

**МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ**

Федеральное государственное бюджетное образовательное
учреждение высшего образования
«Воронежский государственный технический университет»

Естественно-технический колледж

МЕТОДИЧЕСКИЕ УКАЗАНИЯ

для практических занятий и самостоятельной работы
по дисциплине «Иностранный язык» (английский)
для студентов 4 курса специальности
09.02.01 «Компьютерные системы и комплексы»
очной формы обучения



Воронеж 2019

УДК 881.111(07)
ББК 81.2я7

Составители: *преп. Ю. В. Малютина,
преп. И. В. Полухина*

Методические указания для практических занятий и самостоятельной работы по дисциплине «Иностранный язык» (английский) для студентов 4 курса специальности 09.02.01 «Компьютерные системы и комплексы» очной формы обучения / ФГБОУ ВО «Воронежский государственный технический университет»; сост.: Ю. В. Малютина, И. В. Полухина. Воронеж: Изд-во ВГТУ, 2019. – 56 с.

Методические указания включают в себя тексты и упражнения, тематика которых определяется специальной направленностью и тем минимумом, который необходим студентам для профессиональной деятельности на английском языке; направлены на развитие и совершенствование навыков чтения, говорения, аудирования и письма и формирование общих компетенций.

Данные методические указания предназначены для студентов 4 курса естественно-технического колледжа специальности 09.02.01 «Компьютерные системы и комплексы», продолжающих изучение английского языка для профессиональных целей в соответствии с ФГОС СПО.

Методические указания подготовлены в электронном виде и содержатся в файле МУ КСК англ.pdf.

Ил. 10. Табл. 3. Библиогр.: 5 назв.

УДК 881.111(07)
ББК 81.2я7

Рецензент – канд. филол. наук, доц. А. А. Падурец

*Издается по решению учебно-методического совета
Воронежского государственного технического университета*

ВВЕДЕНИЕ

Целью обучения английскому языку для профессиональных целей в системе СПО является: формирование языковой, речевой и социокультурной компетенций; овладение обучающимися элементами непосредственного и навыками опосредованного общения на английском языке для последующего использования и совершенствования сформированных в процессе обучения общих компетенций в бытовой, профессиональной и академической деятельности.

Изучение английского языка также призвано обеспечить: повышение уровня учебной автономии обучающихся; способность к самообразованию; развитие творческих способностей; развитие информационной культуры; повышение общей культуры студентов.

Цель занятий: совершенствование умений профессионально ориентированного устного и письменного общения по заданной теме.

Задачи занятий:

- совершенствование умений просмотрового и поискового чтения текстов, профессионально ориентированной тематики;
- совершенствование навыков перевода;
- совершенствование умений оформления устного и письменного сообщения по заданной теме;
- совершенствование умений обработки информации при помощи информационно-коммуникативных технологий;
- совершенствование когнитивных умений анализировать, обобщать информацию, делать выводы;
- совершенствование мотивационной составляющей для изучения английского языка у студентов за счёт использования информации, касающейся сферы их профессиональных интересов, с учётом междисциплинарных связей.

INFORMATION TECHNOLOGY – A DEFINITION

1. Read. Write down and translate the marked words.

We use the term information technology or IT **to refer to** an **entire** industry. In actuality, information technology is the use of computers and **software** to manage information. In some companies, this is referred to as Management Information Services (or MIS) or simply as Information Services (or IS). The information technology department of a large company would be responsible for storing information, protecting information, processing the information, transmitting the information as necessary, and later **retrieving** information as necessary.

History of Information Technology:

In **relative** terms, it wasn't long ago that the Information Technology department might have consisted of a single Computer Operator, who might be storing data on magnetic tape, and then putting it in a box down in the **basement** somewhere. The history of information technology is **fascinating!** Check out these history of information technology resources for information on everything from the history of IT to electronics inventions and even the top 10 IT **bugs**.

Modern Information Technology Departments:

In order to perform the complex functions **required** of information technology departments today, the modern Information Technology Department would use computers, servers, database management systems, and cryptography. The department would be made up of several System Administrators, Database Administrators and **at least** one Information Technology Manager. The group usually reports to the Chief Information Officer (CIO).

2. Write down and translate the skills.

Popular Information Technology Skills:

Some of the most popular information technology skills at the moment are:

- Computer Networking
- Information Security
- IT Governance
- ITIL
- Business Intelligence
- Linux
- Unix
- Project Management

Jobs in IT:

There can be a lot of **overlap** between many of the job descriptions within information technology departments. **In order to clarify** the descriptions, skills and **career paths** of each, I have put together a Jobs in IT listing. The jobs in IT listing includes information on education and training required for each position. It also includes lists of companies that typically have IT jobs open, as well as links to IT-specific resumes, cover letters and IT interview questions [1].

3. Exercise. Using the diagram, complete the paragraph below.

A computer, has four basic components: input, processor, storage and output. The CPU consists of two parts: the ¹ _____, which directs and controls the signals and commands inside the processor, and the ² _____ unit, which does the arithmetic operations and the decision-making operations. While the ³ _____ is made up of a ⁴ _____, a ⁵ _____, a ⁶ _____, and a ⁷ _____, the ⁸ _____ is composed of ⁹ _____, a ¹⁰ _____, and ¹¹ _____.

In a computer, internal memory or ¹² _____ refers to the storage locations inside the computer, whereas ¹³ _____ refers to the storage embodied in the peripherals. ¹⁴ _____ may be divided into ¹⁵ _____ (¹⁶ _____) and ¹⁷ _____ (¹⁸ _____).

The ¹⁹ _____ devices can be either a ²⁰ _____, a ²¹ _____, or a ²² _____. These devices enter information into the computer. After the processor has operated on it, the ²³ _____ devices display the results of the computations on either a ²⁴ _____ or a ²⁵ _____, or store them on tape or disk for future use.

A Computer system

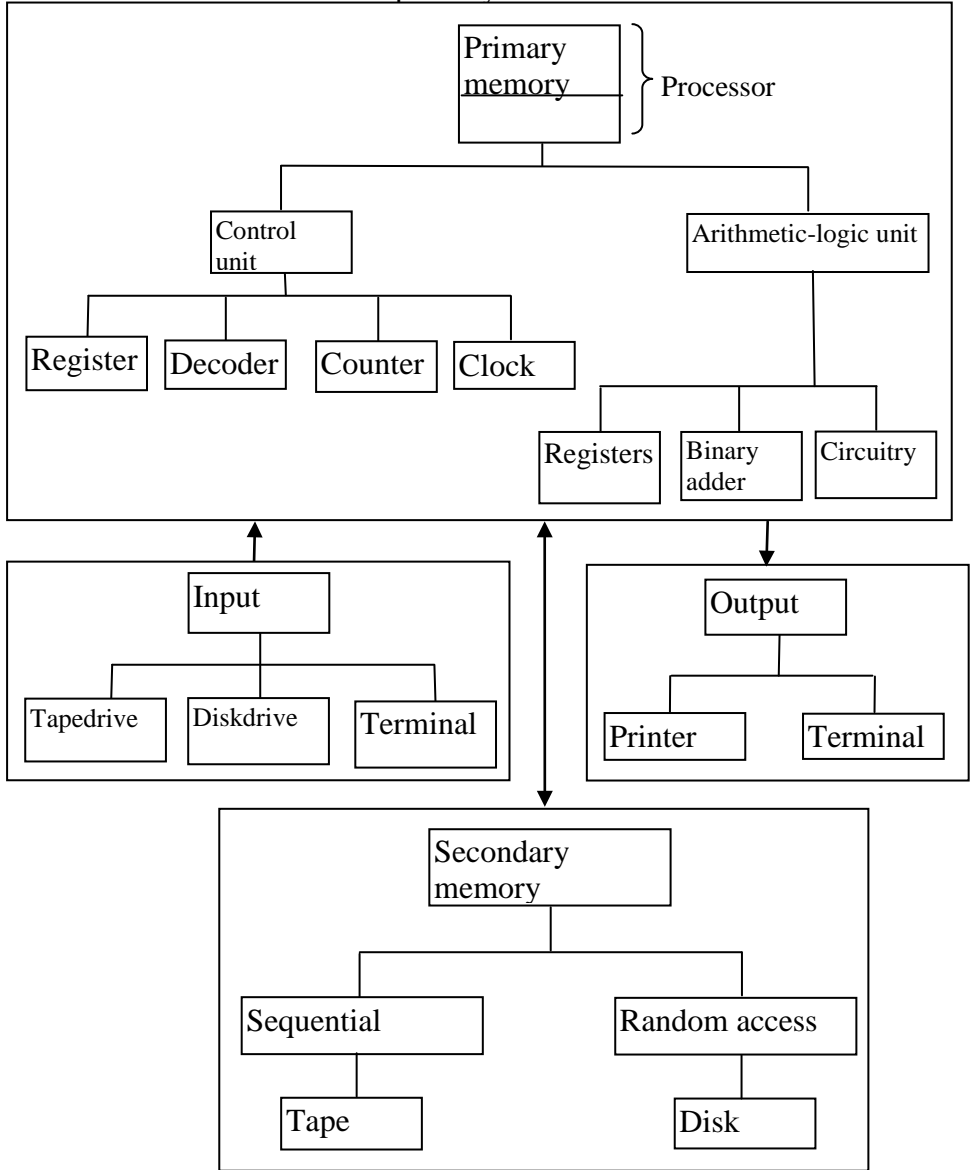


Figure 1

HOW CLOUD COMPUTING AND MOBILE TECH IS CHANGING OUR DAILY LIVES

1. Read. Write down and translate the marked words.

In today's world our computers have become an **inseparable part** of our daily lives. We take them with us everywhere we go in one form or another. This constant **availability** to technology has created an **environment** where we are always connected to the important data of our lives.

One of the major advantages of having technology at our **fingertips** is that we always **have access** to our favorite movies, photos, music and more. When traveling, we never have to be without important documents, **out of touch** with friends and family members, or be without the latest news and **current events**. Of course, with all this connectivity we also need **tools** and services **to keep everything straight** and easy to use. One of the most important developments in that regard has been the "cloud".

Cloud computing is a term that is used to refer to the storage of information on internet based servers rather than **local storage devices**. A person can access data from any connected device that has been **given permission** to do so and, if needed, has the right software installed. Some services and functions require you to install specialized programs, while others simply are used through portals accessible from your internet browser.

Some of the more popular cloud-based services are photo and music **sharing sites**. These services allow you to back up your photos and share them with others, with only a few clicks of the mouse. It is no longer necessary **to "zip"** photo files, use complicated compression formats, or wait for pictures to be printed out and **mailed** to loved ones. **Uploading** files and **giving permissions** to your friends and family is an easy task that will allow them **to view** your latest pictures from their systems.

Another very active component of cloud computing is the

virtual office. Services such as Google apps, allow you to keep all of your office suite applications available anytime you need them, from any connected device. You can do just about anything with one of these services that you could do with **desktop-based software**, such as write documents, work with **spreadsheets** and even create slide show presentations.

These systems are also **tied** to social networking and the cyber-life trend that is becoming popular. These social networking services take advantage of the power of the cloud **to make sharing**, connecting and experiencing information much easier than ever before.

Adding a computing system that is specifically designed to be **versatile** and **flexibility** is the logical evolution of the hyper-connected, everywhere tech life that we have developed in our **modern society**. These are only the first stages of the ever **expanding technological demands** that are being addressed by developers and programmers. As new demands are placed on systems, they will continue **to evolve** to meet the needs of **consumers** [2].

The most widely accepted definition of the computer includes the following operations:

- **Input.** A computer accepts data that is provided by means of an **input device** such as a keyboard.
- **Processing.** A computer performs operations on the data to transform it in some way.
- **Output.** A computer produces output on a device, such as a printer or monitor, that shows the results of processing operations.
- **Storage.** A computer stores the results of processing operations for future use.

This definition is often referred to as the IPOS cycle. The four steps of the IPOS cycle input, processing, output storage -

don't have to occur in a rigid I- P-O-S sequence. Under the direction of a program, a computer uses the steps of this process when needed and as often as needed.

2. Exercises.

2.1. Write the translations.

GUI, window, icon, pointer, menu, interface, dialog box, textbook, checkbox, title bar, tab, recycle bin, arrow pointer.

2.2. Give the Russian equivalents:

to centre attention on; to the right; to the left; a set of figures; and so on; a sequence of reasonable operations; to put out answers; to take in information; to store information; such as; to express mathematical and logical relations; by using physical analogs; numerical measurements.

2.3. Make definitions by adding to the statements (1-10).

- | | |
|--|--|
| 1. A barcode is a pattern of printed black lines | a. it contains the main electronic components. |
| 2. A floppy is a disk | b. it adds features to a computer. |
| 3. A motherboard is a printed circuit board | c. it is about the size of a piece of paper. |
| 4. A password is a secret set of characters | d. supermarkets use them for pricing. |

- | | |
|--|--|
| 5. A monitor is an output device | e. it reads and writes to disks. |
| 6. A disk drive is a unit | f. it can hold 1.44 Mb of data. |
| 7. An expansion card is an electronic board | g. it allows access to a computer system. |
| 8. A CD-ROM drive is a common storage device | h. it controls all the other boards in a computer. |
| 9. A notebook is a portable computer | i. it displays data on a screen. |
| 10. The system unit is the main part of the computer | j. it reads data from a CD-ROM disk. |

WHAT IS HARDWARE?

1. Read. Write down and translate the marked words, find all hardware components.

Your PC (Personal Computer) is a system, consisting of many components. Some of those components, like Windows XP, and all your other programs, are software. **The stuff** you can actually see and touch, and would likely break if you threw it out a fifth-story window, is hardware.

Not everybody has **exactly** the same hardware. But those of you who have a desktop system, like the example shown in Figure 2, **probably** have most of the components shown in that same figure. Those of you with notebook computers probably have most of the same components. Only in your case the components are all integrated into a single book-sized portable unit.

The system unit is the actual computer; everything else is called a peripheral device. Your computer's system unit probably has at least one floppy disk drive, and one CD or DVD drive, into

which you can insert floppy disks and CDs. There's another disk drive, called the hard disk inside the system unit, as shown in Figure 2. You can't remove that disk, or even see it. But it's there. And everything that's currently "in your computer" is actually stored on that hard disk. (We know this because there is no place else inside the computer where you can store information!).

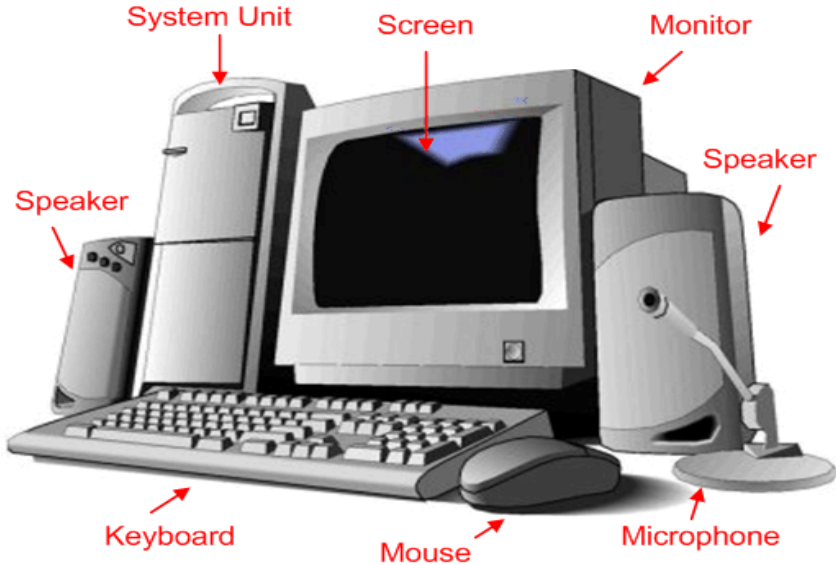


Figure 2 [2]

The floppy drive and CD drive are often referred to as drives with **removable** media or removable drives for short, because you can remove whatever disk is currently in the drive, and replace it with another. Your computer's hard disk can store as much information as tens of thousands of floppy disks which are running out of space very soon. That's why, now we practically don't use floppy disks and CDs. You may store everything you create or download on your USB. We use it to send copies of files through the mail, or to make backup copies of important **items**.

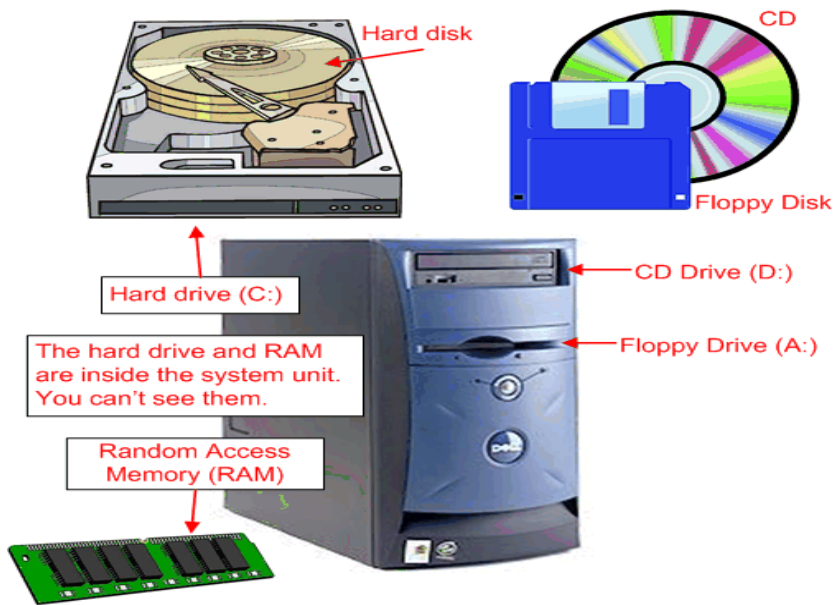


Figure 3

2. Give a scientific definition to hardware.

3. Переведите текст:

Персональный компьютер предназначен для удовлетворения потребностей личности. У персонального компьютера есть четыре основные операции: ввод, обработка, вывод и хранение данных. Данные представляют собой некоторую последовательность, которая вводится в компьютер. Компьютер может быть использован для решения различного рода задач. Для разных целей существуют определенные программы.

USB (UNIVERSALSERIALBUS)

1. Read. Write down and translate the marked words.

USB (Universal Serial Bus) is the most popular connection used to connect a computer to devices such as digital cameras, printers, scanners, and **external** hard drives. USB is a cross-platform technology that is supported by most of the major operating systems. On Windows, it can be used with Windows 98 and higher. USB is a **hot-swappable technology**, meaning that USB devices can be added and **removed** without having to **restart** the computer. USB is also “plug and play”. When you connect a USB device to your PC, Windows should **detect** the device and even install the drivers needed to use it.

There are two versions of USB. The original version of USB, USB 1.0, only supported speeds of up to 11 Mbps and was used mostly to connect keyboards and mice. The latest version of USB, which is known as USB 2.0, supports speeds of up to 480 Mbps. **In order to take** advantage of the higher speeds of USB 2.0 you will need to have ports installed on your computer that are also USB 2.0.

USB connectors come in three different types:

The Type A connector is the flat connector that plugs into the USB port on your computer.



Figure 4

The other end of the USB cable can be either Type B or mini-Type B. The bigger, **square-shaped** Type B connector is often used for scanners and hard drives.



Figure 6



Figure 5

A smaller, trapezoid shaped mini-Type B is used for cameras, MP3 players and other smaller devices. [3]

2. Give a scientific definition to hot-swappable technology.

3. Tell about the ways USB is used.

4. Complete the following tables.

Table 1

SHAPES










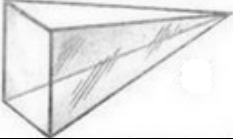
Two-dimensional shapes	Noun	Adjective
	square	square
	circle	
	triangle	
		semicircular
		-shaped
Choose yourself		

Table 2

Three-dimensional shapes	Noun	Adjective
		spherical
	hemisphere	
	cylinder	
	cone	
		pyramidal
Choose yourself		

RANDOM ACCESS MEMORY (RAM)

1. Read. Write down and translate the marked words.

There's too much "stuff" on your computer's hard disk to use it all at **the same time**. During the **average** session sitting at the computer, you'll probably use only a small amount of all that's available. The stuff you're working with at any given moment is stored in random access memory (often abbreviated RAM, and often called simply "memory"). The advantage using RAM to store whatever you're working on at the moment is that RAM is very fast. Much faster than any disk. For you, "fast" translates to less time waiting and more time being productive.

So if RAM is so fast, why not to put everything in it? Why do we have a hard disk at all? The answer to that lies in the fact that RAM is volatile. As soon as the computer is switched off, everything in RAM **disappears**, just as quickly as a **light bulb goes out** when the plug is pulled. So you don't want **to rely on** RAM to hold everything. A disk, on the other hand, holds its information whether the power is on or off.

The Hard Disk

All of the information that's "in your computer", so to speak, is stored on your computer's hard disk. You never see that actual hard disk because it's **sealed** inside a special housing and needs to stay that way. Unlike RAM, which is volatile, the hard disk can hold information forever -- with or without electricity. Most modern hard disks have tens of billions of bytes of **storage space** on them. Which, in English, means that you can create, save, and download files for months or years without using up all the storage space it **provides**.

In the unlikely event that you do manage **to fill up** your hard disk, Windows will start showing a little message on the screen that reads "**You are running low on disk space**" well in

advance of any problems. In fact, if that message appears, it won't until you're down to about 800 MB of free space. And 800 MB of empty space is equal to about 600 blank floppy disks. That's still **plenty of room!**

The Mouse

Obviously you know how to use your mouse, since you must have used it to get here. But let's take a look at the facts and **buzzwords** anyway. Your mouse probably has at least two buttons on it. The button on the left is called the primary mouse **button**, the button on the right is called the secondary mouse button or just the right mouse button. I'll just refer to them as the left and right mouse buttons. Many mice have a small wheel between the two mouse buttons, as illustrated in Figure 7.

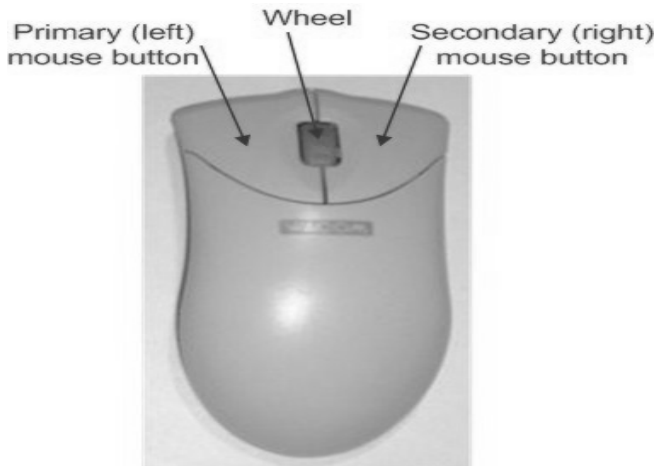


Figure 7

The idea is to rest your hand comfortably on the mouse, with your **index finger** touching (but not pressing on) the left mouse button. Then, as you move the mouse, the **mouse pointer** (the little **arrow** on the screen) moves in the same direction. When

moving the mouse, try to keep the buttons **aimed toward** the monitor -- don't "twist" the mouse as that just makes it all the harder to control the position of the mouse pointer.

If you find yourself reaching too far to get the mouse pointer where you want it to be on the screen, just **pick up** the mouse, move it to where it's comfortable **to hold it**, and place it back down on the mousepad or desk.

The Keyboard [ˈki:b,ɔ:d]

Like the mouse, the keyboard is a means of interacting with your computer. You really only need to use the keyboard when you're typing text. Most of the keys on the keyboard are **laid out** like the keys on a typewriter. But there are some special keys like Esc (Escape), Ctrl (Control), and Alt (Alternate). There are also some keys across the top of the keyboard labeled F1, F2, F3, and so forth. Those are called the **function keys**, and the exact role they play depends on which program you happen to be using at the moment.

Most keyboards also have a **numeric keypad** with the keys laid out like the keys on a typical **adding machine**. If you're accustomed to using an adding machine, you might want to use the numeric keypad, rather than the numbers across the top of the keyboard, to type numbers. It doesn't really matter which keys you use. The numeric keypad is just there as a convenience to people who are accustomed to adding machines.

Most keyboards also contain a set of **navigation keys**. You can use the navigation keys to move around through the text on the screen. The navigation keys won't move the mouse pointer. Only the mouse moves the mouse pointer.

On smaller keyboards where space is limited, such as on a notebook computer, the navigation keys and numeric keypad might be one in the same. There will be a Num Lock key on the keypad. When the Num Lock key is "on", the numeric keypad keys type numbers. When the Num Lock key is "off", the navigation keys

3. Словообразование. Подберите к словам на английском языке русские соответствия.

Обратите внимание на слова с приставками un-, non-, in-, dis-, il-, ir-, mis-, mal-, anti-, de-, under-, которые придают слову отрицательное значение.

1) unmagnetized; 2) incomplete; 3) impossible; 4) illegal; 5) irregular; 6) irrelevant; 7) non-programmable; 8) misdirect; 9) malfunction; 10) disagree; 11) disconnect; 12) antiglare; 13) decode; 14) demagnetize; 15) underestimate.

1) неполный, незаконченный; 2) недооценивать; 3) размагничивать; 4) декодировать; 5) противосветовой; 6) несвязный; 7) несогласие; 8) сбой, ошибка; 9) непрограммируемый; 10) беспорядочный; 11) незаконный; 12) невозможный; 13) неправильно, направлять; 14) размагниченный; 15) неуместный.

4. Подберите к русским словам и словосочетаниям английские соответствия:

1) компьютер; 2) значить, означать; 3) считать; 4) преобразовывать; 5) внешнее устройство; 6) жесткий; 7) программируемый; 8) аппаратура; 9) программное обеспечение; 10) инструмент; 11) производить; 12) основной; 13) ввод; 14) обработка; 15) выход; 16) хранение.

1) mean; 2) count; 3) basic; 4) input; 5) storage; 6) output; 7) rigid; 8) transform; 9) computer; 10) device; 11) hardware; 12) programmable; 13) software; 14) tool; 15) processing; 16) perform.

SOFTWARE

1. Read. Write down and translate the marked words.

Sometimes abbreviated as **S/W**, **software** is a collection of instructions that enable a user to interact with the computer or have the computer perform specific tasks for them. Without software, the computer would be useless. For example, without your Internet browser software you would **be unable** to browse the Internet or read this page and without a software operating system the browser would not be able **to run on** your computer.

How do you get software?

Software can be **purchased at a local retail computer store** and online and is usually included in a box which usually contains all the disks (floppy diskette, CD, DVD, or Blu-ray) required to install the program onto the computer, manuals, warranty, and other important documentation.

Software can also be downloaded to the computer over the Internet. Once downloaded the setup file can be run to start the installation of the program on your computer.

Free software

In addition to purchasing software there are also millions of free software programs available that are broken into several different types of categories. First, **shareware** or **trial** software is software that gives you a few days to try the software before you buy the program. After the trial **time expires** you'll be asked to enter a code or to register the product before you can continue to use the program. Freeware is another type of free software, this software is free to use to anyone for as long as they wish with no obligations **to pay**. Finally, open **source** software is like freeware but not only is the program **given away** but the code used to make the program is also given away, which allows anyone to modify the program or just view how it was created.

Examples of types of software

Below is a short list of the different types of software that a computer may have installed as well as an examples of each program. Antivirus (AVG)

- Audio / Music program (iTunes)
- Database (Access)
- Device drivers
- E-mail (Outlook)
- Game (World of Warcraft)
- Internet browser (Firefox)
- Movie player (VLC)
- Operating system (Windows XP)
- Photo / Graphics program (CorelDRAW)
- Presentation (Powerpoint)
- Programming language (Perl)
- Simulation (Flight simulator)
- Spreadsheet (Excel)
- Utility (Compression, Disk Cleanup, Encryption, Registry cleaner, Screensaver)

- Word processor (Word)

How is software created?

A computer programmer or several computer programmers write the instructions using a programming language that tell the software how to work. Once a program has been completed it is **compiled into** a language that the computer can understand. [4]

2. Переведите текст:

Слово 'computer' в латинском языке означает "считать". Компьютер - это электронное устройство. Компьютер имеет аппаратную часть, которая называется 'hardware'. Аппаратная часть состоит из самой машины и ее компонентов. Для работы с компьютером существует программное обеспечение, называемое 'software'. Компьютеры являются программи-

руемыми устройствами, то есть то, что делает компьютер, зависит от программы, которую он использует. Программа - перечень инструкций. Вне зависимости от того, какую программу использует компьютер, машина выполняет четыре основные операции: ввод, обработку, вывод, хранение.

3. Словообразование.

а) выучите приставки размера:

semi- (половина, частично); equi- (равный); mini- (малый);

micro- (очень малый); macro- / mega- (большой, великий).

б) подберите английским словам их русские соответствия:

1) semiconductor; 2) equidistant; 3) minicomputer; 4) macroeconomics; 5) megabyte; 6) microcomputer.

1) мегабайт (2^{20} байт); 2) макроэкономика; 3) микроЭВМ; 4) мини-ЭВМ; 5) равноотстоящий; 6) полупроводник.

4. Подберите к русским словам их английские соответствия.

1) процедура; 2) клавиша; 3) память; 4) хранение; 5) выключать; 6) десятичная система счисления; 7) бит; 8) рабочая область (памяти); 9) дисковод; 10) временный; 11) двоичные числа; 12) символ; 13) байт.

1) temporary; 2) workspace; 3) disk drive; 4) binary digits; 5) key; 6) storage; 7) memory; 8) switch off / turn off; 9) procedure; 10) decimal number system; 11) byte; 12) character; 13) bit.

PERIPHERAL (*AUXILIARY*) DEVICES

1. Read. Write down and translate the marked words.

A computer peripheral is any **external** device that provides input and output for the computer. For example, a keyboard and mouse are input peripherals, while a monitor and printer are output peripherals. Computer peripherals, or peripheral devices, are sometimes called "I/O devices" because they provide input and output for the computer. Some peripherals, such as external hard drives, provide both input and output for the computer.

Some common input devices include:

- 1) keyboard
- 2) mouse
- 3) touchscreen
- 4) joystick
- 5) scanner
- 6) digital camera
- 7) video camera
- 8) microphone
- 9) Some common output devices include:
- 10) monitor
- 11) projector
- 12) TV screen
- 13) printer
- 14) plotter
- 15) speakers [5]

2. Do you agree with the given definition to peripheral devices? Give a scientific definition to peripheral devices.

3. Tell some words about wired and wireless connection.

4. Do Exercises.

4.1. Fill in the gaps in the following sentences using the appropriate form of the verb in brackets. Translate.

1. The part of the processor which controls data transfers between the various input and output devices _____ (call) the control unit.
2. The address bus _____ (use) to send address details between memory and the address register.
3. The pixel positions _____ (pass on) to the computer's pattern recognition software.
4. An operating system _____ (store) on disk.
5. Instructions written in a high-level language _____ (transform) into machine code.
6. In the star configuration, all processing and control functions _____ (perform) by the central computer.
7. When a document arrives in the mail room. the envelope _____ (open) by a machine.
8. Once the index _____ (store), a temporary key number _____ (generate) and _____ (write) on the document.

4.2. Match these words with their definitions:

<ul style="list-style-type: none"> a. clipboard b. stylus c. screen d. grid e. voltage f. pixel g. template 	<ul style="list-style-type: none"> 1. surface on which picture or data are shown 2. electrical force 3. pattern used as a guide for creating letters or characters 4. individual dot on a computer screen 5. network of lines crossing at right angles 6. pointed implement for drawing or writing 7. portable board with a clip at the top for holding papers
--	---

4.3. Choose the correct word to complete each sentence.

1. *electron, electronic, electronics, electronically*

- a) An _____ pen is one example of an input device.
- b) A computer solves problems _____ .
- c) Many _____ students go on to work as engineers.

2. *technology, technological, technologically, technologist*

- a) The computer is the greatest _____ invention of the twentieth century.
- b) There are two _____ involved in a clipboard PC.
- c) Today's computers are _____ far superior to those used a few years ago.

3. *identify, identifying, identifiable, identity*

- a) The clipboard's pattern recognition software immediately _____ the letters and numbers written by the stylus.
- b) Most computer companies will not allow people without an _____ card to enter their premises.
- c) A password is a mechanism for _____ the computer-user and allowing access.

4. *compute, computing, computation, computerize, computerization*

- a) The _____ of the manufacturing division will be expensive in the-short term, but cost-effective in the long term.
- b) We should be able to _____ our profit for next year fairly accurately with the new program.
- c) I could tell from all the _____ on the board that a math's lesson was in progress.

CD-ROM

1. Read. Write down and translate the marked words.

CD-ROM (Compact Disc, read-only-memory) is an adaptation of the CD that is designed to store computer data in the form of text and graphics, as well as hi-fi stereo sound. The original data format standard was defined by Philips and Sony in the 1983 Yellow Book. Other standards are used **in conjunction** with it to define directory and file structures, including ISO 9660, HFS (Hierarchical File System, for Macintosh computers), and Hybrid HFS-ISO. Format of the CD-ROM is the same as for audio CDs: a standard CD is 120 mm (4.75 inches) in diameter and 1.2 mm (0.05 inches) thick and is composed of a polycarbonate plastic **substrate** (**underlayer** - this is the main body of the disc), one or more thin **reflective metal** (usually aluminum) layers, and a lacquer coating.

The Yellow Book specifications were so general that there was some **fear** in the industry that **multiple incompatible** and **proprietary** formats would be created. In order to prevent such an **occurrence**, representatives from industry leaders met at the High Sierra Hotel in Lake Tahoe **to collaborate** on a common standard. Nicknamed the *High Sierra Format*, this version was later modified to become ISO 9660. Today, CD-ROMs are standardized and will work in any standard CD-ROM drive. CD-ROM drives can also read audio compact discs for music, although CD players cannot read CD-ROM discs.

CD-ROM Data Storage

Although the disc media and the drives of the CD and CD-ROM are, in principle, **the same**, there is a difference in the way data storage is organized. Two new sectors were defined, Mode 1 for storing computer data and Mode 2 for compressed audio or video/graphic data.

CD-ROM Mode 1

CD-ROM Mode 1 is the mode used for CD-ROMs **that carry data and applications only**. In order to access the thousands of data files that may be present on this type of CD, **precise** addressing is necessary. Data is laid out in nearly the same way as it is on audio disks: data is stored in sectors (the smallest separately addressable block of information), which each hold 2,352 bytes of data, with an additional number of bytes used for error detection and correction, as well as control structures. For mode 1 CD-ROM **data storage**, the sectors are further **broken down**, and 2,048 used for the expected data, while the other 304 bytes are **devoted to extra error detection** and correction code, because CD-ROMs are not as **fault** tolerant as audio CDs. There are 75 sectors per second on the disk, which yields a disc capacity of 681,984,000 bytes (650MB) and a single speed transfer rate of 150 KBps, with higher rates for faster CD-ROM drives. Drive speed is expressed as multiples of the single speed transfer rate, as 2X, 4X, 6X, and so on. Most drives support CD-ROM XA (Extended Architecture) and Photo-CD (including multiple session discs).

CD-ROM Mode 2

CD-ROM Mode 2 is used for compressed audio/video information and uses only two layers of error detection and correction, the same as the CD-DA. Therefore, all 2,336 bytes of data behind the **sync** and **header bytes** are for user data. Although the sectors of CD-DA, CD-ROM Mode 1 and Mode 2 are the same size, the amount of data that can be stored varies **considerably** because of the use of sync and header bytes, error correction and detection. The Mode 2 format offers a flexible method for storing graphics and video. It allows different kinds of data to be mixed together, and became the basis for CD-ROM XA. Mode 2 can be read by

normal CD-ROM drives, in conjunction with the **appropriate** drivers.

Data Encoding and Reading

The CD-ROM, like other CD adaptations, has data encoded in a **spiral track** beginning at the center and ending at the **outermost edge of the disc**. The spiral track holds **approximately** 650 MB of data. That's about 5.5 billion bits. The distance between two tracks on a **surface**, measured from the center of one **track** to the center of the next track is **referred to as track pitch**. The track pitch can range from 1.5 to 1.7 microns, but in most cases is 1.6 microns.

Constant Linear Velocity (CLV) is the principle by which data is read from a CD-ROM. This principal states that the read head must interact with the data track at a constant rate, whether it is accessing data from the inner or **outermost portions** of the disc. This is affected by varying the **rotation speed** of the disc, from 500 rpm at the center, to 200 rpm at the outside. In a music CD, data is read **sequentially**, so rotation speed is not **an issue**. The CD-ROM, on the other hand, must read in random patterns, which necessitates constantly **shifting rotation** speeds. Pauses in the read function are **audible**, and some of the faster drives can be quite **noisy** because of it. [6]

2. **Explain what the byte is.**
3. **Explain what the driver is.**
4. **Exercise. Word-play. Find the hidden words in this square. Some appear vertically, some horizontally, and some diagonally. They may be upside-down or back to front. Use the clues below to help you. The number of letters in each word and the first letter of the word appear in brackets. The first one has been done for you.**

4.1. Find words which mean:

1. a computer that is small enough to hold in the hand (7, P)
2. an electronic pen (6, S)
3. to erase or omit (6, D)
4. one type of portable computer which operates with an electronic pen (9, C)
5. the information that the computer processes (4, D)
6. a network of lines crossing at right angles (4, G)
7. a signal to a processor to suspend temporarily the current sequence of instructions (9, I)
8. a pattern used as a guide for creating letters or characters (8, T)
9. an individual dot on a computer screen (5, P)

C	T	A	A	R	I	T	P	L	R
L	P	N	T	P	I	D	A	E	E
I	U	E	A	E	E	B	L	X	T
P	R	T	D	L	A	F	M	I	E
B	R	E	E	S	N	O	T	P	M
O	E	T	G	R	I	D	O	T	P
A	E	C	V	K	L	M	P	Y	L
R	N	D	S	T	Y	L	U	S	A
D	E	L	E	T	E	Y	S	T	T
T	P	U	R	R	E	T	N	I	E

Figure 9

4.2. Arrange (a) synonyms and (b) antonyms in pairs and translate them:

a) speed; peripheral; to control; to write; auxiliary; to do; to receive; rate; to record; to get; to make; to handle; device; unit; instruction; part; to accept; command; section; information; data; to take in.

b) to add; presence; hole; input; full; north; to multiply; to divide; solid; south; output; blank; absence; to subtract.

BRIEF HISTORY OF PROGRAMMING LANGUAGES

1. Read. Write down and translate the marked words.

1842 Most historians recognize Ada Lovelace as the world's first programmer. She wrote an algorithm for Charles Babbage's Analytical Engine. While she may be **credited** with being the first programmer, the algorithms Lovelace wrote for Charles Babbage's Analytical Engine **hardly** counted as a "programming language".

1945 John Von Neumann developed two important concepts that **directly affected the path** of computer programming languages. The first was known as "shared-program technique". The second concept was "conditional control transfer".

1951 High level language compiler invented by Grace Murray Hopper. A compiler is a program that turns the language's statements into 0's and 1's for the computer to understand. This led to faster programming, as the programmer **no longer** had to do the work **by hand**.

1954 FORTRAN (FORmulaTRANslation) development started by John Backus and his team at IBM - continuing until 1957. FORTRAN is a programming language, used for Scientific programming.

- 1958 LISP (interpreted language) developed, Finished in 1960. LISP stands for 'LIST Processing', but some call it '*Lots of Irritating and Stupid Parenthesis*' due to the huge number of confusing **nestedbrackets** used in LISP programs. Used in A.I. development. Developed by John McCarthy at Massachusetts Institute of Technology.
- 1959 COBOL (COMmon Business-Orientated Language) was developed, the initial specifications being **released** in April 1960.
- 1960 ALGOL - first structured, procedural, language to be released.
- 1961 APL programming language released by Kenneth Iverson at IBM.
- 1964 Programming language PL/1 released by IBM.
- 1965 BASIC (Beginners All Purpose Symbolic Instruction Code) developed at Dartmouth College, USA, by Thomas E. Kurtz and John Kemeny. Not **implemented** on microcomputers until 1975. It is often used in education to teach programming, and also at home by **beginners**.
- 1967 Development on PASCAL started, to be finished in 1971. Based on ALGOL. Developed by Niklaus Wirth. Its use **exploded** after the introduction of Turbo Pascal, by Borland, in 1984 - a high speed and low cost compiler. It is used for a **wide variety** of tasks, it contains many features, is well structured and easy to learn. Borland Pascal v7.0 included an implementation of Object-Orientated programming (similar to C++).
- 1968 LOGO programming language developed by Seymour Papert and team at MIT.
- 1970 'Forth' programming language developed.
- 1971 Development of PASCAL finished - see 1967.
- 1972 C programming language developed at The Bell Laboratories

in the USA by Dennis Ritchie (one of the inventors of the UNIX operating system), its **predecessor** was the B programming language - also from The Bell Laboratories. It is a very popular language, especially for systems programming - as it is **flexible** and fast. C++, allowing for Object-Orientated Programming, was introduced in early 1980s.

1973 Prolog developed at the University of Luminy-Marseilles in France by Alain Colmerauer. It is often used for AI programming.

1975 First **implementation** of BASIC by Bill Gates and Paul Allen, it was written for the MITS Altair - the first personal computer - this **led to** the formation of Microsoft later in the year.

1979 Language Ada introduced by Jean Ichbiah and team at Honeywell.

1984 Turbo Pascal Introduced by Borland (see PASCAL, 1967).

2. How do you understand the phrase '*Lots of Irritating and Stupid Parenthesis*'?

3. Translate two paragraphs – either (1842-1945), (1965-1967) or (1972-1973) in the written form.

4. Exercises.

4.1. Fill in the table using the information from the text.

Table 3

Language	Developed	Function	Characteristic
FORTRAN			
	1959		
		Mathematical and scientific purposes	
			combines features of COBOL and ALGOL
BASIC			
		to support Unix operating system	

4.2. Словообразование. Выучите следующие словообразовательные модели:

основа глагола + er/or - существительное со значением лица, производящего действие или орудие действия;
основа глагола + tion - существительное, обозначающее действие по глаголу.

Образец: instruct - instructor – instruction
compile - compiler – compilation
specify - specification
describe – description

4.3. Заполните пропуски требуемыми контекстом словами:

- 1) instruction, instruct, instructed, instructor;
 - a. Our Mathsexplained to us the principles of binary arithmetic.
 - b. We wereto document our programs very carefully.
 - c. Bothand data have to be changed to machine code before the computer can operate on them.

- 2) compilation, compiler, compile, compiled;
- a. Our university computer does not have a Pascal
 - b. Usually, a programmerhis program before he puts in the data.
 - c. A source program cannot be directly processed by the computer until it has been ...

4.4. Подберите к русским словам их английские соответствия:

1) исследовать; 2) языки программирования; 3) машинный язык; 4) язык низкогоуровня; 5) ассемблер; 6) язык высокого уровня; 7) доступный.

1) high-level language; 2) assembly language; 3) low-level language; 4) machine language; 5) available; 6) programming languages; 7) explore.

4.5. Match these common DOS commands with the appropriate explanation.

<p>BACKUP CHDIR or CD CHKDSK CLS DEL DIR:SORT REN TYPE FIND DISKCOPY</p>	<p>1. searches for a specific string of text in a file. 2. allows a text file from the current directory to be displayed on screen. 3. allows the user to change the name of a file. 4. saves the contents of the hard disk to a floppy disk for security purposes. 5. is used when it is necessary to change the current directory. 6. clears data from the screen. 7. alphabetically sorts and lists a disk directory. 8. makes back-up copies of the contents of one disk to another. 9. deletes a specified file from the current directory, specified drive, or specified path.</p>
--	--

	10. produces a status report of the currently logged-on disk, indicating the amount of disk space used, the available capacity (in bytes), and the number of files on disk.
--	---

WHAT IS JAVA?

1. Read. Write down and translate the marked words.

Java is a computer programming language. It enables programmers to write computer instructions using English based commands, **instead of** having to write in numeric codes. It's known as a "high-level" language because it can be read and written easily by humans. Like English, Java has a set of **rules** that **determine** how the instructions are written. These rules are known as its "syntax". Once a program has been written, the high-level instructions are translated into numeric codes that computers can understand and **execute**.

Who Created Java?

In the early nineties, Java was created by a team led by James Gosling for Sun Microsystems. It was originally designed for use on digital mobile devices, such as **cell phones**. However, when Java 1.0 was released to the public in 1996, its main focus had **shifted** to use on the Internet. It provided more interactivity with users by giving developers a way to produce animated web pages. Over the years it has **evolved** as a successful language for use both on and off the Internet. A decade later, it's still an extremely popular language with over 6.5 million developers worldwide.

Why Choose Java?

Java was designed with a few key principles in mind:

Easy to Use: The fundamentals of Java came from a

programming language called C++. Although C++ is a powerful language, it was felt to be too complex in its syntax, and inadequate for all of Java's **requirements**. Java **built on**, and improved the ideas of C++, to provide a programming language that was powerful and simple to use.

Reliability: Java needed to reduce the likelihood of fatal errors from programmer mistakes. With this in mind, object-oriented programming was introduced. Once data and its manipulation were packaged together in one place, it increased Java's **robustness**.

Secure: As Java was originally **targeting** mobile devices that would be exchanging data over networks, it was built to include a high level of security. Java is probably the most secure programming language **to date**.

Platform Independent: Programs needed to work **regardless** of the machine they were being executed on. Java was written to be a portable language that doesn't care about the operating system or the hardware of the computer.

The team at Sun Microsystems was successful in combining these key principles, and Java's popularity can be traced to it being a robust, secure, easy to use and portable language. [7]

2. Переведите текст:

1. Программное обеспечение - это набор инструкций, который управляет аппаратной частью компьютера. 2. Программы пишутся на языках программирования. 3. Программисты — это люди, обученные использованию языка программирования и написанию программ. 3. До 1952г. единственным доступным языком программирования был машинный язык, называемый языком низкого уровня. 5. В языке ассемблера программисты используют короткий машинный код, который означает специфические машинные

операции. 6. Программа "Ассемблер" переводит эти коды на машинный язык, чтобы компьютер мог выполнять команды. 7. В языках высокого уровня программисты используют простые английские слова и знакомые математические выражения.

3. Словообразование.

а) запомните приставки чисел:

semi- (полу), mono- (один), bi- (два), tri- (три), quad- (четыре), penta- (пять), hex- (шесть), sept- (семь), oct- (восемь), dec- (десять), multi- (много).

б) подберите к английским словам их русские соответствия:

1. semicircle; 2. monochromatic; 3. binary; 4. triangle; 5. quadruple; 6. pentagon; 7. hexadecimal; 8. September; 9. octal; 10. decimal; 11. multiplexer.

1) мультиплексор, концентратор; 2) десятичный; 3) восьмеричный; 4) сентябрь; 5) шестнадцатеричный; 6) пятиугольник; 7) четверичный, учетверяться; 8) треугольник; 9) двоичный; 10) монохромный; 11) полукруг.

4. Подберите к русским словам их английские соответствия:

1) решать; 2) исходная программа; 3) краткий; 4) алгебраическая формула; 5) фраза; 6) ориентироваться; 7) включать в себя; 8) применяемая программа; 9) оператор. 10) утверждение.

1) application program; 2) involve; 3) statement; 4) orient; 5) algebraic formulae; 6) brief; 7) source program, 8) solve; 9) phrase. 10) operator.

DATA PROCESSING [ˌprəʊˈsesɪŋ]

1. Read. Write down and translate the marked words.

Data processing is "the collection and manipulation of items of data to produce meaningful information.

A **data processing system** is "a system that accepts data as input and processes it into information as output." The process may be automated and run on a computer. It involves **recording, analysing, sorting, summarising, calculating, disseminating** and **storing data**.

Because data are most useful when well-presented and actually informative, data-processing systems are often referred to as information systems.

Data processing may or may not be **distinguished** from data **conversion**, when the process is **merely** to convert data to another format, and does not involve any data manipulation.

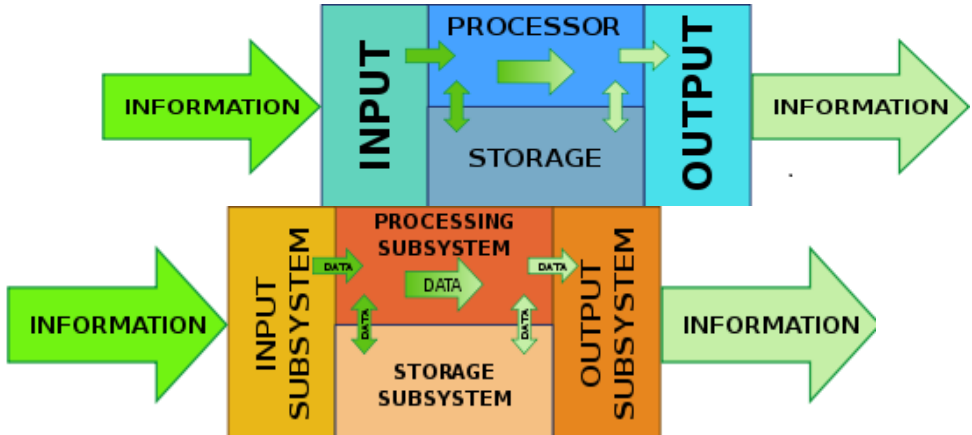


Figure 10

Description

Data are facts, organized or unorganized, which need to be converted into other forms to be useful. This process of converting facts to information is processing. Practically all naturally **occurring** processes **can be viewed** as examples of data processing systems where "observable" information in the form of pressure, light, etc. are converted by human observers into electrical signals in the nervous system as the senses we recognize as touch, sound, and vision. In conventional usage the terms data processing and information systems refer to the types of processing that occur in general **business environments**.

A data processing system may involve some combination of various processes, including:

***Validation** – Ensuring that supplied data is "clean, correct and useful".*

Sorting – "arranging items in some sequence and/or in different sets".

Summarisation – reducing detail data to its main points.

Aggregation – combining multiple pieces of data.

Analysis – the "collection, organization, analysis, interpretation and presentation of data".

Reporting – list detail or summary data or computed information.

Types of data processing systems.

Scientific data processing.

Scientific data processing "usually involves a great deal of computation (arithmetic and comparison operations) upon a relatively small **amount** of input data, resulting in a small volume of output."

Commercial data processing.

Commercial data processing "involves a large volume of input data, relatively few computational operations, and a large volume of output." Accounting programs are the prototypical examples of data processing **applications**.

Data analysis.

"Data analysis is a body of methods that help to describe facts, **detect patterns, develop explanations**, and test hypotheses." For example, data analysis might be used to look at sales and customer data to "identify connections between products **to allow for cross** selling campaigns."

Simple example.

A very simple example of a data processing system is the process of **maintaining** a check register. Transactions— checks and deposits— are recorded as they occur and the transactions are summarized to determine a current balance. Monthly the data recorded in the register is **reconciled** with a hopefully identical list of transactions processed by the bank.

A more **sophisticated** record keeping system might further identify the transactions— for example deposits by source or checks by type, such as **charitable contributions**. This information might be used **to obtain** information like the total of all contributions for the year.

The important thing about this example is that it is a system, that is, all transactions are **recorded consistently**, and the same method of bank reconciliation is used each time. [8]

2. Translate the marked paragraph in the written form.

3. Запомните значения приставок pro- (прежде, вперед), auto» (само-), со-/con- (вместе, с), подберите английским словам их русские соответствия:

- 1) program; 2) progress; 3) automatic; 4) coordinate; 5)

connect.

1) связывать; 2) координировать; 3) автоматический; 4) ход событий, прогресс; 5) программа.

5. Переведите на русский язык, обращая внимание на выделенные слова.

1. Floppy disks are inexpensive and reusable.

2. If a printer malfunctions, you should check the interface cable.

3. The multiplexer was not working because someone had disconnected it by mistake.

4. Improper installation of the antiglare shield will make it impossible to read what is on the screen.

5. After you transfer text using the "cut and paste" feature, you may have to reformat the text you have inserted.

6. You can maximize your chances-of finding a job if you are bilingual or even trilingual.

7. Peripheral devices can be either input devices (such as keyboards) or output devices (such as printers).

8. The octal and hexadecimal systems are number systems used as a form of shorthand in reading groups of four binary digits.

9. As the results are irregular, the program will have to be rewritten.

6. Переведите на английский язык:

Компьютеры преобразовывают данные в информацию. Данные представляют собой сырой материал; информация - упорядоченные данные. Системность модели показывает отношение между данными и информацией. Информация должна быть соответствующей, своевременной, точной, краткой и полной.

INTRODUCTION TO THE WWW AND THE INTERNET

1. Read. Write down and make sentences with the marked words.

Millions of people around the world use the Internet to search for and **retrieve** information on all sorts of topics in a wide variety of areas including the arts, business, government, humanities, news, politics and **recreation**. People communicate through electronic mail (e-mail), discussion groups, chat channels and other means of informational exchange. They share information and make commercial and business **transactions**. All this activity is possible because tens of thousands of networks are connected to the Internet and exchange information in the same basic ways.

The World Wide **Web** (WWW) is a part of the Internet. But it's not a collection of networks. **Rather**, it is information that is connected or linked together like a web. You **access** this information through one interface or tool called a Web browser. The number of resources and services that are part of the World Wide Web is growing extremely fast. In 1996 there were more than 20 million users of the WWW, and more than half the information that is transferred across the Internet is accessed through the WWW. By using a computer terminal (hardware) connected to a network that is a part of the Internet, and by using a program (software) to browse or retrieve information that is a part of the World Wide Web, the people connected to the Internet and World Wide Web through the local providers have access to a variety of information. Each browser provides a graphical interface. You move from place to place, from site to site on the Web by using a mouse to click on a portion of text, icon or region of a map. These items are called Hyperlinks or links. Each link you select represents a document, an image, a video clip or an audio file somewhere on

the Internet. The user doesn't need to know where it is, the browser follows the link.

All sorts of things are available on the WWW. One can use Internet for recreational purposes. Many TV and radio stations broadcast live on the WWW. **Essentially**, if something can be put into digital format and stored in a computer, then it's available on the WWW. You can even visit museums, gardens, cities throughout the world, learn foreign languages and meet new friends. And of course you can play computer games through WWW, competing with partners from other countries and continents. Just **a little bit** of **exploring** the World Wide Web will show you what a much of use and fun it is.

THE INTERNET

1. Read the text. Write down and translate the marked words.

The internet is **a medium** with which we can view information from anywhere in the world. Documents from the World Wide Web and various other services such as **instant** chat, email are **available** through the internet. Most of the time, everyone thinks that the internet and the W3 are the same, however this is not true. The internet is a network of cables, which allow users to access information of various sorts.

The data is transmitted through the Internet Protocol, which is known as the IP. Each computer will have **a separate identity** when it comes to the use of the internet. Though the internet was available, it only became *a household word* in the year 1996. But at the beginning, the use of the internet was very expensive. Most of the users went to public centers to use the internet for a high price per hour.

As the use became more popular, there was an increase in the speed of the internet and also decrease in cost. Networks were

planned, and looking at the money, many service providers entered the market. They made it very simple for all users, and the use of the internet became very cheap. Everyone at home could **afford** to get a connection, and now most users will have **unlimited access** as well

This has made it possible for many people **to benefit**. Those who are unable to go out may get **opportunities** to work from home. Various other doors have been opened to the **average** human, and everyone has taken advantage of the *creation*. Almost every individual uses the internet where it is available, *irrespective* of age groups. This medium *caters* to the needs for all age groups.

The internet has made a lot of activities very easy. The medium is used for almost all **purposes**, even with important *issues* such as education and government organizations. It has come a long way from the use with only scientific organizations and institutes etc. There was a phenomenal growth in the years 1996 and 1997. The growth for the internet has been at around hundred percent per year.

Majority of the users use the English language for the internet, as computer development happened in America in all stages. There are other languages as well, such as French, German, Chinese and Arabic. Internet has also made life easy because we can view through various means [www.articlesbase.com/internet-articles].

2. Match the parts of the sentences.

We can view informationby all age groups.
Various servicesunlimited access.
It only became a household word.....very simple for all users.
They made itare available through the internet.
Most of the users havelife easy.
Everyone has taken.....from anywhere in the world.
The medium is used.....use the English language for the

internet.

The growth for the internet has beenadvantage of the creation.

Majority of the users..... at around hundred percent per year.

Internet has madein 1996.

3. Explain the meaning of the marked words.

Are internet and the W3 the same? What is the difference?

This article describes the Internet advantages and what are its disadvantages?

4. Think of your own, when answering use the following phrases:

To my mind..., I think..., It is better to say..., It is difficult/easy to ..., And other parenthesis words (вводные слова).

5. Напишите, как вы используете интернет (10-15 предложений).

HOW TO GET A JOB

1. Read. Write down and make sentences with the marked words.

Whether you're looking for your very first job, **switching careers**, or **re-entering** the job market after an **extended absence**, finding a job requires two main tasks: understanding yourself and understanding the job market. Presuming you've already chosen a career and are currently searching for jobs, here are several ways **to actually get** a job.

Part One: Build Your Qualifications

1. Revise your resume. Before you start **job hunting**, make

sure that your resume is as complete and **up-to-date** as possible. Your resume is an important **distillation** of who you are, where you come from, and what you can **offer**. *Here are a few tips to consider:*

- *Be honest.* Never lie on your resume; it will come back to haunt you later.

- *Use active verbs.* When describing what you did at your last job, make the sentence as **tight** and active as possible. For instance, instead of saying "Served as **patient contact** for getting bills and contacting **insurance**," say "**Liaised** with patients and insurance companies, and managed financial transactions."

- *Proofread.* Review your resume several times for grammatical or spelling errors. Even something as simple as a typo could negatively impact your ability to land an interview, so pay close attention to what you've left on the page. Have one or two other people look at it as well.

- *Keep the formatting clean.* How your resume looks is almost as important as how it reads. Use a simple, classic **font** (such as Times New Roman, Arial or Helvetica), **black ink** on white paper, and sufficiently **wide margins** (about 1" on each side). Ensure your name and contact information are **prominently displayed**.

2. Develop your personal elevator pitch. Many structured interviews, particularly those at large companies, start with a question like "Tell me about yourself." The interviewer doesn't really want you to go back to grade school and talk about your childhood. This is a specific question with a right answer: in two minutes or so, the interviewer wants to get you to relax and **loosen out your vocal cords**, understand your background, your **accomplishments**, why you want to work at XYZ company and what your future goals are.

- **Keep it short** — between 30 seconds and two minutes — and have the basics of it memorized so that you don't **stammer** when you're asked to describe yourself. You don't want to sound

like robot and learn **to improvise** the rest depending on who you're talking to. Practice your elevator pitch out loud on someone who can give you feedback.

- An elevator pitch is also useful for when you're simply networking, at a cocktail party or with a group of **strangers** who want to get to know you a little bit more. In a networking situation, as **opposed** to a job interview, keep the elevator pitch to 30 seconds or less.

3. Make a list of *work-related skills you'd like to learn.* Your **employer** will be interested in hearing about how you intend to become a better employee. Think about which skills will make you more competent in the position you're **applying for**. Find some books and upcoming conferences that would significantly improve your **abilities**. In an interview, tell the employer what you're reading and learning, and that you'd like to continue doing so. Here is a list of some of the most important job skills, wanted by employers, that a **job-seeker** must have to be sure of landing a good job and just as importantly, **keeping it**.

- *Logical thinking and information handling*: Most businesses **regard** the ability **to handle** and organize information **to produce effective solutions** as one of the top skills they want. They value the ability to make sensible solutions regarding a **spending proposal** or an **internal activity**.

- *Technological ability*: Most job openings will require people who are IT or **computer literate** or know how to operate different machines and office **equipment**, whether it's a PC or multi-function copier and scanner. This doesn't mean that employers need people who are **technology graduates** — knowing the basic principles of using current technology is **sufficient**.

- *Communicating effectively*: Employers tend to value and **hire** people who are able to express their thoughts efficiently through verbal and written communication. People who land a good job easily are usually those who are **adept in** speaking and writing.

- *Strong interpersonal skills:* Because the **working environment** consists of various kinds of personalities and people with different backgrounds, it is essential to possess the skill of communicating and working with people from different **walks of life**.

Part Two: Do Your Homework

Prepare for a behavioral interview. You might be asked to describe problems you've **encountered** in the past and how you handled them, or you'll be given a hypothetical situation and asked what you would do. They'll basically want to know how you'll perform when faced with **obstacles** in the position you're interviewing for. Be able to give honest, detailed examples from your past, even if the question is hypothetical (e.g. "I would contact the customer directly, based on **my past experience** in a different situation in which the **customer** was very pleased to receive a phone call from the supervisor"). You might find yourself listing facts — if so, remember that in this kind of interview, you need to tell a story. Some questions you might be asked are:

- *"Describe a time you had to work with someone you didn't like."*

- *"Tell me about a time when you had **to stick by** a decision you had made, even though it made you very unpopular."*

- *"Give us an example of something particularly innovative that you have done that made a difference in the workplace."*

- *"How would you handle an employee who's **consistently late**?"*

Research the company. Don't just do an Internet search, memorize their mission, and be done with it. Remember that you're competing with lots of other candidates for a single position. You may not be able to change your natural **intelligence**, or the skills that you come to the job with, but you can always change your work ethic. Work harder than everyone else by researching the

company or companies you wish to work for like your life depended on it.

- If it's a retail company, visit a few of their **stores**, observe the customers, and even **strike up** a few conversations. Talk to existing employees - ask them what it's like working there, how long the position has been open, and what you can do to increase your chances of getting it. Become familiar with the history of the company. Who started it? Where? Who runs it now? **Be creative!** [9]

2. Translate the marked paragraphh.

3. Make up your resume.

LETTER OF EMPLOYMENT

1. Read. Write down and make sentences with the marked words.

When you apply for a job, you may need to fill in a **company application** form which asks for personal details, your qualifications, and your work history. Alternatively, you may be asked to supply a **curriculum vitae**, which gives similar information, but which you write yourself.

In either case, you will need to write a covering letter to go with the application form or CV. Most jobs will have been advertised in the papers or specialist publications, and before you write your covering letter you should study the wording of the **advertisement** carefully.

Find out exactly what the **employer** is looking for (for example, a certain **amount of experience**, familiarity with particular languages, etc.). Then, in your covering letter, try to show that you have all the qualities, qualifications, and experience that the employer is **looking for**. You should not simply repeat all the information in the CV, you should highlight the most important parts.

Systems Programmers to J20,000 - London

Our client is a major UK clearing bank whose range of activities is as impressive as the growth of its **profits**. A bank that is dedicated to a long-term programmer of systems development.

With IBM RS/6000, System 38, and VAX hardware driving user-interface PC networks using C, UNIX, FOXPRO, and SYBASE, there's no doubting our client's commitment to systems innovation and investment.

We are looking for SYSTEMS PROGRAMMERS with C and UNIX skills, who can show us 2 years' experience of **delivering advanced banking** and on line information systems. Above all, we need flexible thinkers who appreciate the commercial realities and priorities of the **banking industry**.

Show us these qualities, and our client can offer you a **competitive salary** plus many banking benefits. If your talents and ambitions are ready for such a move, please send your CV, quoting Ref.349.to:

**Harriet Bradman at Comp Recruitment Services,
318 Leadhill Street, London EC1 1DR.**

2. Ответьте на вопросы к тексту:

1. Who placed the advertisement?
2. What software does the current system use?
3. What specific characteristics or qualities are required?
4. What benefits come with the job?

3. Прочитайте письмо, обратите внимание на его структуру.

22 Carlyle Crescent
London WC1H9BH
18 June 19_
Yr Ref:349

Ms H Bradman
Compro Recruitment Services
318 Leadhill Street
London EC 1 1DR

Dear Miss Bradman,

I wish to apply for the post of Systems Programmer, which was advertised in this month's edition of IT World.

I am currently a Systems Programmer at GCG Merchant Bank where I have two years' experience of specialized programming for the financial sector. I am familiar with C / UNIX, LAN / WAN technology, and relational databases.

Prior to taking over my current post, I worked for Data International as a Trainee Systems Programmer, where I was involved in the development of a new online information system for a financial services company.

My experience in the fields of both banking and online information services has given the necessary commercial and technical awareness to be able to make a valuable contribution to the systems development programmer of your client.

Please let me know if there is any further information you require.

I look forward to hearing from you.

Yoursincerely,
DavidManning

4. Напишите письмо, учитывая особенности написания деловых писем в Великобритании и Соединенных Штатах.

- Begin with a reference to where you saw the job advertised.
- List briefly all previous jobs.
- Indicate your current level of responsibility.
- Explain why the company would benefit if they employed you.
- Say when you will be available for interview.
- Request that they reply as soon as is reasonably possible.

БИБЛИОГРАФИЧЕСКИЙ СПИСОК

1. <http://jobsearchtech.about.com/od/careersintechology>
2. <http://service.ezinemark.com/how-cloud-computing-and-mobile-tech-is-changing-our-daily-lives-32273fa6057.html>
3. <http://etc.usf.edu/techease/win/hardware/what-is-usb/>
4. <http://www.computerhope.com/jargon/s/software.htm>
5. <http://www.techterms.com/definition/peripheral>
6. <http://searchcio-idmarket.techtarget.com/definition/CD-ROM>
7. <http://java.about.com/od/gettingstarted/a/whatisjava.htm>
8. http://en.wikipedia.org/wiki/Data_processing_system
9. <http://www.wikihow.com>
10. Santiago RemachaEsteras. Infotech: English for Computer Users. –Cambridge University Press, 2008.
11. Computer User High-Tech Dictionary[Electronic resource].–<http://www.computeruser.com/resources/dictionary/>.
12. Michael R. MacmillanStudydictionary.:Macmillan Publishers, 2010.
13. TechDictionary[Electronic resource].–<http://www.techdictionary.com/>.
14. Федеральный государственный образовательный стандарт среднего профессионального образования по специальности 09.02.01 Компьютерные системы и комплексы. Утвержден приказом Министерства образования и науки РФ от 28 июля 2014 г. N 849

ОГЛАВЛЕНИЕ

ВВЕДЕНИЕ.....	3
INFORMATION TECHNOLOGY – A DEFINITION.....	4
WHAT IS HARDWARE?.....	11
SOFTWARE.....	21
PERIPHERAL (AUXILIARY) DEVICES.....	24
BRIEF HISTORY OF PROGRAMMING LANGUAGES.....	32
DATA PROCESSING.....	39
INTRODUCTION TO THE WWW AND THE INTERNET.....	43
PHOW TO GET A JOB.....	47
БИБЛИОГРАФИЧЕСКИЙ СПИСОК.....	55

МЕТОДИЧЕСКИЕ УКАЗАНИЯ

для практических занятий и самостоятельной работы
по дисциплине «Иностранный язык» (английский)
для студентов 4 курса специальности
09.02.01 «Компьютерные системы и комплексы»
очной формы обучения

Составители:

Малютина Юлия Владимировна
Полухина Ирина Васильевна

Редактор Кулакова Н.В.

Подписано к изданию 27.05.2019.
Уч.-изд. л. 3,4.

ФГБОУ ВО «Воронежский государственный
технический университет»
394026 Воронеж, Московский просп., 14