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МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ

**НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
ХАРЧОВИХ ТЕХНОЛОГІЙ**

АНГЛІЙСЬКА МОВА

МЕТОДИЧНІ ВКАЗІВКИ

до практичних занять

для студентів II курсу

всіх спеціальностей

факультету автоматизації та комп'ютерних систем
денної та заочної форм навчання

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на засіданні кафедри
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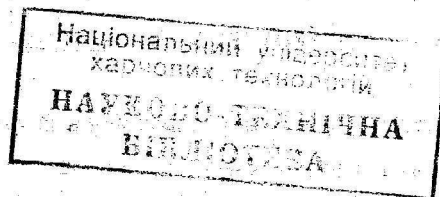
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ВСТУП

Методичні вказівки призначені для студентів 2 курсу факультету автоматизації та комп'ютерних систем денної та заочної форми навчання.

Тематика, лексичний мінімум, система проблемних та творчих завдань спрямовані на досягнення головної мети.

Мета даних методичних вказівок – формування комунікативної мовленнєвої компетенції на матеріалі оригінальних текстів фахової тематики.

Методичні вказівки складаються з 20 розділів, що містять автентичні тексти та післятекстові завдання, які сприяють подальшому розвитку набутих мовних навичок для задоволення практичних та професійних потреб в сфері комп'ютерних технологій.

Система завдань розділів будується на фаховій лексиці, спрямована на полегшення засвоєння поданого тематичного та мовного матеріалу, та містить ряд проблемних завдань, що розвивають творче мислення студентів.

Дані методичні вказівки є додатковим спонукальним мотивом до удосконалення навичок усного та писемного мовлення в професійній сфері та надають допомогу студентам в формуванні лексичної компетенції на основі фахової лексики.

Unit 1 COMPUTER APPLICATIONS

Exercise 1. Computers have many applications in great variety of fields. Read the text below and fill in the table which follows.

Computers

A computer is an electronic device. It makes calculations and processes information. Complicated problems can be solved very quickly. Millions of pieces of information can be processed in seconds.

Nowadays, computers are used for many different purposes.

In education, computers can help students perform mathematical operations and solve difficult questions. They can be used to access the Internet, teach courses such as computer-aided design, language learning, programming, mathematics, etc. PCs (personal computers) are also used for administrative purposes: for example, schools use databases and word processors to keep records of students, teachers and materials.

Race organizers and journalists rely on computers to provide them with the current positions of riders and teams in both the particular stages of the race and in the overall competition. Workstations in the race buses provide the timing system and give up-to-the-minute timing information to TV stations. In the press room several PCs give real time information on the state of the race. Computer databases are also used in the drug-detecting tests for competitors.

Businesses use their computers not only to bill their customers and to keep track of their inventories, but also to send information to customers and to communicate with other businesses.

In supermarkets, computers read the prices of food.

Computers also store information about the amount of money held by each client and enable staff to access large databases and to carry out financial transactions at high speed. They also control the automatic cash

dispensers which, by the use of a personal coded card, dispense money to clients.

In transportation, airplanes, ships, and even spacecraft are guided by computers. Airline pilots use computers to help them control the plane. For example, monitors display data about fuel consumption and weather conditions.

In airport control towers, computers are used to manage radar systems and regulate air traffic.

On the ground, airlines are connected to travel agencies by computer. Travel agents use computers to find out about the availability of flights, prices, times, stopovers and many other details.

In industry, many complicated machines are controlled by computers. Machines that produce chemicals, steel, and hundreds of other products are connected to computers.

In science, complicated problems and scientific data almost are almost always analysed by computers. Even earthquakes and hurricanes can be predicted by computers.

In home, people are buying computers to help them manage their households more efficiently. People can shop, make travel arrangements, and pay their bills using computers right in their own homes.

<i>Field</i>	<i>Application</i>

Exercise 2. Think and answer.

- 1 How are/were computers used in your university?
- 2 What other areas of study would benefit from the introduction of computers?
- 3 What do you use the computer for?

Exercise 3. When you read the text like the one above, you don't always need to understand every word. But there are words which you can guess from the context. Look at these words. Are they nouns (n), verbs (v) or adjectives (adj)?

- | | | | |
|-----------------------|------------------|----------------|------------------|
| 1 workstation..... | 2 data..... | 3 perform..... | 4 automatic..... |
| 5 monitor..... | 6 financial..... | 7 store..... | 8 connected..... |
| 9 word processor..... | 10 large..... | | |

Exercise 4. Now find the words in the text above and match them with the meanings below.

- | | |
|-------------------------|-----------------------------------------------------|
| a) information | f) linked |
| b) execute (do) | g) self-acting, mechanical |
| c) connected with money | h) screen |
| d) keep (save) | i) powerful computer usually connected to a network |
| e) massive | j) program used for text manipulation |

Exercise 5. Speaking

Think and tell the class how these people use computers at work.

electrical	engineer	secretary	librarian
composer	teacher	singer	shop-assistant

Exercise 6. Reading

Look at the table you filled in in Exercise 1. Add as many fields and uses of the computer, or computer applications, as you can think of.

Now read the text below and write down any applications that are not in your list.

What can computers do?

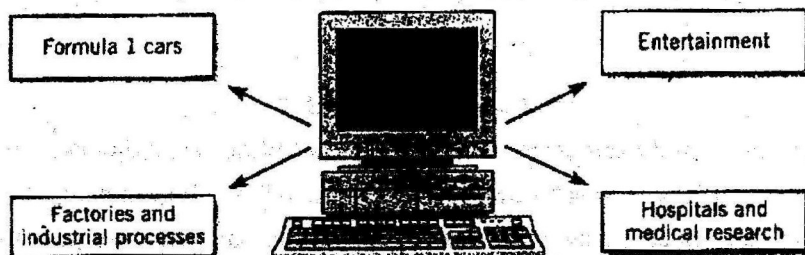
Computers and microchips have become part of our everyday lives: we visit shops and offices which have been designed with the help of computers, we read magazines which have been produced on computer, we pay bills prepared by computers. Just picking up a telephone and dialling a number involves the use of a sophisticated computer system, as does making a flight reservation or bank transaction.

We encounter daily many computers that spring to life the instant they're switched on (e.g. calculators, the car's electronic ignition, the timer in the microwave, or the programmer inside the TV set), all of which use chip technology.

What makes your computer such a miraculous device? Each time you turn it, on, it is a tabula rasa that, with appropriate hardware and software, is capable of doing anything you ask. It is a calculating machine that speeds up financial calculations. It is an electronic, filing cabinet which manages large collections of data such as customers' lists, accounts, or inventories? It is a magical typewriter that allows you to type and print any kind of document — letters, memos or legal documents. It is a personal communicator that enables you to interact with other computers and with people around the world. If you like gadgets and electronic entertainment, you can even use your PC to relax with computer games.

Exercise 7. Other computer applications

- In small groups, choose one of the areas in the diagram below and discuss what computers can do in this area.



Useful words

Formula 1: racing car, car body, design, mechanical parts, electronic components, engine speed

Entertainment: game, music, animated image, multimedia, encyclopaedia

Factories: machinery, robot, production line, computer-aided manufacturing software

Hospitals: patients, medical personnel, database program, records, scanner, diagnose, disease, robot, surgery

Useful constructions

Computers are used to ...

A PC can also be used for ...

Computers can help / make / control / store / keep / provide / manage / give / perform / measure / test / provide access to ...

- Now write a short paragraph summarising your discussion. Then ask one person from your group to give a summary of the group's ideas to the rest of the class.

Examples

In business, computers are used for financial planning, accounting and specific calculations.

In the office, computers are used to write letters and e-mails, and keep records of clients, suppliers and employees.

UNIT 2 COMPUTER ESSENTIALS

Exercise 1. Look at the picture and label the elements of this computer system. Then read the text *What is a computer?* and check your answers.



What is a computer?

Computers are electronic machines which can accept data in a certain form, process the data and give the results of the processing in a specified

format as information.

Three basic steps are involved in the process. First, data is fed into the computer's memory. Then, when the program is run, the computer performs a set of instructions and processes the data. Finally, we can see the results (the output) on the screen or in printed form (see the diagram below the text).

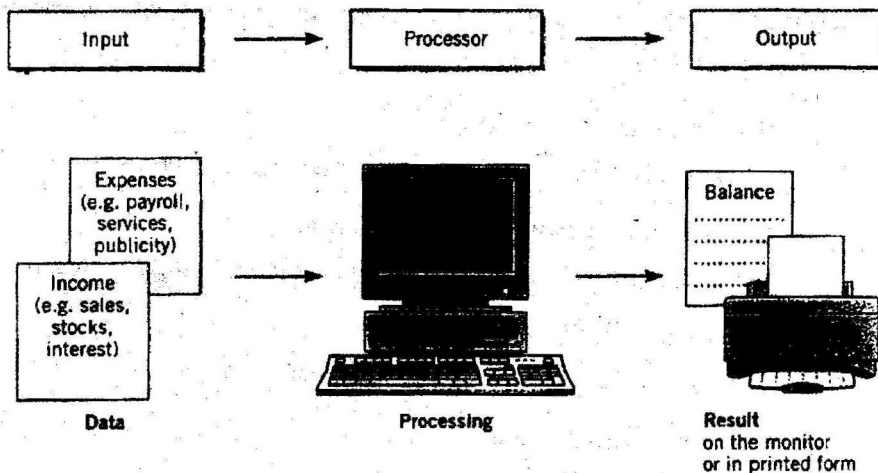
Information in the form of data and programs is known as **software**, and the electronic and mechanical parts that make up a computer system are called **hardware**. A standard computer system consists of three main sections: the central processing unit (CPU), the main memory and the peripherals.

Perhaps the most influential component is the **central processing unit**. Its function is to execute program instructions and coordinate the activities of all the other units. In a way, it is the 'brain' of the computer. The **main memory** holds the instructions and data which are currently being processed by the CPU. The **peripherals** are the physical units attached to the computer. They include storage devices and input/output devices.

Storage devices (floppy, hard or optical disks) provide a permanent storage of both data and programs. **Disk drives** are used to handle one or more floppy disks. **Input devices** enable data to go into the computer's memory. The most common input devices are the **mouse** and the **keyboard**. **Output devices** enable us to extract the finished product from the system. For example, the computer shows the output on the **monitor** or prints the results onto paper by means of a **printer**.

On the rear panel of the computer there are several ports into which we can plug a wide range of peripherals – modems, fax machines, optical drives and scanners.

These are the main physical units of a computer system, generally known as the **configuration**.



Exercise 2. Use the information in the text and the diagram to help you match the terms in the box with the appropriate explanation or definition below.

a software	b peripheral devices	c monitor
d floppy disk	e hardware	f input
g port	h output	i central processing unit

- 1 The brain of the computer.
- 2 Physical parts that make up a computer system.
- 3 Programs which can be used on a particular computer system.
- 4 The information which is presented to the computer.
- 5 Results produced by a computer.
- 6 Hardware equipment attached to the CPU.
- 7 Visual display unit.
- 8 Small device used to store information. Same as 'diskette'.
- 9 Any socket or channel in a computer system into which an input/output device may be connected.

Exercise 3. Read these slogans or quotations, and say what computer element they refer to.

- 1 a 'Point and click here for power.'
- b 'Obeys every impulse as if it were an extension of your hand.'
- 2 a 'Displays your ideas with perfect brilliance.'
- b 'See the difference - sharp images and a fantastic range of colours.'
- 3 a 'I love this drive. It's quiet and fast.'
- b 'With this it's easy to back up your data before it's too late.'
- 4 a 'Power and speed on the inside.'
- b 'Let your computer's brain do the work.'
- 5 a '... a big impact on the production of text and graphics.'
- b 'Your choice: a laser powerhouse.'

Exercise 4. Answer these questions.

- 1 Have you got a computer at home, school or work? What kind is it?
- 2 How often do you use it? What do you use it for?
- 3 What are the main components and features (the configuration) of your computer system?

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Навчальне видання

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