МЕТОДИЧНІ РЕКОМЕНДАЦІЇ
щодо забезпечення самостійної роботи студентів
з дисципліни
ТЕХНІЧНА ІНОЗЕМНА МОВА
(для бакалаврів)
Підготовлено завідувачем кафедри іноземних мов І.С. Баховим

Затверджено на засіданні кафедри іноземних мов
(протокол № 1 від 29.08.2007)

Перезатверджено на засіданні кафедри іноземних мов
(протокол № 6 від 15.01.2016)

Схвалено Вченою радою УАІМВіЛ ім. Аверроеса ПрАТ «ВНЗ «МАУП»
(Протокол № 2 від 23.03. 2016)

Бахов І.С. Методичні рекомендації та контрольні завдання до навчальної програми дисципліни "Технічна іноземна мова" (англійська) для освітньо-кваліфікаційного рівня „Бакалавр” (заочної форми навчання). Містить пояснювальну записку, варіанти тестових завдань. – К.: МАУП, 2016. – 20 с.
Пояснювальна записка

Якісне володіння іноземною мовою у період інтеграції України в Європейське та світове спіттєвірество сприяє поширенню ділових зв'язків та контактів, надає можливість вивчати та ефективно використовувати іноземний досвід ділового спілкування користуватися сучасними інформаційними технологіями, брати участь у міжнародних конгресах та семінарах, проходити стажування в іноземних державах з метою вдосконалення фахової підготовки, проводити письмовий обмін діловою інформацією тощо.

Дисципліна "Технічна іноземна мова" має на меті розвиток мовної, працездатної та міжкультурної компетенції студентів в сфері ділового спілкування. Курс має практичне спрямування, яке здійснюється шляхом інтеграції мовленнєвих умінь та мовних знань в рамках тематичного та ситуативного контексту.

Методичні рекомендації з дисципліни «Технічна іноземна мова» мають забезпечити послідовність вивчення матеріалу та допоможуть студентові:
• оволодіти термінологією та знати ідіоматичні вирази мови ділового спілкування;
• розвивати та поглибляти навички усного та письменного ділового мовлення;
• застосовувати здобуті у процесі вивчення англійської мови професійні та комунікативні навички для більш ефективного вирішення проблем ділового спілкування;
• засвоїти особливості письмового оформлення ділових документів англійською мовою.

Основними організаційними формами вивчення дисципліни "Технічна іноземна мова" є: практичні заняття, виконання самостійної роботи, підсумкова контрольна робота, залік.

Практичні заняття мають на меті активізацію мовленнєвих умінь та навичок, їх практичне застосування під час виконання студентами комунікативних вправ та завдань за відповідними темами змістового модуля: «Електронні засоби зв’язку», «Інтернет та електронна пошта» та ін.

Методичні рекомендації мають чіту структуру та складаються з адаптованих основних та додаткових текстів, лексико-граматичних вправ, завдань для виконання залікової контрольної роботи, словників-мінімумів, списку рекомендованої літератури. Основні тексти охоплюють базові питання ділового спілкування та ведення бізнесу. Післятекстові питання та вправи зорієнтовано на контроль розуміння прочитаного і запропоновано для сприяння розвитку навичок усного мовлення. Додаткові тексти та дискусійні питання для формування комунікативних навичок допомогуть інтенсифікувати навчальний процес.

Для кращого засвоєння матеріалу ставиться вимога здебільшого письмового виконання лексико-граматичних вправ, ретельна підготовка до написання словникових диктанів тощо. Тренувальні вправи допоможуть активізувати вживання термінологічної лексики, граматично правильно будувати свої висловлювання. Для закріплення тематичного матеріалу подаються запитання, які виступають планом для обговорення певної теми та спонукають студентів до участі у дискусії.
Read and translate the text.

Computer users

A computer is a device that processes data according to a set of instructions known as a program. The equipment is known as the hardware and the programs and data are the software. A special set of programs, called an operating system, provides an interface for the user and allows applications programs to communicate with the hardware. Common applications programs include word processors for creating and editing texts, spreadsheets for calculating mathematical formulae and databases for storing data in a way that allows the data to be sorted and searched. Anti-virus programs are used to detect and remove viruses (harmful programs that can reproduce themselves and attach themselves to other programs). Some operating systems have graphical (user) interfaces that allow the computer user to select items from menus (lists of choices) and to start programs using an input device called a mouse. This is done by pressing a button on the mouse i.e. clicking the mouse. The main device for inputting the data is a typewriter-style keyboard and the output is commonly displayed on a monitor screen that looks like a small television screen.

There is a range of sizes and types of computer. Those designed for use by one person at a time are known as personal computers (PCs) although the term PC is usually only applied to personal computers that are compatible with the standards laid down by the company known as IBM (international Business Machines). Personal computers include desktop computers (for use on an office desk) and handheld computers that can be carried around by the user. Electronics can be added to desktop computers by plugging in expansion cards (electronic circuit boards that can be plugged into special sockets called expansion slots).

It is also possible to build all the main parts of a computer into one electronic integrated circuit packaged as a single electronic chip (the common name for a microchip; an electronic integrated circuit in a small package) i.e. the ‘computer on a chip’. This enables computers to be built into other devices including household devices such as washing machines and fridges and to be incorporated into plastic cards i.e. smart cards, which are able to store information such as health records, drivers’ licenses, bank balances, etc. Devices that include a computer circuit are commonly referred to as smart devices. A multimedia computer can process different forms of data including text, graphics, audio (sound), animation and video. This enables computer systems to be used for a combination of education and entertainment, sometimes referred to as edutainment.

Unlike most machines, computers do not have a fixed purpose. They are multi-purpose tools. They can be used in a very wide variety of situations and are found in a wide range of systems including security systems, cars and phones. Advanced systems, known as expert systems, enable computers to ‘think’ like experts. Medical expert systems, for example, can help doctors diagnose an illness and decide on the best treatment. As computer systems are developed, they are becoming more common and are gradually being used for more and more purposes. How they are developed, and for what purposes they are actually used in the future, can be influenced by computer users. A variety of devices known as peripherals can be added externally to a computer. One of the most common peripherals is a printer used for printing the computer output (the processed data or signals that come out of a computer system) on paper. A digital camera allows photographs to be input to a computer for editing.

Ex.1. Match the terms with the statements.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>edutainment</td>
<td>1</td>
<td>Software that enables computers to 'think' like experts.</td>
</tr>
<tr>
<td>b</td>
<td>multimedia</td>
<td>2</td>
<td>Use computers to stay in touch with the office while</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>expert system</td>
<td>Internet system designed to provide free, interactive access to vast resources for people all over the world.</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>telecommute</td>
<td>Multimedia materials with a combination of educational and entertainment content.</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td>information superhighway</td>
<td>A combination of text with sound, video, animation, and graphics.</td>
<td></td>
</tr>
<tr>
<td>f</td>
<td>log on</td>
<td>the Web (moving from webpage to webpage using a Web browser program</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>videoconferencing</td>
<td>electronic circuit boards that can be plugged into special sockets called <em>expansion slots</em></td>
<td></td>
</tr>
<tr>
<td>h</td>
<td>browsing</td>
<td>connect to a network system account, normally using a password</td>
<td></td>
</tr>
<tr>
<td>i</td>
<td>hard disk</td>
<td>a form of communication over a network that uses video cameras so that the people taking part can see and hear each other</td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>expansion cards</td>
<td>a set of aluminium disks coated in a magnetic material and enclosed in a vacuum-sealed case</td>
<td></td>
</tr>
</tbody>
</table>
Word Processing

I. People use word processors for writing all kinds of documents, such as letters, school papers and reports. Word processors have many advantages over disadvantages. Word processing have many advantages over handwriting and manual typewriters. Word processing is faster and easier than writing by hand and you can store documents on your computer, which you cannot usually do on a typewriter. This makes it easier to review and rewrite your documents. You have more formatting choices with a word processor, and the spelling, grammar and language tools are useful, too. You can also print copies of your documents, which look neater than handwritten ones. Many language students use word processors to improve their writing skills and because they help them feel proud of their work.

II. Word processors do have disadvantages, however. First, it is not easy to read long documents on a computer screen. Second, sometimes the printer does not print an exact copy of what you see on the screen. Not all word processors can read each other’s files, which is another disadvantage. Finally, word processors do not always work well with e-mail. If you paste a word-processed letter into an e-mail it may lose a lot of its formatting. Many people use a text editor for the Internet, which is similar to a word processor but has fewer formatting features and cannot use graphics. Text editors, such as Notepad, use a simple coding system called ASCII (American Standard Code for Information Interchange), as does e-mail.

Ex. 2. Match the outlined words and phrases from the text with their definitions.

| manual | 1 the way a program organizes data |
| word processor | 2 a program used for simple text files |
| text editor | 3 the code that e-mail used |
| features | 4 things that a program has, or can do |
| coding system | 5 a program used for text and graphics |
| ASCII | 6 by hand, not electronic |
Ex. 1. Read the passage below. Underline gerunds.

Graphics and Design

You cannot create a picture simply by specifying primitives. Instead, you must specify the primitives in their attributes, then transform them by specifying where and how you want them placed on the screen so they create your picture. Transformation means moving or otherwise manipulating the object by translating, rotating and scaling the object.

Translation is moving an object along an axis to somewhere else in the viewing area. Rotation is turning the object around the axis. Scaling is making the object larger or smaller in any of the horizontal, vertical or depth directions (corresponding to the x, y and z axes). The term rendering describes the techniques used to make your object look real. Rendering includes hidden surface removal, shading, light sources and reflections.

Ex. 2. Complete the sentences by using an appropriate gerund form from those in the box.

creating, adding, clicking, processing, printing, rendering

1. Graphic artists like ................ color and depth to their drawings and designs.
2. A 32-bit painting program has a complete palette of tools for ........ images from scratch.
3. The speed of microprocessor is important in ........ information.
4. Before ........... a document, the user should decide on the layout.
5. You can open the color palette by ........ on the corresponding pop-up icon.
6. ........... refers to the techniques used to make realistic images.

Ex. 3. Read the text and answer the questions.

Operating Systems: Hidden Software

When a brand new computer comes off a factory assembly line, it can do nothing. The hardware needs software to make it work. Are talking about applications software such as word-processing software? Partly. But an applications software package does not communicate directly with the hardware. Between the applications software and the hardware is a software interface – an operating system. An operating system is a set of programs that lies between applications software and the computer hardware.

The most important program in the operating system, the program that manages the operating system, is the supervisor program, most of which remains in memory and is thus referred to as resident. The supervisor controls the entire operating system and loads into memory other operating system programs (called non-resident) from disk storage only as needed.

An operating system has three main functions:
(1) manage the computer’s resources, such as the central processing unit, memory, disk drives, and printers,
(2) establish a user interface, and
(3) execute and provide services for applications software.

Keep in mind, however, that much of the work of an operating system is hidden from the user. In particular, the first listed function, managing the computer’s resources, is taken care of without the user being aware of the details.

Furthermore, all input and output operations, although invoked by an applications
program, are actually carried out by the operating system.

Questions:
1. What difference is there between applications software and operating systems?
2. Why is the supervisor program the most important operating system program?
3. What is the difference between resident and non-resident programs?
4. What are the main functions of an operating system?

BAPIAHT 4.

Ex. 1 Complete the gaps using these linking words and phrases.

although because but in addition such as therefore

The user is aware of the effects of different applications programs (1) ....... operating systems are invisible to most users. They lie between application programs, (2) ....... word-processing, and the hardware. The supervisor program is the most important. It remains in memory, (3) ....... it is referred it as resident. Others are called non-resident (4) ....... they are loaded into memory only when needed. Operating systems mange the computer’s resources, (5) ....... the central processing unit. (6) ....... , they establish a user interface, and execute and provide services for applications software. (7) ....... input and output operations are invoked by applications programs, they are carried out by the operating system.

Ex.2 . In some lines there is an extra word. Underline the incorrect word or write CORRECT next to the line number.

Computer applications

<table>
<thead>
<tr>
<th>CORRECT</th>
<th>0</th>
<th>In the last ten years, police have installed speed trap units on many busy roads.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>These contain a radar set, a microprocessor and a camera equip with a flash.</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>The radar sends out a beam of radio waves at a frequency of 24 gigahertz.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>This is equivalent for a wavelength of 1.25 cms.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>If a car is moving toward the radar, the reflected signal will bounce back with a slightly smaller wavelength.</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>If away from the radar, the waves will reflect with a slightly longer wavelength.</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>The microprocessor within the unit measures the difference in wavelength between outgoing and returning signals and calculate the speed of each vehicle.</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>The informations is stored on a smart card for transfer to the police computer.</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>The owner of the vehicle can then be traced using the Driver and Vehicle Licensing Centre database.</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Some drivers have now got used to these traps. They slow down when they approach one to that the camera is not triggered.</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>They speed away again as soon as they have passed.</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>This is known as 'surfing'. One way of outwitting such motorists is a newly computerized system.</td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>This consists of two units equipped with digital cameras positioned on a measured distance apart.</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>The first unit records the time each vehicle passes it and identifies each</td>
</tr>
</tbody>
</table>
vehicle with its number plates using optical character recognition software.

13 This information is relayed to the second unit which repeats the exercise.

14 The microprocessor within the second unit then will calculate the time taken by each vehicle to travel between the units.

15 The registration numbers of those vehicles exceeding the speed limits are relayed to police headquarters where a computer matches each vehicle with the DVLC database.

16 Using mailmerge a standard letter is then printed of addressed to the vehicle owner.

### BAPIAHT 5.

**Ex. 1. Read the text. Choose the appropriate word for each space.**

**Networks. Wireless networking**

Wireless (WiFi) networks are just like (1) **(fixed/fixing)** LANs but instead of using cables, devices are linked by radio waves.

Each computer in a wireless network (2) **(requires/was required)** a wireless network interface card (NIC). These can be (3) **(built/building)** in or you can use plug-in adaptors. These (4) **(has allowed/allow)** each component in the network to communicate with a wireless access point (AP) to create a wireless local area network (WLAN). The AP operates like a router in a fixed LAN. It also provides a bridge which (5) **(plugged/plugs)** into the hub of a fixed LAN allowing both fixed and wireless users to talk to each other. If your LAN is connected to the Internet, the LAN can also use it. If not, you can (6) **(connect/disconnect)** the WLAN to the Internet via an ADSL or cable modem.

What are the **advantages** of a wireless network? You don’t need (7) **(to cable/cabling)**. In older buildings, it can be expensive to install cables and access points. With WiFi, one access point can cover an entire floor or even a building. You (8) **(should/can)** work anywhere within range of the access point. On a sunny day, you could work outside. You can (9) **(make/do)** any room in the house your study. There are now WiFi hotspots in hotels, libraries and airports so you can link to a network away from home or your office.

There are **disadvantages**.

Fixed LANs can run at 1000 Mbps. Wireless networks are much slower and the further you are from an access point, the (10) **(faster/slower)** the rate. Although there are savings on the cost of cabling, wireless NICs are more expensive than wired versions. Then there is the problem of interference, if a neighbour is using the same channel, and security. Other users may be able to intercept your data. Encryption programs like Wired Equivalent Privacy (WEP) can help.

**Ex. 2. Choose the advantages and disadvantages of a network in the boxes and divide them in two groups: A and B.**

<table>
<thead>
<tr>
<th>Group A: Advantages</th>
<th>Group B: Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
</tr>
<tr>
<td>7.</td>
<td>8.</td>
</tr>
</tbody>
</table>
Read the text. Consult the ‘Help-box’

The Internet

The Internet (commonly called the Net) is the connection of networks across the world. Different services are made available on the Internet including:
- email, Usenet (user network), IRC (Internet relay chat), FTP (file transfer protocol), Telnet (telephone network), MOOs (Multi-user domain that is object-oriented), WWW (the World Wide Web, commonly referred to as the Web).

Computer-Mediated Communication (CMC) is a term used to describe systems that allow users to communicate using a computer network.

Basics

Networked computers allow users to communicate with each other. At present most of this communication is written although video- and audio-conferencing permit speech. Most computer-mediated communication (CIVIC) is asynchronous i.e. the participants are not on line at the same time and there are delays between messages. Examples of asynchronous communication include: mobile phone text messages, chat rooms, email, bulletin boards and newsgroups/discussion lists. Synchronous CMC depends on participants being on line at the same time. There may be a few seconds delay – like a satellite phone call – but the communication is closer to face-to-face interaction. Examples of synchronous communication include; internet Relay Chat, MOOs, audio and videoconferencing.

With the exception of videoconferencing (a form of communication over a network that uses video cameras so that the people taking part can see and hear each other), there is no opportunity for paralinguistic features such as gesture. To compensate, users have developed a number of strategies which account for the linguistic features of text-based CMC including: abbreviations and acronyms, e.g. LOL, simplified syntax -subject and modal deletion (C U L8R), tolerance of surface errors – typographical/spelling errors, symbols and exclamation marks, etc. to express emotional meaning e.g. Yeees!!, symbols indicating emotions called emoticons e.g.:-), formulaic phrases, emotes, to display action in a chat room, e.g. looks round nervously. Discourse features vary from mode to mode, but for emails include omitting salutations and quoting previous messages in whole or part Most users connect to the internet, using a modem (modulator/demodulator-an electronic device that converts signals to enable a computer to be
connected to an ordinary telephone line), through a server and router owned by an ISP (internet service provider). Often they have to pay the ISP a fee to make a connection but some ISPs provide a free connection, usually depending on advertising on the webpages to pay for the service or charging premium rate telephone line charges for helplines that provide help and support services. With free ISPs, the user only pays for the telephone call connection which is usually a local connection.

To attract users to connect through their system, ISPs offer various options including: an unlimited number of email addresses (unique address codes used to contact someone using electronic mail) with filtering of email to remove junk email (unwanted and unsolicited email normally advertising or trying to sell something), unlimited Web space (file storage space for storing webpage files) for setting up your own website (a set of related pages stored on a server on the World Wide Web) and virus checking facilities (for checking your computer files to detect programs written with the purpose of causing damage or causing a computer to behave in an unusual way), Web-based mail allows users to access their email from any computer with Internet access. POP3 email, however, requires a special email program but is faster and more efficient. Users register (open an official account) with the ISP, using a program provided on a CD-ROM or by filling out details on a webpage while online (connected to the internet).

| Help-box |

| **email** (electronic mail) | sending and receiving text messages. |
| **Usenet** (user network) | accessing newsgroups (groups of users who send and read messages on a particular topic). |
| **IRC** (Internet relay chat) | chatting to other users using text messages in real-time (immediately, while users are logged on to the system). |
| **FTP** (file transfer protocol) | copying files e.g. program files, between computers on a network. Copying files from a server computer to a client computer is known as downloading and copying from a client to a server is uploading. |
| **Telnet** (telephone network) | logging on (connecting to a network system account, normally using a password) to your local server from across a network communications system at a distance e.g. from another country. |
| **MOOs** (Multi-user domain that is object oriented) | taking part in simulations in a shared environment. Each person assumes a persona and communicates using text messages. |
| **WWW** (the World Wide Web, commonly referred to as the Web) | browsing (moving from webpage to webpage) linked documents known as WebPages. |

**BAPIAHT 7.**

**Ex. 1 Read the text. Choose the words that best complete the sentences.**

cyberspace
navigate
random
interactive
transfer

network
create
The Internet

The Internet originated in the early 1970s when the USA wanted to make sure that people could communicate after a nuclear war. This needed a free and independent communication network without a center and it led to a (1) _______ of computers that could send each other e-mail through (2) _______.

Tim Berners-Lee invented the World Wide Web (WWW) when he discovered a way to jump to different files on his computer using the (3) ________, or unplanned, links between them. He then wrote a simple coding system, called HTML (Hyper Text Markup Language), to (4) _______ links to files on any computer connected to the network. This was possible because each file had an individual address, or URL (Uniform Resource Locator). He then used a set of (5) _______ rules, called HTTP (Hyper Text Transfer Protocol), to link Web files together across the Internet. Berners-Lee also invented the world’s first browser. This lets you locate and view Web pages and also (6) _______ from one link to another.

The WWW became available to everyone in 1991 and the number of Internet users grew from 600,000 to 40 million in five years. Today, that number is much larger and there are now many browsers that provide Web pages, information and other services. You can also do research, download music files, play (7) _______ games, shop, talk in chat rooms and send and receive e-mail on the WWW.

Ex. 2

Complete the sentences with the words from the previous exercise.

1. When you surf the Internet, you are traveling in ________.
2. Some people spend too much time playing _______ games on the Internet.
3. People use the Internet to _______ information from one place to another.
4. You can sometimes have a computer _______ that is not connected to the Internet.
5. Some people surf the Internet at _______ just to see what they can find.
7. It is easy to _______ around a screen with a mouse.

BAPIAHT 8.

Ex. 1. Read the text. Choose the best words to complete it.

The Miracle Chip

Scientists at Imperial College London today announced plans to begin full-scale trials of a new device which (1) _______ revolutionize the lives of people with serious medical conditions.

A) must  B) could  C) can’t

The device is a miniature sensor less than two millimeters square which (2) _______ monitor changes in the body and is able to send out warning signals via a mobile phone.

A) can  B) might  C) may

The sensor, a microprocessor, is put under the skin of a patient's body and (3) _______ detect any dangerous changes long before the patient is even aware of them.

A) can’t  B) can  C) might

This means that patients with serious conditions who would usually have to stay in hospital (4) _______ now live at home

A) can  B) must  C) should

and (5) _______ lead more or less normal lives.

A) can  B) must  C) can’t

When it detects changes in the body, the microprocessor sends out a pre-programmed text message to the patient's doctor or hospital, describing the changes in detail. Of course, patients with
the device (6) …… carry their mobile phone with them at all times, but this will be the only restriction on their lifestyles.

A) may B) could C) must

Although it will probably be expensive to develop, the device (7) …… be a boon to the economy

A) can’t B) could C) must

because those patients who (8) …… work because of the need to be near medical facilities will be able to go back to full-time employment, saving the government millions in sickness and unemployment benefits.

A) can’t B) could C) can

The first patients to be given the implant will be diabetics, but doctors hope to extend the trial to those with heart or lung diseases. And in years to come the device (9) …… be adapted to cover even more conditions.

A) might B) can C) can’t

If all goes to plan and the trial is a success, the device (10) …… be available to the general public within three to four years.

A) can B) couldn’t C) should

GATES SAYS GOODBYE TO YOUR MOUSE

Read and translate the text.

Bill Gates, who built his fortune equipping the personal computer, predicts that the keyboard and mouse will soon become relics.

The founder of Microsoft Corp used his swansong technology industry on Sunday to spell out a vision of a “digital decade” of telephones, televisions and cars that respond to voice and touch.

“This is the area that people underestimate the most,” he said. Mr. Gates, who plans to retire from day-to-day operations at Microsoft in July to oversee his $37 billion charitable foundation, gave a keynote address to a packed 3,500 seat Las Vegas ballroom at the world’s largest consumer electronics show.

He predicted that high-definition video “will be everywhere” from TV to wall projections to screens built into desks. Users will be able to roam in 3-D through virtual worlds when they do shopping or interact online with friends. Devices will connect seamlessly so that data is automatically transferred to mobile phone, for instance, “When you take a photo, it will show up where you want to show up,” he said.

The software billionaire has used the annual Consumer Electronics Show to unveil products such as the Windows operating system and the Xbox 360 game console. But his visionary predictions have not always led to commercial success, as in the case of the touch-screen tablet computer.

As Microsoft’s Vista computer operating system earned lukewarm reviews last year, its rivals have introduced bestselling products with “natural” user interfaces. Apple Inc’s touchscreen iPhone and Nintendo’s Wii motion-sensing video game, which allows players to connect wirelessly to the screen, have won popular acclaim.

Providing a glimpse into the future, Mr. Gates demonstrated a device called a Microsoft surface that embeds a computer in a table-top, showing how he could customize a snowboard in a shop. Just by running his fingers over the counter, he designed a snowboard with different colours and patterns. When he was happy with the result, he placed his mobile phone on the surface. The counter-top computer recognized the phone and wirelessly downloaded the design to the web.

Mr. Gate’s presentation was met by some skepticism because of Microsoft’s failure to unveil any major new innovations at the show.

“Part of this has to do with Microsoft being tired of announcing new staff that doesn’t ever
A winner was declared yesterday in the multi-billion pound war between rival high definition and DVD formats.

Sony’s Blu-ray technology looked to have prevailed after Toshiba’s HD-DVD system was dealt a devastating blow by a major film studio.

Warner brothers said it would release its films only in the Blu-ray format from later this year, a decision analysts believe will effectively kill off the rival.

The studio is behind the hugely-successful Harry Potter movies and has an extensive back catalogue, including such classics as The Wizard of Oz.

Consumers who want to see them in HD clarity in their living room will have to opt for a Blu-ray player costing £100 or so more than a HD-DVD machine, which can be bought for £175.

Despite this, analyst Robin Harris of Data Mobility Group said: “I think the war is over. HD-DVD has lost. The basic issue is not technology. It’s about distribution, it’s about marketing, it’s about content and Blu-ray has been winning the content war for some time.’

The battle was billed as the biggest in home entertainment since the VHS video machine saw off Betamax in the 1980s.

The introduction of high-definition DVD players has been hamstrung because consumers have been reluctant to spend hundreds of pounds on a box that might become obsolete.

Warner said this confusion and the resulting poor take-up of the technology was crucial in its decision.

There is no technological advantage for Blu-ray. Both types of player deliver images around five times sharper than existing DVDs through an HD-ready TV.

Toshiba said it was ‘surprised’ by Warner’s announcement and would ‘assess the potential impact.’ A spokesman added: ‘We remain firm in the belief that HD-DVD is best suited to the wants and needs of consumers.’

Is Shrink-Wrapped Software Dead?

There's a free-for-all on the Web right now, and you don't need a Ph.D. in computing to figure out how to tap into it. Simplified alternatives to many popular applications that you once had to buy are freely available online, thanks to new ad-supported programs that run right on your browser.

So what's the catch? While many of the free word processors, photo-editing programs and games lack the rich features of their retail counterparts—the word processor in Google Docs, for example, has just 11 fonts vs. the dozens in Microsoft Word—chances are you won't miss what's missing. After all, most people use only a small fraction of the features available. "Software went through a period where it got way too complex. We have a concept that focuses on simplicity,” says Dave Girouard, vice president and general manager of Google's free Web applications.
Below you’ll find some of the best free Web apps compared with similar retail products. With new programs popping up every week—some of which are available only through social-networking sites like Facebook—it pays to check out the freebies before spending a dime. And you can keep the change.

To Pay or Not to Pay.

Ex. 2. Word building. Look at the groups of words and decide what part of speech each word is. Then complete the sentences with the correct word.

Program design

1. Programs written in a high-level language require ……., or translation into machine code.
2. A ……. generates several low-level instructions for each source language statement.
3. Programmers usually …….. Their programs to create an object program and diagnose possible errors.
4. Most computer …….. make a plan of the program before they write it. This plan is called a flowchart.
5. A computer …….. is a set of instructions that tells the computer what to do.
6. Converting an algorithm into a sequence of instructions in a programming language is called ……….. .
7. New programs need …….. to make them work properly.
8. Any error or malfunction of a computer program is known as a ………….. .
9. The best compilers usually include an integrated ………….. which detects syntax errors.

BAPIAHT 12.

Are Cell-phones Harmful?

Read and translate the text.

All cell phones emit some amount of electromagnetic radiation. Given the close proximity of the phone to the head, it is possible for the radiation to cause some sort of harm to the 118 million cell-phone users in the United States.

What is being debated in the scientific and political arenas is just how much radiation is considered unsafe, and if there are any potential long-term effects of cell-phone radiation exposure.

There are two types of electromagnetic radiation:

Ionizing radiation. This type of radiation contains enough electromagnetic energy to strip atoms and molecules from the tissue and alter chemical reactions in the body. Gamma rays and X-rays are two forms of ionizing radiation. We know they cause damage, which is why we wear a lead vest when X-rays are taken of our bodies.

Non-ionizing radiation. Non-ionizing radiation is typically safe. It causes some heating effect, but usually not enough to cause any type of long-term damage to tissue. Radio-frequency energy, visible light and microwave radiation are considered non-ionizing.

On its Web site, the FDA states that “the available scientific evidence does not demonstrate any adverse health effects associated with the use of mobile phones.” However, that doesn’t mean that the potential for harm doesn’t exist.

Radiation can damage human tissue if it is exposed to high levels of RF radiation, according to the FCC. RF radiation has the ability to heat human tissue, much like the way microwave ovens
heat food. Damage to tissue can be caused by exposure to RF radiation because the body is not equipped to dissipate excessive amounts of heat. The eyes are particularly vulnerable due to the lack of blood flow in that area.

The added concern with non-ionizing radiation, the type of radiation associated with cell phones, is that it could have long-term effects. Although it may not immediately cause damage to tissue, scientists are still unsure about whether prolonged exposure could create problems. This is an especially sensitive issue today, because more people are using cell phones than ever before. In 1994, there were 16 million cell-phone users in the United States alone. As of July 17, 2001, there were more than 118 million.

Here are a few illnesses and ailments that have potential links to cell-phone radiation: cancer, brain tumors, Alzheimer’s, Parkinson’s, fatigue, headaches.

If you are worried about the potential hazards of cell-phone radiation, here are a few ways to reduce your risk:

· Use a hands-free headset.
· Use a phone that places the antenna as far away from you as possible.
· Extend the antenna during use.
· Limit calls inside buildings.
· Limit use by children.

Read and translate the text.

ROBOTS

Ever since the Czech writer Karel Chapek first coined the term “robot” in 1921, there has been an expectation that robots would someday deliver us from the drudgery of hard work. The word – from the Czech “robota”, for hard labour and servitude – described intelligent machines used as slaves in his play R.U.R. (Rossum’s Universal Robots).

Today, over one million household robots, and a further 1.1 million industrial robots, are operating worldwide. Robots are used to perform tasks that require great levels of precision or are simply repetitive and boring. Many also do jobs that are hazardous to people, such as exploring shipwrecks, helping out after disasters, studying other planets and defusing bombs or mines.

Robots are increasingly marching into our lives. In the future, robots will act as carers, medics, bionic enhancements, companions, entertainers, security guards, traffic police and even soldiers.

Domestic invasion.

Despite the longevity of the robot concept, robotic butlers that roam our homes and relieve us from housework still seemed far from reality until very recently. Instead, the vast majority of robots worked in factories performing the industrial functions of brainless machines.

However, a combination of increased computing power and advances made in the field of artificial intelligence, or AI, have now made software smart enough to make robots considerably more useful.

A recent report published by the United Nations revealed that sales of domestic robots had tripled in a single year. What’s more, they were well on their way to outstripping their industrial cousins.

While a large portion of the household robots were made up of robotic vacuum cleaners, mops, lawn mowers, pool cleaners, security bots and even robotic baby-rockers – the real boom was in entertainment robots.

Suddenly people were happy to pay for robots that had no specific functional value. Instead these bots, such as Sony’s Aibo robotic dog and its robo-pups served as robo-pets and companions, rather than slaves.

This is partly because many domestic chores still pose a real challenge for robots, in terms of dexterity and intelligence, even with seemingly simple chores such as ironing.
BAPIAHT 14.

SOCIAL NETWORKS

Read and translate the text.

A social network is a social structure made up of a set of actors (such as individuals or organizations) and the dyadic ties between these actors. The social network perspective provides a clear way of analyzing the structure of whole social entities. The study of these structures uses social network analysis to identify local and global patterns, locate influential entities, and examine network dynamics.

Social networking began in 1978 with the Bulletin Board System (or BBS.) The BBS was hosted on personal computers, requiring that users dial in through the modem of the host computer, exchanging information over phone lines with other users. This was the first system that allowed users to sign in and interact with each other, although it was quite slow since only one user could be logged in at a time.

Later in the year, the very first copies of web browsers were distributed using the bulletin board Usenet. Usenet was created by Jim Ellis and Tom Truscott, and it allowed users to post news articles or posts, which were referred to as “news”. The difference between Usenet and other BBS and forums was that it didn’t have a dedicated administrator or central server. There are modern forums that use the same idea as Usenet today, including Yahoo! Groups and Google Groups.

The first version of instant messaging came about in 1988 with Internet Relay Chat (IRC). IRC was Unix-based, limiting access to most people. It was used for link and file sharing, and generally keeping in touch with one another.

Geocities was among the first social networking sites on the internet, launching its website in 1994. Its intent was to allow users to create their own websites, dividing them into “cities” based on the website’s content. In 1995, TheGlobe.com was launched, offering users the ability to interact with people who held the same interests and publish their own content.

Two years later, in 1997, AOL Instant Messenger and SixDegrees.com were launched. This was the year instant messaging became popular and it was the first time internet users were able to create a profile and friend each other.

BAPIAHT 15.

Read and translate the text.

Friendster was the pioneer of social networking. In it’s first three months, the social networking website acquired 3 million users, amounting to 1 in 126 internet users being members at the time. Friendster served as the launching point for the widely popular MySpace, who cloned Friendster and launched after just 10 days of coding.

In the following years, other social networking websites like Classmates.com, LinkedIn and Tribe.net started to pop up, including what was to be the most popular social networking website in internet history.

Facebook.com was launched in 2004 with the intent to connect U.S. college students, starting with Harvard College. In it’s first month, over half of the 19,500 students signed up. After gaining popularity, Facebook opened it’s registration to non-college students, and in 2008, Facebook surpassed MySpace as the leading social networking website.

Social networking has come a long way since 1978, and we will all witness its evolution for years to come, forever changing the way people connect with one another.
Now social networking is the grouping of individuals into specific groups, like small communities or a neighborhood subdivision, if you will.

BAPIAHT 16.

Read and translate the text.

Although social networking is possible in person, especially in the workplace, universities, and high schools, it is most popular online.

This is because unlike most high schools, colleges, or workplaces, the internet is filled with millions of individuals who are looking to meet other people, to gather and share first-hand information and experiences about cooking, sports, gardening, developing friendships professional alliances, finding employment, business-to-business marketing and even groups sharing information about baking cookies to the Thrive Movement. The topics and interests are as varied and rich as the story of our universe.

When it comes to online social networking, websites are commonly used. These websites are known as social sites. Social networking websites function like an online community of internet users. Depending on the website in question, many of these online community members share common interests in hobbies, religion, politics and alternative lifestyles. Once you are granted access to a social networking website you can begin to socialize. This socialization may include reading the profile pages of other members and possibly even contacting them.

The friends that you can make are just one of the many benefits to social networking online. Another one of those benefits includes diversity because the internet gives individuals from all around the world access to social networking sites. This means that although you are in the Ukraine, you could develop an online friendship with someone in Denmark or India. Not only will you make new friends, but you just might learn a thing or two about new cultures or new languages and learning is always a good thing.

BAPIAHT 17.

Read and translate the text.

As mentioned, social networking often involves grouping specific individuals or organizations together. While there are a number of social networking websites that focus on particular interests, there are others that do not. The websites without a main focus are often referred to as "traditional" social networking websites and usually have open memberships. This means that anyone can become a member, no matter what their hobbies, beliefs, or views are. However, once you are inside this online community, you can begin to create your own network of friends and eliminate members that do not share common interests or goals.

As I'm sure you're aware, there are dangers associated with social networking including data theft and viruses, which are on the rise. The most prevalent danger though often involves online predators or individuals who claim to be someone that they are not. Although danger does exist with networking online, it also exists in the real world, too. Just like you're advised when meeting strangers at clubs and bars, school, or work -- you are also advised to proceed with caution online.

By being aware of your cyber-surroundings and who you are talking to, you should be able to safely enjoy social networking online. It will take many phone conversations to get to know someone, but you really won't be able to make a clear judgment until you can meet each other in person. Just use common sense and listen to your inner voice; it will tell you when something doesn't feel right about the online conversations taking place.
Once you are well informed and comfortable with your findings, you can begin your search from hundreds of networking communities to join. This can easily be done by performing a standard internet search. Your search will likely return a number of results, including MySpace, FriendWise, FriendFinder, Yahoo! 360, Facebook, Orkut, and Classmates, Connect, Odnoklassniki and the lovest in our region Vkontakte.

BAPIAHT 18.

Read and translate the text.

Not all computer systems are compatible, i.e. they cannot use the same programs and data. Connecting computers together to form a network can provide the ‘connectivity’ required to enable computers and software to communicate and to share resources. Networks connected together form an internet. The connection of networks throughout the world is known as the Internet (note that a capital I is used) or, more simply, the Net. Various communication services are available on the Internet, including email (electronic mail) for sending and receiving text messages and IRC (Internet Relay Chat) which allows users to communicate using text messages in real-time i.e. without any delay, while the users are logged on (connected to a network system account, normally using a password) to the system. An Internet service called FTP (File Transfer Protocol) is used for transferring data or program files between the powerful server computers that provide the network services and the client computers that use these services e.g. downloading music files. Note that copying data from a larger server system to a client is referred to as downloading and copying from the client to the server is known as uploading.

One of the newest and most popular services available on the Internet is the World Wide Web (WWW) which is often simply referred to as the Web (note the use of the capital W). The Web contains interlinked documents called web pages. A set of related webpages stored together on a server computer is called a website. Websites, such as Dogpile and Askjeeves, give the user access to special programs called search engines that are designed to allow the user to find relevant webpages on the Web. An Internet system designed to provide free, interactive access to vast resources for people all over the world is sometimes referred to as an information superhighway. Services such as these allow people to telecommute (use their computers to stay in touch with the office while they are working at home).

Computer uses mentioned in this unit include producing greetings cards; learning, using three-dimensional graphics programs called ‘Splat the Cat’ and ‘Pets 3’; using the Microsoft Word word-processing program including features such as clipart (ready-drawn graphic images that can be inserted into documents); communicating on the Internet using email and chat programs including the use of email attachments (other types of files e.g. video files attached to simple email text messages); distance learning and videoconferencing (a form of communication over a network that uses video cameras so that the people taking part can see and hear each other); electronic classrooms or boardrooms; browsing the Web (moving from webpage to webpage using a Web browser program); selling using a website; painting; scanning pictures; downloading music and creating CD-ROMs (compact disk read only memory, commonly referred to as CDs). CD-ROMs are storage devices that use laser light for reading and writing data. The most common storage device is a hard disk (a set of aluminium disks coated in a magnetic material and enclosed in a vacuum-sealed case) used for storing the operating system and applications programs as well as the user's data.

BAPIAHT 19.

Read and translate the text.

Computer Architecture

There are different types of computer of varying size and power, including the following:

Supercomputer (the most powerful type of mainframe).
Mainframe (large, very powerful, multi-user i.e. can be used by many people at the same time, multi-tasking i.e. can run many programs and process different sets of data at the same time.  
Minicomputer (smaller than a mainframe, powerful, multi-user, multi-tasking)  
Personal computer (PC) (single user)  
Desktop computer (suitable size for sitting on an office desk)  
Workstation (most, powerful type of desktop, used for graphic design, etc.) Portable (can be carried around, can operate with batteries)  
Laptop (large portable, can be rested on user’s lap)  
Notebook (size of a sheet of notebook paper)  
Handheld (can be held in one hand)  
Pen-based (main input device is an electronic pen)  
PDA (personal digital assistant, has functions such as task lists, diary, address book)  
UPS (uninterruptible power supply)  
RAM (random access memory) holds the program instructions and the data that is being used by the processor,  
ROM (read only memory) holds the program instructions and settings required to start up the computer.  
NIC – network interface card.

Ex.1 Choose the right answer: a, b, or c  

**Computer terminology**  
1. What cursor control device is operated by rolling it across a desktop?  
   A. trackball  
   B. mouse  
   C. pointer  
2. The common name for picture elements is  
   a. bits  
   b. resolution points  
   c. pixels  
3. Each piece of information written on a record (in a database program) is known as a  
   A. field  
   B. cell  
   C. layout  
4. To ……. a disk is to mark tracks and sectors on its magnetic surface.  
   A. save  
   B. store  
   C. format  
5. One gigabyte has …….  
   a. one thousand megabytes.  
   B. one thousand kilobytes.  
   C. one million megabytes.  
6. What is the only type of language that computers can understand directly?  
   A. human language  
   B. BASIC  
   C. machine code  
7. Which utility is based to have a live conversation (usually typed) on the Internet?  
   A. FTP software  
   B. IRC program  
   C. Web browser  
8. What name is given to the set of programs which manages and coordinates all the hardware and software?  
   a. system program  
   B. operating system  
   C. database management system  
9. What type of program is used for the creation and manipulation of texts?  
   A. word processor  
   B. spreadsheet  
   C. spell checker  
10. ……. means moving a complete display horizontally or vertically on the screen.  
    A. wrapping  
    B. indenting  
    C. scrolling

**MODULE TEST 1**

**Error correction.** Read the text below and look carefully at each line. Some of the lines are correct, and some have a word which should not be there. If a line is correct, put a tick (√) by the number. If a line has a word which should not be there, write the word on the separate answer sheet. There are two examples at the beginning (0 and 00).

**Internet shopping**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>√</td>
<td>Imagine the situation: a busy mother is pushing a heavy trolley</td>
</tr>
</tbody>
</table>
around of a supermarket. Her baby is sitting in the seat and crying for food, while her two bigger children have become much bored and are starting to be run around the shop. They have already spent an hour in their car, stuck in queues of vehicles waiting to park, and the mother will soon have to carry up a large number of bags back to the car. Wouldn't it be a whole lot easier for the mother to have order her shopping on the internet? This method of shopping saves time and transport costs, enables you can see a much greater range of goods, and must surely be a lot less stressful. So why has internet shopping not caught on to a greater extent? The answer it may well be that most people still enjoy leaving their homes to shop. They want to get out into a different environment, meet people and watch as the world go by. They want to be able to see and touch the goods, try them on clothes before buying them, for an example. That is why, in my opinion, internet shopping will never replace with conventional shopping.

Goodbye to CDs

In the old days the (1) way to get your favourite pop song was to walk into a record shop and buy a CD. But (2) stays still in the world of technology and when you talk to young people today it seems they are (3) getting their music from the Internet, with the result that many record stores arc experiencing dropping sales and can often be virtually deserted. Nowadays it seems (4) is downloading songs as digital files from the Internet and listening to them on MP3 players and mobile phones. (5) who still buys their music from shops is regarded as a dinosaur!

In fact in Britain the 'pop chart' – the list of the most popular songs – is now based equally on sales in shops and on the number of songs downloaded from the Internet. Record companies have recognized the importance of this new way of distributing music and (6) you could possibly want to hear is now available in digital form. From the latest avant-garde groups to the most obscure medieval church music, there is always (7) ready and willing to record even the most esoteric piece of music and upload it onto the Net.

Of course, (8) that can be downloaded to one computer can also be downloaded to another, so it's easy to swap music tracks with your friends. But (9) musicians aren't happy with this situation. Making illegal copies of tracks deprives them of royalties. They believe (10) should be done to prevent what they feel is little more than downright theft.

The PostScript revolution
The PostScript language (1) in the early 1980’s as a page description language for printers and photosetters. It was Adobe Systems, Inc. that (2) the PostScript language and developed Illustrator, the first program that (3) advantage of the full range of graphic possibilities (4) by PostScript. Adobe Systems (5) also the suppliers of fonts for use with PostScript-based printers.

The language was documented in *The PostScript Language Reference Manual*, (6) by Addison-Wesley in 1985. PostScript soon (7) widely used by DTP publishers and graphic designers. In 1990 PostScript level 2 (8), which incorporated new features such as ATM technology, composite fonts, image compression and other details.

When some experts (9) performance of different color printers, they (10) that every PostScript printer was easy to use and (11) consistently good results, while every non-PostScript printer in at least one application.

**MODULE TEST 5**

*Complete the text below. Use one word or phrase in each gap.*

```
broadband, threads, laptop, word
processing, bookmarked, e
mails, DTP, downloaded, part
```

Switched on and on-line...

It's difficult for me to imagine not using my desktop or (1) at some stage of a normal day. As a rule, the first thing I do each morning is to go online to see if I have received any overnight (2) from friends who live on different continents. Now that I've upgraded to (3), I may make a computer call to one of them too. I do this using my built-in microphone and the communication software which I (4), free of charge, at lightning speed. After breakfast, I may decide to solve a crossword or Sudoku problem, accessed and completed online, before starting work. During the course of the morning, I may use my (5) system to write letters or essays. The cut and paste facilities are now essential. I've relied on them to such an extent that I've lost the ability to plan effectively in my head. In the afternoon, I might be tempted to e-purchase cosmetics, a book, a pot of paint or sports equipment, using my credit card on secure sites. I might use (6) to create a poster for the university pantomime. Before dinner, I'll visit my most frequently-visited websites, which I've (7) for quick access, in order to find out what's on television, to check the balance of my internet bank account or find out what the weather's like in the Amazon jungle.

I might end the day by going onto a chatsite or by reading the latest (8) on a discussion group I've registered with. The topic is something I'm researching at the moment – our dependency on computers! Who needs legs, buses, pens and paper? For the most (9), not me!
СПИСОК ЛІТЕРАТУРИ

ОСНОВНА