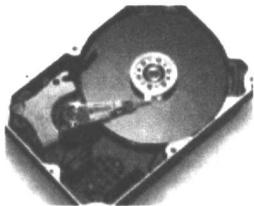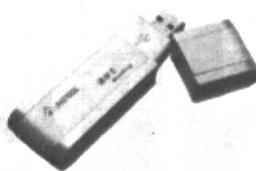
Figure 1-4　Hard Disk　　　　Figure 1-5　Flash Disk　　　　Figure 1-6　CD-ROM

Software

System Software - The operation of your computer is controlled by system software. As you boot the computer, the system software is stored in the computer's memory which instructs the computer to load, store, and execute applications.

Examples of system software are Windows 2000 and Windows XP which use a Graphical User Interface (GUI) that provides image to help the user. DOS, short for the Disk Operating System, is text based and not user - friendly.

Application Software - Application software is designed to run on system software. Examples of application software include Microsoft Word, Photoshop, etc.

Vocabulary

typical　['tipikəl]　adj.典型的

System Unit　n.（计算机）主机

monitor　['mɔnitə]　n.监听器，显示器

electronic　[ilek'trɔnik]　adj.电子的

perform　[pə'fɔːm]　vt.履行，执行

operation　[ˌɔpə'reiʃən]　n.操作

input　['input]　n.输入

processing　[prəu'sesiŋ]　n.处理

output　['autput]　n.输出，输出量

storage　['stɔridʒ]　n.存储，存储器

device　[di'vais]　n.设备

etc　adv.及其他，等等

contain　[kən'tein]　vt.包含

circuit　['səːkit]　n.电路

instruction   [in'strʌkʃən]   n.指导，指令

program   ['prəugræm]   n.节目，程序

available   [ə'veiləbl]   adj.可用到的，有用的

printer   ['printə]   n.打印机

plug-and-play   即插即用

execute   ['eksikju:t]   vt.执行，实行，完成

specific [spi'sifik]   n.细节；adj.明确的，特殊的

Microsoft   n.美国微软公司

Abbreviations

RAM   Random Access Memory   随机存储器

ROM   Read-Only Memory   只读存储器

GUI   Graphical User Interface   图形用户界面

DOS   Disk Operating System   磁盘操作系统

Language Points

【1】It is an electronic machine that performs the following four general operations...

这是一个强调句型："It is …that…"。

此句型除了谓语不能强调外其他任何成分都可以强调，把要强调的内容提前，达到强调的目的。

可将句子还原为：An electronic machine performs the following four general operations...

【2】It contains the electronic circuits that cause the computer to follow instructions from ROM (Read-Only Memory) or from a program in RAM (Random Access Memory).

这是一句由 that 引导的限制性定语从句。

that 代替 circuits 在从句里充当主语。注意与从句谓语单复数形式的一致性。

Exercises

Exercise 1   Reading the text, answer the following questions.

1.   What are the four operations performed by an electronic computer?

2.   Can you give some examples of input devices?

3.   What are the two parts of Central Processing Unit (CPU)?

4.   Give some examples of output devices.

5.   What steps have to be taken before a computer application is executed?

6.   What's the full name of GUI?

Exercise 2   Fill in the blanks according to the text.

1.   Computer hardware is made up of the equipment used to make up you computer unit. It is an electronic machine that performs the following four general operations: _____, _____, _____ and _____.

2.   CPU contains the electronic circuits that cause the computer to follow instructions from _____ or from a program in _____.

3.   Application software is _____ to run on _____ and for specific usage.

Exercise 3   Choice.

1.   The "intelligence" of computer locates in the _____, which is one part of CPU.

  A.   Memory   B.   Control Unit (CU)

  C.   Cache   D.   ALU

2.   _____ is the basic unit of computer storage.

  A.   Byte   B.   Bit

  C.   Gigabyte(GB)   D.   Kilobyte(K)

3.   From the following operating system, _____ is not equipped with a Graphical User Interface(GUI).

  A.   Windows NT   B.   DOS

  C.   MacOS   D.   Linux

Exercise 4   Translate the following sentences into Chinese.

1.   The main input devices used are the keyboard, mouse and other devices such as scanner, etc.

———————————————————————————————————

2.   RAM is temporary(暂时) memory, which stores the information you are working on.

———————————————————————————————————

3.   Application software is designed to run on system software for specific usage.

———————————————————————————————————

Exercise 5   Translate the following sentences into English.

1.   中央处理器是计算机的"大脑"。

———————————————————————————————————

2.   当用户启动计算机时，系统软件将加载到计算机的内存，指导计算机装入、存储和执行应用软件。

———————————————————————————————————

Exercise 6   True or False.

1.   Scanner is one kind of input device.   ( )

2.   Monitor is the brain of a computer system.   ( )

3.   People like using DOS because it's user-friendly.   ( )

Reading Materials

Dialogue A

Recycle Bin

A: Oh my God, I have deleted my document! I thought it was of no use.

B: Don't worry, maybe you can recover it.

A: How can I?

B: Open the "Recycle Bin" on your desktop, see if it is there.

A: Wow, thank goodness, it's really there.

Dialogue B

Installing a Program

A: I have just bought a new game CD, but I don't know how to install it.

B: That's pretty easy. Insert the CD into your CD-ROM.

A: Which side up?

B: The side with labels.

A: Ah, the program runs automatically.

Text 2   Computer Evolution

In the beginning

The history of computer starts from 2000 years ago, at the birth of the abacus. When the beads are moved around, according to rules of the user, all common calculation problems can be done.

Blaise Pascal is usually credited for building the first digital computer in 1642. It was made to help his father, a tax collector.

Electronic Digital Computers

The start of World War II produced a large need for computer capacity. New weapons were made, for which great amount of data processing was needed. A high-speed electronic computer was designed to do the job. This machine became known as ENIAC. As shown in Figure 1-7.
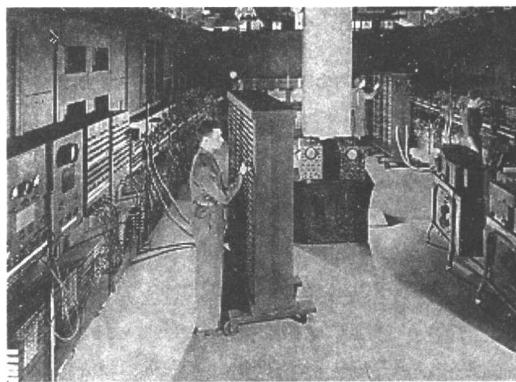
Figure 1-7   ENIAC

ENIAC used 10 decimal digits as a "word", and it could multiply two of these numbers at a rate of 300 per second. ENIAC was about 1,000 times faster than the previous generation of relay computers.

The Modern Stored Program Machine

The mathematician John Von Neumann made an abstract study of computation. He showed that a computer should have a very simple structure, and yet be able to execute any kind of computation.

His ideas, usually referred to as the stored-program method, became important for future generations of high-speed digital computers and were widely adopted.

Advances in the 1950's

Early in the 1950's two important engineering discoveries changed the image of computer, from one of fast but unreliable hardware, to an image of high reliability and even more capability. These discoveries quickly found their way into new models of computers.

More Recent Advances

In the 1980's, Very Large Scale Integration (VLSI), in which hundreds of thousands of transistors were placed on a single chip, became more and more common.

Advance in the area of software has not matched the great advances in hardware. Software has become the major cost of many systems because programming productivity has not increased very quickly. New programming methods, such as object-oriented programming, have been developed.

The computer field continues to grow. With the advances of technology, computers will reside in most, if not all homes, offices and schools.

Vocabulary

evolution [ˌiːvəˈluːʃən] n.进展，发展
abacus [ˈæbəkəs] n.算盘
bead [biːd] n.珠子
credit [ˈkredit] vt.把...归功于
digital [ˈdidʒitl] adj.数字的
tax [tæks] n.税，税款
electronic [iˈlekˈtrɔnik] adj.电子的
digit [ˈdidʒit] n.数字
multiply [ˈmʌltiplai] v.乘，增加
previous [ˈpriːvjəs] adj.在前的，早先的
relay computers n.继电器式计算机
stored program n.存储式程序
method [ˈmeθəd] n.方法
adopt [əˈdɔpt] vt.采用
image [ˈimidʒ] n.图像，景象
unreliable [ˈʌnriˈlaiəbl] adj.不可靠的
reliability [riˌlaiəˈbiliti] n.可靠性
capability [ˌkeipəˈbiliti] n.性能
transistor [trænˈzistə] n.[电子]晶体管
method [ˈmeθəd] n.方法
match [mætʃ] v.相配，相称
productivity [ˌprɔdʌkˈtiviti] n.生产力
programming [ˈprəugræmiŋ] n.程序编写
object-oriented 面向对象（一种编程方法）

advance　[əd'vɑ:ns]　v.前进，进步

Abbreviations

ENIAC　Electrical Numerical Integrator And Calculator　电子数值积分计算机

VLSI　Very Large Scale Integration　　超大规模集成

Language Points

【1】When the beads are moved around, according to rules of the user, all common problems can be done.

这是一个由 when 引导的时间状语从句，中间是由 according to 带出的插入语。according to sth.：“根据...，按照...，依照...”的意思。如：according to one's principles 按照自己的原则行事。

【2】Blaise Pascal is usually credited for building the first digital computer in 1642.

be credited：“把某事归功于某人”。注意 credit 在这是动词，它常常用做名词，表示“信用”的意思。如：credit card 信用卡，credit transfer 银行转账等。

【3】In the 1980's, Very Large Scale Integration (VLSI), in which hundreds..., became...

in which...是一个非限制性定语，在这里相当于 where，修饰前面的主语 Very Large...。

【4】Computers will reside in most, if not all homes, offices and schools.

reside in/at ...：have one's home in a certain place.“安家于...，居住...”的意思。if not all....此句型用来对前面观点进行修正，以避免绝对化。

Exercises

Exercise 1　Reading the text, answer the following questions.

1. What's the original form of computer?

2. Who is considered as the builder of the first digital computer?

3. What produced a large need for computer capacity in the 1940s?

4. Who contributed to the modern model of computer? What was he?

5. What's the main advance of computer technology in the 1980's?

Exercise 2　Fill in the blanks according to the text.

1. Blaise Pascal is usually _____ building the first digital computer in 1642.

2. Ideas of John Von Neumann, usually referred to as the _____ technique, became essential for future generations of high-speed digital computers and were widely adopted.

3. In the 1980's, Very Large Scale Integration (VLSI), in which hundreds of thousands of transistors _____ a single chip, became more and more common.

Exercise 3　Choice.

1. ENIAC was about _____ times faster than the previous generation of relay computers.

　　A.　10　　　　　　　　　　　　B.　100

　　C.　1,000　　　　　　　　　　　D.　10,000

2. The ideas proposed by John Von Neumann are usually referred to as _____technique.

  A. defined-program   B. object-oriented

  C. run-program   D. stored-program

3. Advance in the area of software has not _____ the great advances in hardware.

  A. increased   B. matching

  C. decreased   D. matched

Exercise 4 Translate the following sentences into Chinese.

1. Software has become the major cost of many systems because programming productivity has not increased very quickly.

———————————————————————————————————

2. Advance in the area of software has not matched the great advances in hardware.

———————————————————————————————————

3. With the advances of technology, computers will reside in most, if not all homes, offices and schools.

———————————————————————————————————

Exercise 5 Translate the following sentences into English.

1. 为了完成这些任务，人们制造了一台高速的电子计算机。

———————————————————————————————————

2. 数学家 John Von Neumann 进行了一项关于计算理论的研究。

———————————————————————————————————

3. 80 年代，超大规模集成技术的应用越来越普遍，它实现了在一个芯片之上集成数以十万计的晶体管。

———————————————————————————————————

Exercise 6 True or False.

1. The first computers were invented for the needs of science.   ( )

2. The start of the first World War produced a large need for computer capacity. ( )

3. The size of ENIAC's numerical "word" was 10 decimal digits.   ( )

4. Progress (发展) in the area of hardware has not matched the great advances in software.

                           ( )

Reading Materials

Different Parts of Computer

  The computer is an electronic device, much like a television or stereo. It takes some patience and a little practice to properly work a computer. Operating a computer is like ridding a bike, once you learn how it becomes much easier.

  The most important thing to remember as a beginner is to take the time to learn how to use the mouse. Actually doing something on a computer is the best way to learn.

  MONITOR - The monitor looks like a television set. You can see what the computer is doing on the monitor. The buttons on the monitor can change the color, size and shape of the screen. The power button turns the monitor on and off.