

МІНІСТЕРСТВО ОСВІТИ І НАУКИ,  
МОЛОДІ ТА СПОРТУ УКРАЇНИ

НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ  
«ХАРКІВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ»

**МЕТОДИЧНІ ВКАЗІВКИ**

до практичних занять та самостійної роботи з розвитку умінь  
та навичок професійного спілкування англійською мовою  
для студентів I курсу факультету комп'ютерних  
та інформаційних технологій

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Методичні вказівки до практичних занять та самостійної роботи з розвитку умінь та навичок професійного спілкування англійською мовою для студентів I курсу факультету комп'ютерних та інформаційних технологій Уклад.: Полоусова Н.В., Неустроєва Г.О., Нетецька Т.М., Землякова О.О. – Х. : НТУ «ХП», 2012. – 80 с.

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## **ПЕРЕДМОВА**

Дані методичні вказівки призначені для аудиторних занять з іноземної мови під керівництвом викладача, а також можуть використовуватися для самостійного опрацювання. Методичні вказівки спрямовані на оволодіння необхідним граматичним та лексичним матеріалом з англійської мови.

Робота складається з двох розділів, в яких подано сучасні тексти з наукових видань за спеціальностями комп'ютерних та інформаційних технологій, що дозволяють використовувати методичні вказівки для повторення вивченого матеріалу, для самостійної роботи з текстами в аудиторії та вдома.

## UNIT 1

### NEW INFORMATIONAL TECHNOLOGIES

#### PART 1

##### I. Discuss these questions.

1. Do you use the Internet? If so, what do you use it for?
2. What goods or services have you bought over the Net? What would you prefer not to buy over the Net?
3. What kind of products or services are best sold on the Net?
4. What are the risks of e-commerce for
  - a) the companies involved?
  - b) their customers?

**II. a) Look at the various means used to communicate ideas and messages. For each pair, indicate which is the *spoken* and which is the *written* means. Which of these are interactive means of communication?**

- |                           |                          |
|---------------------------|--------------------------|
| 1) novels                 | 6) films                 |
| 2) letters /faxes/ e-mail | 7) telephones            |
| 3) TV commercials         | 8) magazine adverts      |
| 4) newspapers             | 9) radio/TV news reports |
| 5) lectures /speeches     | 10) textbooks            |

**b) For each of the pairs above discuss:**

- 1) which means you prefer and why
- 2) in what situations each means is more effective. You may use the prompts below and any further ideas of your own.

leaves more to the imagination	more absorbing	greater visual impact
provides a record of a transaction	time-consuming	more/less personal
governed by program schedules	instantaneous	conveys more information
more up-to-date-information	more relaxing	requires greater concentration

eg; *I'd* rather *read a* novel than watch a film because I *find* that books are more absorbing and they leave more to the imagination, whereas films on TV *or* at the cinema ...

**III. Look at the list of technological inventions in the field of communication.** Then, from the list of advantages and disadvantages below, write the numbers in the space provided to indicate which apply to each invention. Some may be used more than once. Can you think of any other advantages or disadvantages?

- 1) easy to use
- 2) not everybody can afford one
- 3) access to all kinds of information
- 4) may lose social skills/become isolated
- 5) instant information about world issues
- 6) people may ring at inconvenient times
- 7) can be contacted at any time
- 8) children may access unsuitable information
- 9) faster than sending letters by post
- 10) poor reception in certain areas

Technological inventions	Advantages	Disadvantages
Telephone tax-machine mobile phone radio/television e-mail the Internet		

**IV. Read the text.**

**THE INTERNET AND E-COMMERCE**

**A. The Internet**

The Internet service provider or ISP is the organization that provides you with Internet access. You register and open an account, then they give you an

email address so that you can communicate by email with other users. Some ISPs have their own content – news, information and so on but many do not. After you log on by entering your user name and password, you can surf to any site on the World Wide Web. If you're looking for a site about a particular subject, you can use a search engine like Google or Yahoo. When you've finished, remember to log off for security reasons.

### **B. Clicks-and-mortar**

My name's John and I own a chain-of sports shops. Last year I started an e-commerce operation, selling goods over the Internet. We've done well. Visitors don't have trouble finding what they want, adding items to their shopping cart and paying for them securely by credit card. Last year we had two-million-unique users (different individual visitors) who generated 35 million hits or page views. That means our web pages were viewed a total of 35 million times!

E-commerce or e-tailing has even acted as a form of advertising and increased levels of business in our traditional bricks-and-mortar shops! Pure Internet commerce operations are very difficult. To succeed, I think you need a combination of traditional retailing and e-commerce: clicks-and-mortar. In our case, this has also helped us solve the last mile problem, the physical delivery of goods to Internet customers: we just deliver from our local stores!

### **C. B2B, B2C and B2G**

Selling to the public on the Internet is business-to-consumer or B2C e-commerce. Some experts think that the real future of e-commerce is going to be business-to-business or B2B, with firms ordering from suppliers over the Internet.

Businesses can also use the Internet to communicate with government departments, apply for government contracts and pay taxes: business-to-government or B2G.

#### **1) Find expressions in B opposite with the following meanings.**

- 1) traditional shops (two possibilities)
- 2) selling on the Internet (two possibilities)
- 3) where you put your items before you purchase them
- 4) physical delivery of goods to Internet customers

5) how many times a webpage is viewed

**2) What type of e-commerce are the following? Choose from B2B, B2C or B2G.**

1. Private individuals can rent a car without going through a call centre.

2. The city is looking for construction companies to build a new airport.

There are hundreds of pages of specifications you can obtain from the city authorities.

3. Car companies are getting together to buy components from suppliers in greater quantities, reducing prices.

4. Small businesses can get advice about wages, taxation, etc.

5. Members of the public can buy legal advice from law firms.

6. It can seem very convenient, but if you are out when the goods you ordered arrive at your house, you're in trouble!

**V. The media: Internet and e-mail.**

**The pros and cons of Internet use:**

**a) Here is a list of some possible advantages (pros) and disadvantages (cons) of the Internet.**

pros	cons
e-mail, instant messaging <sup>1</sup> , chat rooms <sup>2</sup> , newsgroups <sup>3</sup>	ISP <sup>9</sup> charges can be high for heavy users
e-commerce <sup>4</sup> (e.g. Internet banking, travel booking)	downloading <sup>10</sup> and uploading <sup>11</sup> times can be slow
ability to send files as attachments <sup>5</sup>	spam <sup>12</sup> can be annoying
fun of just browsing <sup>6</sup> and surfing the Web <sup>7</sup>	Cookies <sup>13</sup> track your activities on the Web
ability to transmit graphic images <sup>8</sup> and sound files	many sites contain pornography and other offensive material <sup>14</sup>

1) a kind of e-mail where both people are online at the same time

- 2) an online conversation between a group of people on topics chosen by them, where you can enter or leave the “room” at any time
- 3) a website where people with shared interests can get news and information
- 4) all kinds of business done on the Internet
- 5) files you send at the same time as e-mail messages
- 6) looking at different websites, with no particular goal
- 7) moving from one website or one webpage to another, usually-looking for something
- 8) technical term for pictures, icons, diagrams, etc.
- 9) (pronounced I-S-P) Internet Service Provider: a company that offers users access to the Internet and services such as news, e-mails, shopping sites, etc. usually for a monthly fee
- 10) bringing files to your computer from the Internet
- 11) sending files from your computer to the Internet or to another Internet user
- 12) unwanted advertisements and other materials sent from the Internet to your computer, often without your knowledge, which can follow and record what you do, which website you visit, etc.
- 13) material such as pornography, or extreme political news, or material that encourage hate and violence against people

#### **b) E-mail and Internet communications.**

1. I’ve **bookmarked** the CNN home page as I use it regularly to get the latest news. – [put it in a list of websites I can access immediately]
2. If you **subscribe** to newsgroups, you often get hundreds of messages- [become a member of]
3. Some ISPs allow you to **screen out** unwanted mail – [prevent from reaching you]
4. Our **server** [central computer that distributes e-mail and other services to a group of users] at work was **down** [not working] yesterday so I didn’t get your message till today
5. Someone **hacked into** our company server and destroyed all our files – [accessed it legally]



6. Do you have good **anti virus software**? It's worth updating it frequently – [protection against computer viruses]

7. She must have changed her e-mail address – the e-mail I sent her **bounced-** [came back to me]

8. That file you sent me as an attachment was unreadable. The text was completely garbled – [just a series of meaningless letters and numbers].

**VI. Match the words and phrases on the left with the explanations on the right.**

- 1) attachment      Internet site where people with common interests can email each other online
- 2) cookie            unwanted web pages (e.g. advertisements) sent to you via the Internet
- 3) spam              company that gives you access to the Internet and offers news pages, shopping, etc.
- 4) chat room        program sent to your computer from the Internet, used to follow your activities
- 5) ISP                file sent at the same time as an e-mail message

**VII. Some of these pairs of opposites exist in the language of Internet/ computer communications, others do not. Tick the box for “exist” or “doesn’t exist”.**

	<b>word</b>	<b>opposite</b>	<b>exist</b>	<b>doesn't</b>
1)	delete	undelete		
2)	download	upload		
3)	update	downdate		
4)	inbox	outbox		
5)	online	offline		
6)	install	uninstall		

**VIII. Use the correct words from the table above to fill the gaps in these sentences. You are given a paraphrase of the meaning in brackets.**

1. I sent a photo of my house by e-mail to my friend in Canada, but it took ages to \_\_\_\_\_ (transfer from here to there) and I spent 20 minutes \_\_\_\_\_ (connected to the Internet).

2. I've had your message in my \_\_\_\_\_ (a place where unread e-mails are stored) for two days but haven't had time to read it yet.

3. I had a lot of trouble trying to \_\_\_\_\_ (add to the programs already on my computer) that new software I bought.

4. How do I \_\_\_\_\_ (restore something accidentally rubbed out) on this computer?

5. I write my e-mails \_\_\_\_\_ (while disconnected from the Internet) and then connect to send them.

**IX. Look at these expressions taken from magazine articles and advertisements for computers and Internet services. In your own words, say what the words in bold mean.**

1. A new law has gives **e-signatures** the same legal status as handwritten ones.

2. **E-learning** will become more and more common as an alternative to traditional learning.

3. We have **e-enabled** everything you need to study on the Internet.

4. **E-books** are beginning to seriously compete with traditional books.

5. The **dotcom** economy has attracted hundreds of new businesses hoping to make a fortune.

## SUMMARY WRITING

**X. Read the following passages and answer the questions.**

Electronic mail may be one of the great conveniences of modern life, but it isn't very portable. In order to read and send e-mail, your computer and software normally must travel with you. But a-new breed of web based e-mail service – many of them free – lets you check and reply to e-mail from any computer with an Internet connection.

Hotmail (www.hotmail.com), recently acquired by Microsoft, and Bigfoot (www.bigfoot.com) were two of the first “e-mail anywhere” providers. But **they**’ve been joined by popular web search services such as Yahoo and Excite. AH work similarly. Yahoo Mail (mail.yahoo.com), for example, is free and lets you send or receive e-mail from any computer. You simply log on to the Yahoo website and enter a password to check your mail. You can also access your e-mail from other systems that use a standard “post office protocol” (called POPS, used by most office networks).

Aside from the fact that it is free, one of the best perks of web-based e-mail is that you get a permanent e-mail address you can keep even if you switch to a different Internet service provider or browser software. And the e-mail software is built into the website, so there’s never any upgrading required.

**Questions:**

- A. What does the writer mean by the phrase “Electronic mail... isn’t very portable”?
- B. What differences are there between the various web-mail services as far as the way in which their function is concerned?
- C. What do you have to do to check your e-mail if you’re using Yahoo web-mail?
- D. What are the two major advantages of web-based e-mail apart from the facts that it is free and that you can access it from anywhere?

**XI. Use the words given in capitals at the end of some of the lines to form a word that fits in the space on the same line.**

**FINDING INFORMATION**

*Almost one in ten children have stopped using (0) **refer** ( **reference**) books and are relying on electronic sources, chiefly the Internet, to get their information, according to a full study of reading habits.*

All age groups of the (1) **Populate** (\_\_\_\_\_) were involved in the survey from young children to the elderly. The report offers the first (2) **statistic** (\_\_\_\_\_) evidence that a new generation of children growing up in the microchip era has (3) **mark** (\_\_\_\_\_) different attitudes to the (4)

**acquire** (\_\_\_\_\_) of knowledge from those of their parents. After the age of five, a small (5) **minor** (\_\_\_\_\_) about 15% make use of electronic sources. However, this percentage increases (6) **drama** (\_\_\_\_\_) to more than half for 12-16 year olds, where (7) **digit** (\_\_\_\_\_) sources of information are used in favour of text-books. After this age, the (8) **percent** (\_\_\_\_\_) of people using technology to acquire information falls sharply and books, (9) **popular** (\_\_\_\_\_) in earlier ages, are more widely used. Evidence also reveals a (10) **substance** (\_\_\_\_\_) difference in the attitude of parents and their offspring to attaining knowledge. The 180-page study indicates that the old habit of reading books continues to flourish despite all counter attractions, as by far the biggest cultural pastime in Britain.

## **XII. Read the text.**

### **EFFECTS OF ELECTRONIC MEDIA**

**Presenter:** Good evening and welcome to our weekly debate. This evening's topic is Electronic Media and Young-People and our guests tonight are Mike Marshall, a specialist in child development, Tom Gates, an educational psychologist, and Ruth Bowker, a concerned parent. Mike, to start off with, could you tell us something about the effects of electronic media on a developing human brain?

**Mike:** Certainly. First of all, let me say that these are not all bad. It depends very much on the content and pacing of the game, computer programme or TV programme in question. So if the game or programme is relatively slow-paced and has a narrative form, it can actually help to develop a form of long-term memory that we call declarative memory, which is related to language capabilities. However, many programmes and games are very frenetically-paced and contain violent or bizarre elements which serve to trigger the "fight or flight" response, priming your reflexes to respond rapidly to danger. It is a useful response in that it helps to enhance survival, but when it is triggered in situations where no real threat exists, it can cause us to act impulsively and inappropriately. Too much stimulation of this kind could inhibit the development of rational thought in children.

**Ruth:** I'm glad you brought up the point about violence, because I think that's the main thing that worries parents. Research shows that regular exposure to violent scenes can trigger aggressive attitudes and behavior in children. It can also lead to desensitization – in other words, it has a numbing effect on the emotions, so that in the end young people come to accept violence as a way of solving problems.

**Complete the notes with one or two words or a short phrase:**

### **Effects of electronic media**

The effects of electronic media on the brain depend on the games or programmes (1) \_\_\_\_\_. Games or programmes with a narrative structure can help to develop long-term memory and so improve children's (2) \_\_\_\_\_. Frenetically-paced games or programmes with violent elements get your body ready to (3) \_\_\_\_\_. When survival is not at risk, this response can lead to behavior which is (4) \_\_\_\_\_. Frequent over-stimulation of this type may prevent children from (5) \_\_\_\_\_. Regular exposure to on-screen violence can lead to children behaving (6) \_\_\_\_\_ it can also cause (7) \_\_\_\_\_.

### **XIII. Read the text.**

#### **THE PRICE OF PROGRESS**

I was listening sleepily to that ingenious contraption, my digital clock radio, the other morning, when I half heard one of those items that infects your day. It was about a new invention. A genius has decided that we wait too long at supermarket check-outs, and so he has developed a considerate computer to let the brain take the strain. It all involves weighing, and tearing off special little tags from each item you buy, and feeding them into a machine and weighing again.

Now I can recall a time when there were a few long queues in supermarkets, because the companies ploughed their profits into employing *two* people at each check-out: one to ring up and the other to help you speedily-pack. Remember? It was also when every garage was staffed by friendly men who filled the car up, checked the oil and even did the tyres, before an infernal

machine encased a solitary soul in glass by the till, reading off the digits and charging you accordingly. It meant jobs for them; and for you – *people* who had the time to be jolly, grouchy, helpful or saucy.

Maybe you believe in that sort of progress. But I would like to smash the dreadful machines. I simply cannot understand why otherwise intelligent humans have gone computer-mad. It starts early: teachers despair of time-telling when all the kids sport hideous digital watches that peep, play tunes, start and stop, even show firework displays, but instill no sense of the hands moving majestically round a clock face. No more “Happy Families”, computer toys bark at them in Americanese and cost a fortune in batteries. Instead of learning mental arithmetic they grow-up thinking that calculators are their right.

As adults, they drivel on about Space Invaders, and learn a dead vocabulary that owes nothing to Shakespeare or Milton. Boring, mindless, boring. As for thinking, our computers will do it for us.

Computers breed laziness and discontent. A couple came to my house and gazed in disbelief at the battered old Olympia, on which I am typing this. “Gosh, we’d thought you would have a word processor by now.” I go to a library and see my beloved dusty manuscripts and old newspaper cuttings replaced by gleaming terminals, so you cannot actually handle the stuff. Then I hear from friend that he is actually contemplating spending money on a “cozy home computer”, so that all the little details of his life can be stored in its nasty cold brain. As for organising, our computers will do it for us.

All the science fiction fantasies of computers taking over the world, or being used to plot some devious overthrow of government are not far from the truth I see all around me. Myths are rooted in a need to explain to ourselves the workings of the universe, and of human nature. That modern myth foretells the insidious corruption of man by his own dinky little invention.

The computer generation (God help them) assumes that it is better to calculate, buy petrol, tell the time, work out your holiday plans, pay your bills, and even shop, with the aid of a computer. After all, our civilization is founded, now, on the certainty that we can kill by remote control and a computer error could unleash Armageddon. The age of the computer is the age of dehumanization. Significantly in my old Oxford dictionary the word does not

exist except as a subheading – a person who computes or calculates. Now the person has gone. As for feeling, our computers won't do that us.

**Answer the questions:**

1. Explain the phrase “ingenious contraption”.
2. What does the writer mean by an item “that infects your day”?
3. How effective does the writer seem to think the new invention will be, and why?
4. What is wrong with the service which the writer receives at garages these days?
5. What does “It” in line 18 refer to?
6. Explain in other words why teachers disapprove of digital watches. What might “Happy Families” have been?
7. Why does the writer think that the new vocabulary, learnt by adults, is “dead”?
8. In what way do computers “breed laziness and discontent”?
9. What are the gleaming terminals at the library?
10. Explain “to plot some devious overthrow of government”.
11. Explain the phrase “rooted-n”.
12. What is “that modern myth”?
13. Why does the writer see the dictionary definition of a computer as significant?
14. Summarise in 50-100 words the writer's complaints about computers.

**XIV. Read the website descriptions. To which website does each sentence 1 - 7 refer?**

**a) paralegal.com** Fed up with paying exorbitant legal fees? Get leading-edge legal services at a fraction of the cost of going to a law firm. E-mail our legal team for low-cost advice on all aspects-of company and tax law. Download specialist up-to-the-minute documents for a small charge. Conduct your own court cases with our help and save thousands of euros! No win, no fee!

**b) bespontaneous.com** Be spontaneous! Do something on the spur of the moment. Book otherwise impossible-to-get tickets to theatre and sports events. Ready to fly tomorrow? Take a break to one of our popular destinations: beach

or city. Worry-free booking by credit card on our secure server. Next-day courier delivery of tickets to your door.

**c) worldweather.com** Want to see what the weather's like anywhere in the world? Come to worldweather.com! Consult free forecasts for 100 world cities. Download stunning satellite pictures of the world's increasingly unpredictable weather for free. Deluxe, framed versions of these pictures make beautiful gifts. Order on-line. Delivery within 48 hours.

**d) goinggone.com** Consumer electronics products auctioned daily: computers, TVs, washing machines, you name it. It's so simple: put in your bid and we'll notify you by e-mail of the competing bids. You can raise your bid as many times as you like over a three – day period. If your bid is the highest at the end of three days, pay by credit card and goods are delivered to you within 24 hours.

1. You consult this site if you are not sure what clothes to take with you on a trip.

2. This site tries to reassure users who may be worried about giving their credit card details on-line.

3. This site mentions a delivery method that does not use the ordinary post office service.

4. This site does not mention physical delivery of goods or documents.

5. On this site, you can order a picture to put on your wall.

6. On this site, you can offer a price for something, but you won't necessarily get it.

7. On this site, there is a service that you may have to pay for or that may be free, depending on the results.



# COMPUTERS

## PART 2

**I. Make a list of people who use computers. What do they use them for? Who might say the following?**

- a) “I love computers. In fact I have one at home and I use it to play games. The games are on floppy disks but the programs are on the hard drive.”
- b) “I couldn’t live without my laptop. I take it everywhere with me.”
- c) “We upgraded our old computers by having CD-ROM drives installed.”
- d) “Having databases of names and fingerprints is useful for us.”
- e) “Our students can connect to the Internet to download software and also to find information for different research projects they are working on.”

**II. Reading task: Gapped text.**

**Strategy: Understanding reference words.**

1) Skim through the following text to get the general idea of the meaning. Do not worry about words you do not know. Choose a suitable title for the text. (Do not focus on the words in italics or the gaps 1 – 3 at this stage.)

- a) The development of the computer
- b) The problems of having a computer
- c) Personal computer

### TEXT

Although computers have been around for a long time, it wasn’t until recent years that *they* became accessible to almost everyone. Approximately 60 million computers are sold each year. In the 19th century, Charles Babbage, an English mathematician worked out the principles of the modern computer. [1]

One of Babbage’s designs had many features of a modern computer. *It* had an input screen and a store for saving data, together with a printer that made permanent records. Today, a typical computer has components to display and print information. *These* are the monitor and the printer. [2]

Nowadays, most computers come equipped with CD-ROM drives, which provide users with immediate access to a huge source of information; for *those* who want entertainment, the CD-ROM and the addition of speakers can bring a game or activity to life. With the development of the Internet and the World Wide Web, many computer users now have access to an even bigger range of facilities, by linking up with other computers around the world. [3]

Another feature of high technology machines is video conferencing. *Such* a facility enables people to see each other while they are talking on the phone through the Internet. If the people communicating through the Internet have mini-cameras connected to their computer they can speak to each other face-to-face in real time. The need to be better informed is creating more powerful machines to provide society with all kinds of information and services.

2) Read the text again more slowly. Choose from the sentences A – D the one which best fits each gap-(1 – 3) in the above text, using the reference words in **bold** to help you. There is one extra sentence which you do not need to use.

- A. This is achieved through a modem and a telephone line.
- B. Both of these involve training.
- C. It also has a keyboard and a mouse to enter commands and data which is stored on and retrieved from the hard drive or floppy disks.
- D. At that time, the technology to put the theory into practice did not exist.

3) Complete the following text with suitable reference words. Sometimes more than one answer is possible.

Despite the advantages of using computers, there are also drawbacks. First, (1) \_\_\_\_\_ are generally expensive to buy, maintain and update. There are also fears that the use of computers in education reduces human interaction and (2) \_\_\_\_\_ may cause developmental problems in some students. A further problem is the availability of software. Educational computer programs can be bought but (3) \_\_\_\_\_ programs may not suit the needs of individual classes. Teachers can adapt (4) \_\_\_\_\_ software to suit (5) \_\_\_\_\_ needs in the classroom, but this is time-consuming and often complicated.

**III. You are going to read an article, about the uses of computers. Eight sentences have been removed from the article. Choose from the sentences A - I the one which best fits each gap (1 - 7). There is one extra sentence which you do not need to use. There is an example at the beginning (0).**

Key parts of the sentences are in *italics* to help you with some of the questions.

### **THE COMPUTER AND ITS USES**

Few industries have changed so much in such a short time as the computer industry, and the pace of change shows no sign of slowing. The computer now has a role in almost every aspect of modern life, and it has radically affected the way people work, play, study and organise their lives.

*As we enter the 21st century, computers are influencing ways of teaching and learning, as access to computers in schools is becoming more widespread and varied. [0 H].* In a teaching mode, computers provide a wide variety of information and practice material. They can also play a testing role in a range of subjects including Maths, English and Modern Languages. The one-to-one interaction students have with the computer, along with the immediate response to their answers, help to promote independent learning.

[1] In the fast-changing world of business, employees are being physically removed from the workplace and the proximity of their colleague, while remaining virtually connected via telephone, and the Internet. Laptop computers enable business-people who travel to have access to important information at the touch of a key. [2]

Computers are used to solve time-consuming data-management problems, such as payroll calculations, keeping stock records, bank account transactions, airline reservations, and scientific and engineering computations. Computers are also important in the collection, organisation, storage, retrieval and interpretation of information. [3].

In the film industry, computers are used to create graphics for scenes which would have been inconceivable in the past. This technique was used for films like “Jurassic Park” where the incredibly realistic scenes of dinosaurs were all computer-generated.

[4] Additionally, computer technology enables the training of pilots in flight simulators. Not only do these create the illusion of flying but they are safe and cheaper than training staff in airplanes.

In the home, the computer has become a great source of entertainment with the introduction of interactive Virtual Reality programs which are available on CD-ROM or through the Internet. They enable people located in different places to come together and interact with one another in real time using speech, sound and 3-D animated graphics. [5].

Nowadays, computers come equipped not only with a mouse, but also a host of different devices. Such components are essential if you are to spend any time online, whether it is playing games or researching any number of topics on the Internet [6]. It is possible to explore sites on anything you are interested in, or even chat with celebrities, experts and others who share your interest. Keep up with the latest news, fashions and reports. Look up facts on everything from who invented the plane to where to go on holiday.

In the future, today's technology will probably become obsolete as machines become more powerful. [7] The development of smaller machines will mean that it will be possible to condense all the written knowledge in the world into devices the size of a child's notebook. All human knowledge will literally be at your fingertips.

**A.** *Another area* where computers are used is in the military, especially in the development of weapons and surveillance equipment to use in satellites for spying.

**B.** *Here* you can access all kinds of valuable information and the beauty of it is that you do not need to leave your house to find it.

**C.** *Then*, there may well be a microchip in each telephone receiver with more computing power than the huge machines of today.

**D.** In fact, *they are* essential tools in almost every field of work from constructing models of the universe to predicting tomorrow's weather reports.

**E.** Outside the classroom, computers provide people with greater flexibility and freedom, and also allow them to organise their time in a more productive way.

**F.** Programs like *these* can often be downloaded free from different sites.

G. Connections through a modem allow *them* to transfer data anywhere in the /World.

H. *Their* use enables the learner to develop at his or her own pace and makes the whole learning process more flexible.

I. Computers are machines which take over more mechanical aspects of our brain.

## LANGUAGE DEVELOPMENT

### Word attack

IV. Complete the text with the nouns in the box to form appropriate noun phrases. There are two nouns that you do not need to use.

century	fame	key	life	information	nonsense	technology	time
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With the development of (1) \_\_\_\_\_ in recent years, the way of (2) \_\_\_\_\_ for a great number of people has changed beyond recognition. Because of increased speed in the transfer of (3) \_\_\_\_\_ news and ideas travel around the world in seconds. Whatever we want to know is available at the touch of a (4) \_\_\_\_\_. Not long after the turn of the (5) \_\_\_\_\_ scientists expect us to have computers which are so small and powerful that they will fit into our pockets. Because of this, some believe that newspapers and books will become a waste of (6) \_\_\_\_\_ as we will have all the information we need through our personal computers.

V. Complete the following sentences, using the phrases in the box.

It is a good idea	It doesn't matter
It wasn't until	It seems impossible
It is necessary	it is incredible
It is unwise	It is only a matter of time

1. \_\_\_\_\_ to imagine a world without computers.
2. \_\_\_\_\_ to have a CD-ROM drive to make use of multimedia facilities.
3. \_\_\_\_\_ the mid-1990s that the Internet became easily accessible to the general public.

4. \_\_\_\_\_ how our lives have changed with the advent of the computer.
5. \_\_\_\_\_ before every household has a computer,
6. \_\_\_\_\_ to leave CDs and floppy disks in direct sunlight.
7. \_\_\_\_\_ to read the instructions on computer hardware carefully.
8. \_\_\_\_\_ how old you are, it's never too early or late to learn to use a computer.

## USE OF ENGLISH

**6. Read the text below. Use the word given in capitals at the end of each line to form a word that fits in the space in the same line. There is an example at the beginning (0).**

### THE IMPACT OF TECHNOLOGY

The 21<sup>st</sup> century will no doubt see a great (0) *ADVANCE* (advancement) in electronics and technology as the (1) *POPULAR* (\_\_\_\_\_) of computers increases all around the world. For some, this technology will mean an (2) *INVADE* (\_\_\_\_\_) of their privacy, but for others it will be welcomed. In business and education as well as the home, the idea of sending your (3) *CORRESPOND* (\_\_\_\_\_) through email is surely an exciting idea. The greatest (4) *ATTRACT* (\_\_\_\_\_) must be the fact that there is no need to waste time going out to buy stamps and posting the letter off to its destination. Of course, as our (5) *DEPEND* (\_\_\_\_\_) on the computer and technology grows, there is also the problem of (6) *SECURE* (\_\_\_\_\_) Users are afraid that personal (7) *INFORM* (\_\_\_\_\_) such as bank account numbers will become accessible to people who may misuse it. To combat this problem, there must be greater (8) *COOPERATE* (\_\_\_\_\_) between banks and on-line services.

**VII. Read the following sentences and decide which answer a, b, c or d best fits each space.**

1. Having a computer at home allows you to have all kinds of information at your \_\_\_\_\_.

- a) arm                      b) fingertips                      c) fingers                      d) hand
2. She is a specialist in the \_\_\_\_\_ of Information Technology.
- a) job                      b) subject                      c) topic                      d) field
3. The Internet allows users to download free \_\_\_\_\_.
- a) sites                      b) hardware                      c) viruses                      d) software
4. Video \_\_\_\_\_ can only be done if you have a camera with your computer.
- a) conversations      b) conferencing      c) discussions      d) meetings
5. The bigger the memory on your hard disk, the more \_\_\_\_\_ you can store.
- a) details                      b) money                      c) data                      d) storage
6. Most hard disks today have a \_\_\_\_\_ capacity of 200 megabytes.
- a) storing                      b) memory                      c) huge                      d) storage
7. When you connect to the Internet it is said that you are \_\_\_\_\_.
- a) on-line                      b) on                      c) in-line                      d) integrated
8. A computer should be seen as a \_\_\_\_\_ we use to help us do our work.
- a) disc                      b) mechanism                      c) tool                      d) source
9. Technology has indeed had a significant \_\_\_\_\_ on our lives today.
- a) change                      b) role                      c) effort                      d) effect

**VIII. Read the text and answer the questions:**

**TEXT**

**ARE YOU SAFE FROM ON-LINE CROOKS?**

ANDREW ARKINSTAIL, a 34-year-father of three in Maxville, Ont, needed a laptop for his home-based business. Like millions, of other Canadians, who spent \$ 4.4 billion shopping online last year, he felt comfortable buying in the digital marketplace.

Surfing computers-for-sale listings on Yahoo last April, he found exactly what he was looking for – an IBM ThinkPad advertised at an irresistible price on the professional-looking web pages at Computer cheap.com. After confirming shipping details and the company’s seven-day money-back guarantee via e-mail, he express-posted a \$ 2,100 certified cheque, as requested, to the company’s Vancouver address.

Three days later, after the cheque was cashed, Arkinstall e-mailed the company to ask why the computer hadn't arrived. The seller replied that a mix-up with the cheque at the bank had held things up and promised to throw in a DVD drive. When Arkinstall demanded a contact phone number, Computer Cheap's web site suddenly vanished and Arkinstall's e-mails went unanswered.

He called the Better Business Bureau of Mainland B. C. "Mr. Arkinstall was not the first person to call us about being swindled by this company," director Valeric MacLean says.

When he reported the fraud to Det. Vello Kleeband of the Vancouver Police Computer Investigative Support Unit, he discovered the seller was a juvenile scam artist under investigation for a string of on-line frauds with victims as far away as California. Says Arkinstall, "I've learned the hard way that it's "user beware" on the Internet."

Sgt. Bill Cowper of the Halifax Regional Police Technological Support Section says too many people are leaving themselves vulnerable to fraud when they log on to the Net.

Known as the city's Internet Cop. Cowper has trained 16 police investigators to combat proliferating computer crime. "Cyber fraud is growing as fast as the Internet," he says, but he estimates that less than ten percent of Internet crime is reported because embarrassed victims are reluctant to come forward.

Before sending credit-card numbers to an on-line merchant, ensure that the site is secure.

With up to 80 percent of households expected to be on-line by 2005, experts like Cowper predict that Internet fraud will only get worse.

Phillip McKee, assistant director for Internet Fraud Watch at the National Fraud Information Centre in Washington, D.C., says "People are being scammed on-line in record numbers." In 1996 Internet Fraud Watch reported 1,000 incidents of Internet fraud in the United States and Canada. Last year complaints soared to more than 10,000. "Complaints about on-line shopping have doubled in the last year," says McKee, "making cyber fraud involving goods for sale our number one complaint."

Const. Michael McCrery of the RCMP's Computer Crime Unit in Montreal says the ability to reach hundreds of thousands of people



anonymously, by setting up slick web sites or through mass e-mailing, makes the internet a bonanza for criminals. “They don’t have to pay for a stamp or even make a phone call to snare victims,” he says. The lack of signatures and face-to-face transactions makes it easy for criminals to operate on-line.

Says Ontario Provincial Police Detective Const. Gaston Laforge, at Phone Busters, an agency in North Bay, Ont., that collects information on telemarketing complaints nationwide, “If a single, on-line scammer reaches several thousand people through “spamming” (mass-e-mailing) or phony web-sites, and hooks just 100 people for \$ 100 each, he rakes in \$ 10,000, with his only costs his computer and Internet access.”

### **What’s Safe Online?**

“Reputable online merchants have contact phone numbers and a proper business address”, Kleeband says “If the only method of communication between buyer and seller is by e-mail, shop elsewhere.”

At Kleelpand’s office in downtown Vancouver, I watch as he inputs the mailing address posted on a suspect web site that lists no contact phone number. It shows up as a P.O. box. “This is typical of a scam,” he tells me. “This guy uses a mailbox to pick up cheques from victims who will never see their goods.”

Kleeband advises against sending cash, cheques or money orders to anyone you do not know. Use your credit card. If fraud is involved, the card company can withhold payment. “PhoneBusters” Laforge advises that, before sending money to an on-line-seller-consumers check with the Better Business Bureau in the area where the company is listed to see if there have been complaints.

Says Sgt. Robb McGirr of the Port. Moody, B.C., police: “Companies doing business on-line have to improve their security. Some savvy people can obtain unauthorized access to business transactions that are conducted through web sites.” His department arrested two petty thieves and a 16-year-old computer hacker last August when the trio charged \$ 2,000 worth of computer equipment to a credit-card number belonging to a man in Maine. The suspicious store owner called the police.

“We eventually found three nobodies sitting, in a basement punching keys, defrauding people as far off as Australia,” says McGr. “They’d stolen 20

credit-card numbers along with their expiration dates and credit limits, either by hacking into web sites or by intercepting the information as it was send.”

Before sending credit-card numbers to an on-line merchant, check the security notice on your screen when transmitting information. If the lock’s cyberthieves, who can electronically hijack credit or personal information. A secure site will ensure encrypted on-line transactions.

Scam artists also target popular auction sites like eBay and Yahoo! Auctions. “The most common form on-line auction fraud involves goods not delivered or the, value of what is sent being only a fraction of what was paid,” says Sgt. Barry Elliott, call centre co-ordinator at PhoneBusters. Internet Fraud Watch reports auction rip-offs are now the most frequently reported type of Internet fraud.

### **Old Scams Go High-Tech**

“Earn \$4000 a month at home,” touts the e-mail in my mailbox. Others promise a cure for heart disease, get-rich-quick investments or free travel. All these scams require consumers to send money. Scammers use commercially available software to “harvest” thousands of e-mail addresses from header information on web-site postings or from people signing up for on-line contests. Their sole purpose is to generate e-mail lists that are often sold to other scammers and unscrupulous marketers. “Victims of these scams are most often those who can least afford it,” says Laforg.

When her mother became ill, Linda Russell, 58 found it hard to make ends meet. The teacher from Tennessee was a good typist and searched Internet sites offering assistance in finding work-at-home employment. She found Friends From Home, an Ontario company. For a \$ 40 fee, they promised her clerical work. She sent the cheque, which was cashed. When she heard nothing further, she e-mailed the company half a dozen times without response.

When Russell contacted Leslie King of the Better Business Bureau of Ottawa and Hull, she was told that several people in the U.S. and Canada had reported being ripped off by Friends From Home.

“Work-at-home schemes are among the most common frauds we see.” King says, “Be suspicious of offers \$ 40 for stuffing an envelope. They just don’t make sense.”

Pyramid schemes, chain letters and phony diploma mills are other classic scams that have migrated from telephones and fax machines to the Internet. Says Andrew Mc. Alpine, who investigates illegal pyramid schemes for Industry Canada, “Be careful before responding to e-mails offering business opportunities.”

Travel scams are an old swindle now showing up on the Net. Stan Bosco, assistant director of consumer affairs with the American Society of Travel Agents, says: “Avoid paying a company for travel that won’t be ticketed or take place for 12 to 18 months. When it comes time to get your tickets, the dates you want are often not available, restrictions may make it more expensive or the company has disappeared.”

Travel certificates or vouchers arriving by e-mail with congratulations on winning a bargain fare or free travel are come-ons; the real fare is far higher or the free travel is bait offered by high-pressure time-share pushers. “Luxury cruises sometimes become six-hour ferry rides and deluxe accommodations can turn out to be run-down dumps,” Bosco says.

Another costly fraud is the telephone scam. An e-mail warns you of an impending legal action, congratulates you on winning a prize, or offers urgent information about a family member and asks you to call a phone number for details. Victims are unaware, as they are put on hold or stalled by scammers, that they have called an offshore area code – usually in the Caribbean – and are racking up phone charges of up to \$ 25 a minute. Often, charges of hundreds of dollars appear on next month’s phone bill. “The crooks divide the take with the unwitting phone company that supplies the pay-per-call lines,” says Phone Busters Elliott.

Never call a 900 number to collect a prize. And never send bank information for the deposit of “winnings.”

Beware too of online games of chance. “Type “lotteries” into a search engine if you want to see how many sweepstakes scams are out on the Internet,” says Gordon Board, corporate security investigator at the B.C. Lottery Corporation. “People buy tickets on their credit cards at these bogus sites, but there is no prize money.”

Never call a 900 number – it’s not a free call – to collect a prize. And never send bank information for the deposit of “winnings” into your account.

Rule No. 1 for avoiding scams online, says Sgt. Cowper: “If it sounds too good to be true, it usually is.”

### **Investment Scams**

Shawn Fitzsimmons, an accountant with Phone Busters who specializes in investment fraud, says on-line scams have cost some victims their life savings.

He walks me through an array of glitzy web pages extolling the virtues of tax havens and the tremendous profits to be made from offshore investments in places like the Caribbean, Panama, Latin America and the South Pacific. Rachel Smith, (Name changed to protect privacy) 37, decided to invest \$ 1,000 with an on-line investment site called Stock Generation in the spring of 1999. As the year passed, the mother of a 12-year-old watched in delight as her investment grew to \$ 18,000. When she decided to cash in last April, her account suddenly showed zero. She called a contact number in the Caribbean three times, only to be put on hold. She was devastated to be told by authorities that her money was likely lost to scam artists.

“It is one of the most lucrative, underreported and cruel crimes on the Internet,” says Fitzsimmons. “Victims sometimes won’t even tell their families, let alone report it to the police.” He estimates authorities see only five percent of on-line investment fraud.

Another way investment scam artists make money is with pump-and-dump schemes, in which scammers hype stocks they are holding by posting phony tips in investment chat rooms, spam e-mails and on-line newsletters. Unsuspecting investors bid up the price, and then the swindler dumps the stock at a profit.

#### **1) Answer the questions:**

1. How was Mr. Arkinstall swindled by the online company?
2. Why is cyber fraud growing?
3. What should people do before sending credit-card numbers to an online merchant?
4. What makes the Internet a bonanza for criminals?
5. What’s safe online?
6. What does online auction fraud involve?
7. How was Linda Russell ripped off by Friends from Home?
8. What are travel scams?

9. What was Rachel Smith's online experience?
10. Why don't victims want to report online investment fraud?

### **IX. Reading Analysis.**

#### **VOCABULARY LIST**

*Nouns: freshman, access to, authority, reign, pride, innovation, bogus, endeavor, exhilaration, insights.*

*Verbs: to encompass, to promote.*

*Adjectives: bonafide, awe-inspiring, mere, efficient.*

#### **THE FIRST HACKERS**

1. The first "hackers" were students at the Massachusetts Institute of Technology (MIT) who belonged to the TMRC (Tech Model Railroad Club). Some of the members really built model trains. But many were more interested in the wires and circuits underneath the track platform. Spending hours at TMRC creating better circuitry was called "a mere hack." Those members who were interested in creating innovative, stylistic, and technically clever circuits called themselves (with pride) *hackers*.

2. During the spring of 1959, a new course was offered at MIT, a freshman programming class. Soon the hackers of the railroad club were spending days, hours, and nights hacking away at their computer, an IBM 704. Instead of creating a better circuit, their hack became creating faster, more efficient program – with the least number of lines of code. Eventually they formed a group and created the first set of hacker's rules, called the Hacker's Ethic.

3. Steven Levy, in his book *Hackers*, presented the rules:

- *Rule 1: Access to computers – and anything, which might teach you, something about the way the world works – should be unlimited and total.*
- *Rule 2: All information should be free.*
- *Rule 3: Mistrust authority – promote decentralization.*
- *Rule 4: Hackers should be judged by their hacking, not bogus criteria such as degrees, race, or position.*
- *Rule 5: You can create art and beauty on a computer.*

- *Rule 6: Computers can change your life for the better.*

4. These rules made programming at MIT’s Artificial Intelligence Laboratory a challenging, all encompassing endeavor. Just for the exhilaration of programming, students in the AI Lab would write a new program to perform even the smallest tasks. The program would be made available to others who would try to perform the same task with fewer instructions. The act of making the computer work more elegantly was, to a bonafide hacker, awe-inspiring.

5. Hackers were given free reign on the computer by two AI Lab professors, “Uncle” John McCarthy and Marvin Minsky, who realized that hacking created new insights. Over the years, the AI Lab created many innovations: LIFE, a game about survival; LISP, a new kind of programming language; the first computer chess game; The CAVE, the first computer adventure; and SPACEWAR, the first video game.

## **EXERCISES**

### **1) True or false?**

1. Those who can, do. Those who cannot, teach. Those who cannot teach, HACK!
2. The first hackers were interested in railroad circuitry.
3. The first hackers studied at MIT.
4. The point of a hacker’s work was to create a faster and smaller code.
5. Hackers had their own Ethic Code.
6. TMRC stands for Toy Machinery Railroad Car.
7. Hackers sabotaged the work of the AI Lab.
8. An elegant computer was, to a real hacker, awe-inspiring.
9. At AI Lab hackers wrote a computer program for every other task.
10. Hackers were quite prolific in innovations.
11. Hackers were given free reign on the two AI Lab professors.

### **2) Put the proper words into sentences:**

programming	insights	innovation	endeavor	awe-inspiring
exhilaration	ethic	instructions	encompass	mistrust
freshmen	bogus	authority		

1. Decentralization results in \_\_\_\_\_ to the chief.
2. Holding the door for a lady is the question of \_\_\_\_\_.
3. This still life isn't Picasso's; it's a \_\_\_\_\_.
4. The report you've presented doesn't \_\_\_\_\_ some of the problems.
5. If you can survive both in the jungle and the desert, a \_\_\_ Indian you are.
6. The \_\_\_\_\_ in how hardware works is obligatory for a good programmer.
7. Each \_\_\_\_\_ is another step to a new technological revolution.
8. In 1961 the Soviet Scientists' \_\_\_\_\_ to conquer the space was a success.
9. \_\_\_\_\_ without any reason proves one's carelessness.
10. Iron grip boss expects you to carry out all his \_\_\_\_\_.
11. Annually MIT gains over 5000 \_\_\_\_\_.
12. \_\_\_\_\_ should cause \_\_\_\_\_ terror in your heart.

## **X. Read the text.**

### **COMPUTER CRIMES**

More and more, the operations of our businesses, governments, and financial institutions are controlled by information that exists only inside computer memories. Anyone clever enough to modify this information for his own purposes can reap substantial rewards. Even worse, a number of people who have done this and been caught at it have managed to get away without punishment.

These facts have not been lost on criminals or would be criminals. A recent Stanford Research Institute study of computer abuse was based on 160 case histories, which probably are just the proverbial tip of the iceberg. After all, we only know about the unsuccessful crimes. How many successful ones have gone undetected is anybody's guess.

Here are a few areas in which computer criminals have found the pickings all too easy.

**Banking.** All but the smallest banks now keep their accounts on computer files. Someone who knows how to change the numbers in the files can transfer

funds at will. For instance, one programmer was caught having the computer transfer funds from other people's accounts to his wife's checking account. Often, traditionally trained auditors don't know enough about the workings of computers to catch what is taking place right under their noses.

**Business.** A company that uses computers extensively offers many opportunities to both dishonest employees and clever outsiders. For instance, a thief can have the computer ship the company's products to addresses of his own choosing. Or he can have it issue checks to him or his confederates for imaginary supplies or services. People have been caught doing both.

**Credit Cards.** There is a trend toward using cards similar to credit cards to gain access to funds through cash-dispensing terminals.

Yet, in the past, organized crime has used stolen or counterfeit credit cards to finance its operations. Banks that offer after-hours or remote banking through cash-dispensing terminals may find themselves unwillingly subsidizing organized crime.

**Theft of Information.** Much personal information about individuals is now stored in computer files. An unauthorized person with access to this information could use it for blackmail. Also, confidential information about a company's products or operations can be stolen and sold to unscrupulous competitors. (One attempt at the latter came to light when the competitor turned out to be scrupulous and turned in the people who were trying to sell him stolen information.)

**Software Theft.** The software for a computer system is often more expensive than the hardware. Yet this expensive software is all too easy to copy. Crooked computer experts have devised a variety of tricks for getting these expensive programs printed out, punched on cards, recorded on tape, or otherwise delivered into their hands. This crime has even been perpetrated from remote terminals that access the computer over the telephone.

**Theft of Time-Sharing Services.** When the public is given access to a system, some members of the public often discover how to use the system in unauthorized ways. For example, there are the "phone freakers" who avoid long distance telephone charges by sending over their phones control signals that are identical to those used by the telephone company.

Since time-sharing systems often are accessible to anyone who dials the right (telephone number, they are subject to the same kinds of manipulation.



Of course, most systems use account numbers and passwords to restrict access to authorized users. But unauthorized persons have proved to be adept at obtaining this information and using it for their own benefit. For instance, when a police computer system was demonstrated to a school class, a precocious student noted the access codes being used; later, all the student's teachers turned up on a list of wanted criminals.

**Perfect Crimes.** It's easy for computer crimes to go undetected if no one checks up on what the computer is doing. But even if the crime is detected, the criminal may walk away not only unpunished but with a glowing recommendation from his former employers.

Of course, we have no statistics on crimes that go undetected. But it's unsettling to note how many of the crimes we do know about were detected by accident, not by systematic audits or other security procedures. The computer criminals who have been caught may have been the victims of uncommonly bad luck.

For example, a certain keypunch operator complained of having to stay overtime to punch extra cards. Investigation revealed that the extra cards she was being asked to punch were for fraudulent transactions. In another case, disgruntled employees of the thief tipped off the company that was being robbed. An undercover narcotics agent stumbled on still another case. An employee was selling the company's merchandise on the side and using the computer to get it shipped to the buyers. While negotiating for LSD, the narcotics agent was offered a good deal on a stereo!

Unlike other embezzlers, who must leave the country, commit suicide, or go to jail, computer criminals sometimes brazen it out, demanding not only that they not be prosecuted but also that they be given good recommendations and perhaps other benefits, such as severance pay. All too often, their demands have been met.

Why? Because company executives are afraid of the bad publicity that would result if the public found out that their computer had been misused. They cringe at the thought of a criminal boasting in open court of how he juggled the most confidential records right under the noses of the company's executives, accountants, and security staff. And so another computer criminal departs with just the recommendations he needs to continue his exploits elsewhere.

## EXERCISES

### 1) True or false?

1. A person is innocent until proven guilty.
2. Computer-related crime has diminished.
3. A thief can transfer funds from other people's accounts.
4. Dishonest employees can't ship the company's products to addresses of their choosing.
5. It is impossible to counterfeit credit cards.
6. Phone freaks can be found out.
7. Personal information should not be stored in computer files.
8. A real bank checks very carefully before handling out any money.
9. Unauthorized persons have proved to be inefficient laymen.
10. Hardware is less expensive than software.
11. Computer criminals will never be caught.
12. Companies don't punish some criminals because they don't want bad publicity.

### 2) Give synonyms to:

*to come to light; confidential; attempt; crooked; to deliver; to perpetrate crime; freaks; to avoid; to obtain; to reveal; merchandise; transaction; severance pay; publicity; executive.*

### 3) Give antonyms to:

*fraudulent; common; to ship; like; to go to jail; to be adept at; to reveal; a precocious student; former; by accident; to complain of.*

### 4) Construct other sentences in these patterns (transitional expressions):

1. After all, we know only about unsuccessful crimes.
2. All but the smallest banks keep their accounts in computer files.
3. Yet, in the past, organized crime used stolen credit cards to finance its operations.
4. Also, confidential information can be stolen.
5. For example, three phone freakers who avoid paying distance telephone charges.
6. Of course, most systems use passwords to restrict access to authorized users.

7. Unlike other embezzlers, computer criminals demand that they be given good recommendations.

## **XI. Read the text.**

### **THE INTERNET AND INFORMATION REVOLUTION**

In 1969, the US Defence Advanced Research Projects Agency needed a system for computers “to talk” to each other via the telephone. They created a network of computers called ARPANET. In 1984, the US National Science Foundation started the NSNET network, a system of five supercomputer centres.

More and more people and agencies wanted to join the network. NSNET became known as the Inter-Net-Network. People started calling it the Internet.

Today, there are millions of computers all over the world which are connected to the Internet.

The World Wide Web is the most popular area of the Internet. The Web is a huge collection of documents, from all over the world. It contains a mixture of texts, images and sounds.

The Internet is a source of information that is accessible through a computer. It consists of millions of pages of data about every possible subject. Twenty-five million people surf the Internet every day. The Internet is already the biggest source of information of the planet. It will soon be the main source of material for students and teachers of many different subjects.

To access the Internet, you need a service provider, a company which can bring the Internet to your computer screen. Then you can access the information via your telephone line.

If you have the website address of a company or service that you want, you simply type it and you arrive automatically at the page you want. If you haven't got a particular website address, there are several directories or search engines which can help you, such as Alta Vista, Yahoo! or Infoseek. There are then two ways to find information-directories and key-word searches.

**1) Mark the correct variant.**

1. What is exactly the Internet?

- a) system of five supercomputer centres
- b) system of four supercomputer centres
- c) system of six supercomputer centers
- d) system of six supercomputer centers

2. What kind of information can you find there?

- a) It consists of very specific information.
- b) It consists of millions of pages of data about every possible subject.
- c) It consists of hundreds of pages of data.
- d) It consists of a few of pages of data.

3. How can you access the information?

- a) You can access the information via your TV set.
- b) You can access the information via your radio phone.
- c) You can access the information via your telephone line.
- d) You can access the information via sputnik.

4. In what country did the Internet start?

- a) in Great Britain
- b) in the USA
- c) in France
- d) in Spain

5. What was the original purpose?

- a) the US Defence Advanced Research Projects Agency needed a system for computers “to talk” to each other via the telephone
- b) the US National Science Foundation needed a system for computers “to talk” to each other via the telephone
- c) The NASA needed a system for computers “to talk” to each other via sputniks.
- d) The US Military Service needed a system for computers “to talk” to each other via mobile phone.

6. When did NSF start the NSNET network?

- a) in 1989
- b) in 1980
- c) in 1987
- d) in 1984

7. What is called WWW?

- a) World Wide Web
- b) World War Web
- c) World Wide Word
- d) World Web War

8. What does the Web contain?

- a) The Web contains the coded information.
- b) The Web contains a mixture of texts, images and sounds.
- c) The Web contains the whole library.
- d) The Web contains music.

9. How many people surf the Internet everyday?

- a) twenty million people
- b) twenty-five million people
- c) thirty million people
- d) thirty-five million people

10. Who is called a service provider?

- a) a company which can bring the Internet to your computer screen
- b) an international firm which accesses the Internet
- c) a local company which serves your computer
- d) an international company which serves your computer

**2) Mark if the following statements are true (a) or false (h).**

1. The Internet is a source of information that is accessible through a cable TV.
2. You can access the Internet without a service provider.
3. The first network of computers was called DARPANET.

4. You can't do a key-word search without knowing website address.
5. The Internet consists of million of pages of data about different subjects.
6. More and more people and agencies wanted to join the network.
7. The World Wide Web is the most popular area of the Internet.
8. The Internet is a source of information.
9. The Web is a small collection of documents from all over the world.
10. There are several directories or search engines which can help you.

**3) Mark what words refer to computers (a) and what words don't (b).**

- 1) mobile telephone
- 2) CD-ROMs
- 3) to surf
- 4) producer
- 5) a service provider
- 6) key-word search
- 7) e-mail
- 8) screened version
- 9) website
- 10) camera

## UNIT 2

### VOCABULARY AND GRAMMAR REVISION

#### VOCABULARY

**I. Choose the right variant (a, b, c, d) to complete the sentence. Circle the corresponding letter.**

1. When you want to find information on the web you can use a \_\_\_\_\_.  
a) search engine    b) mouse    c) motherboard    d) screen
2. You type in a \_\_\_\_\_ or phrase.  
a) website    b) password    c) screen    d) engine
3. Many people use the web for \_\_\_\_\_ or banking.  
a) writing    b) looking    c) online shopping    d) listening
4. This means they have to \_\_\_\_\_ private information.  
a) click    b) enter    c) keyword    d) password
5. To enter a secure site, you usually need to enter a \_\_\_\_\_.  
a) mouse    b) website    c) internet    d) keyword
6. Amy \_\_\_\_\_ customer data.  
a) manages    b) clicks    c) accesses    d) conducts
7. She \_\_\_\_\_ data in the customer database.  
a) manages    b) keeps    c) conducts    d) clicks
8. Bob collects data about people who \_\_\_\_\_ the company website.  
a) keep    b) access    c) browse    d) click
9. Carla \_\_\_\_\_ search engines to find new products and suppliers.  
a) manages    b) clicks    c) updates    d) uses
10. She \_\_\_\_\_ the files with new information.  
a) updates    b) manages    c) clicks    d) enters
11. Decide how to \_\_\_\_\_ your filing system.  
a) update    b) structure    c) search    d) click
12. Create \_\_\_\_\_ for each kind of material.  
a) search engines    b) data    c) files    d) access
13. Arrange your files for easy \_\_\_\_\_.  
a) access    b) structure    c) data    d) category

14. Keep most important files at the \_\_\_\_\_ of the filing area.  
 a) desk                      b) table                      c) front                      d) back
15. Keep your filing system \_\_\_\_\_.  
 a) used                      b) up to date                      c) best                      d) easy
16. Create files for the main \_\_\_\_\_ of information.  
 a) data                      b) access                      c) structure                      d) categories
17. My advice is to \_\_\_\_\_ the web.  
 a) search                      b) structure                      c) click                      d) enter
18. We know that many people in the USA visit our company's \_\_\_\_\_.  
 a) data                      b) website                      c) search engine                      d) file
19. The company doesn't have any problems with \_\_\_\_\_.  
 a) managers                      b) structure                      c) data                      d) security
20. His \_\_\_\_\_ is newer than mine.  
 a) filing system                      b) program                      c) data                      d) file
21. A \_\_\_\_\_ device is a peripheral used for the storage of information.  
 a) output                      b) input                      c) storage                      d) data
22. Microcomputers, commonly known as \_\_\_\_\_ are the smallest and least powerful.  
 a) minis                      b) micros                      c) input                      d) output
23. The most important item of \_\_\_\_\_ is the CPU.  
 a) hardware                      b) software                      c) motherboard                      d) computer
24. The \_\_\_\_\_ is the brain of the computer.  
 a) software                      b) screen                      c) hardware                      d) processor
25. The main memory is the part where data and programs can be \_\_\_\_\_.  
 a) processed                      b) stored                      c) displayed                      d) input

## GRAMMAR

**II. Choose the right variant (a, b, c, d) to complete the sentence. Circle the corresponding letter.**

1. There isn't \_\_\_\_\_ information about it on the internet  
 a) some                      b) an                      c) so                      d) any
2. If I \_\_\_\_\_ his e-mail address, I would send him e-mail.  
 a) know                      b) would know                      c) knew                      d) will know



3. This search engine is \_\_\_\_\_ than that one.  
 a) more new      b) newer      c) newest      d) the newest
4. I \_\_\_\_\_ this website two days ago.  
 a) found      b) have found      c) would      d) had found
5. This is not your password, \_\_\_\_\_?  
 a) doesn't it      b) isn't it      c) is it      d) does it
6. He \_\_\_\_\_ already used to log on with a password.  
 a) got      b) can get      c) has got      d) had got
7. My friend can design a website \_\_\_\_\_ than I can.  
 a) best      b) well      c) more fast      d) better
8. Don't switch off \_\_\_\_\_ down your PC.  
 a) not closing      b) not to close      c) not closed      d) without closing
9. Pauline \_\_\_\_\_ three classes of IT yesterday.  
 a) has had      b) had      c) had had      d) has
10. She \_\_\_\_\_ Computer Architecture now.  
 a) studying      b) is studying      c) studies      d) doesn't study
11. Communication \_\_\_\_\_ once a week on Friday afternoons last year.  
 a) has taken place      b) took place      c) had place      d) taken place
12. You can update your PC \_\_\_\_\_ a new motherboard.  
 a) by adding      b) adding      c) by add      d) to add
13. Digital cameras \_\_\_\_\_ popular lately.  
 a) became      b) have become      c) had become      d) has become
14. He \_\_\_\_\_ a website to advertise his travel company.  
 a) sets up      b) set      c) sets      d) has set
15. You can find \_\_\_\_\_ information about their company on the internet.  
 a) many      b) an      c) much      d) any
16. He likes programming, \_\_\_\_\_?  
 a) isn't he      b) does he      c) is he      d) doesn't he
17. Could you tell me where \_\_\_\_\_ web page is.  
 a) the better      b) best      c) the best      d) better
18. If you \_\_\_\_\_ his e-mail you will know the news about the presentation.  
 a) will read      b) read      c) would read      d) have read
19. Data \_\_\_\_\_ from regional PC.  
 a) is backed up      b) backs up      c) are backed up      d) backed up

20. My friends \_\_\_\_\_ the computer now.  
 a) play                      b) don't play                      c) are playing                      d) doesn't play
21. Can I find \_\_\_\_\_ information about it on this disk.  
 a) some                      b) any                      c) an                      d) most
22. Let's send him an e-mail, \_\_\_\_\_?  
 a) shall we                      b) don't we                      c) O.K.                      d) shan't we
23. He \_\_\_\_\_ their website yet.  
 a) hasn't found                      b) finds                      c) has found                      d) found
24. I \_\_\_\_\_ Canada to become a programmer five years ago.  
 a) have visited                      b) had visited                      c) have been to                      d) visited
25. If I \_\_\_\_\_ the data in the database, I will call you.  
 a) will find                      b) would find                      c) find                      d) found
26. \_\_\_\_\_ a new film online today.  
 a) There is                      b) It is                      c) There are                      d) It's
27. He can't \_\_\_\_\_ log on with a password.  
 a) use                      b) get                      c) get used to                      d) use to
28. \_\_\_\_\_ switch off without closing down your PC.  
 a) Not                      b) Can't                      c) Won't                      d) Don't
29. He \_\_\_\_\_ to pay expensive telephone calls for the internet access.  
 a) objected                      b) had objected                      c) objects                      d) has objected
30. You can find information on the internet \_\_\_\_\_ a search engine.  
 a) to use                      b) if to use                      c) by using                      d) if using
31. I \_\_\_\_\_ this website yet.  
 a) Have visited                      b) haven't visited                      c) visited                      d) had visited
32. Who knows \_\_\_\_\_ about the main search engines?  
 a) something                      b) anything                      c) everything                      d) nothing
33. Their website is \_\_\_\_\_ of all.  
 a) better                      b) worse                      c) good                      d) best
34. I want \_\_\_\_\_ my computer.  
 a) to upgrade                      b) upgrading                      c) the upgrading                      d) upgrade
35. I \_\_\_\_\_ my computer 2 years ago.  
 a) have bought                      b) bought                      c) 've bought                      d) had bought
36. Can you find \_\_\_\_\_ information about their company on the internet?  
 a) some                      b) any                      c) an                      d) few

37. I don't have \_\_\_\_\_ data in my computer.  
 a) many                      b) a                              c) few                              d) much
38. \_\_\_\_\_ forget your password  
 a) Not                              b) Can't                              c) Don't                              d) Not to
39. \_\_\_\_\_ so many websites to find information.  
 a) It is                              b) It's                              c) Don't                              d) Not to
40. If I \_\_\_\_\_ more time, I will prepare the presentation better.  
 a) will have                      b) have                              c) have had                              d) would have

## TRANSLATION

### III. Translate the sentences into Ukrainian.

1. If you read his e-mail, you will know the date of the presentation.
2. He sets up a website to advertise his company.
3. First of all, many people in the US visit our company's website.
4. Can you find any information about their company on the internet?
5. There are so many websites to find information for the presentation.
6. You can't carry a computer as easily as a newspaper.
7. Online newspapers have the most up-to-date news.
8. Health questions have been raised by the people who sit in front of the computer.
9. A storage device is a peripheral used for the permanent storage of information.
10. Information in the form of programs and data is called software.
11. A program is a set of instructions, written in a special computer language.
12. The most important item of hardware is the Central Processing Unit.
13. The main memory is the part of the computer where programs and data can be stored.
14. All the other devices in the computer system are known as peripherals.
15. The main memory stores information while the computer is switched on.

## SELF - STUDY SECTION

### PART 1

#### I. Reading 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’ licences, 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.

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 **webpages**. 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.

## Tasks

**I. Range (1 - 7) the following statements (a-g) according to the order they appear in the text.**

1. Anti-virus programs are used to detect and remove viruses.
2. CD-ROMs are storage devices that use laser light for reading and writing data.
3. The connection of networks throughout the world is known as the Internet.
4. Personal computers include desktop computers and handheld computers that can be carried around by the user.
5. A special set of programs, called an operating system, provides an interface for the user and allows applications programs to communicate with the hardware.
6. The Web contains interlinked documents called webpages.
7. 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.

## **II. Match the words and their definitions.**

<b>computer</b>	computer designed for use by one person at a time
<b>hardware</b>	devices, that can be added externally to a computer
<b>software</b>	communication service, available on the Internet, that is used for sending and receiving text messages
<b>operating system</b>	electronic circuit boards that can be plugged into special sockets called expansion slots
<b>viruses</b>	a special set of programs, that provides an interface for the user and allows applications programs to communicate with the hardware
<b>personal computers</b>	a set of related webpages stored together on a server
<b>expansion cards</b>	computer moving from webpage to webpage using a Web browser program

<b>peripherals</b>	device that processes data according to a set of instructions known as a program.
<b>email</b>	special programs, designed to allow the user to find relevant webpages on the Web
<b>downloading</b>	the equipment
<b>website</b>	copying data from a larger server system to a client
<b>search engines</b>	the programs and data
<b>browsing</b>	harmful programs that can reproduce themselves and attach themselves to other programs

### **III. Decide whether the following statements are true (T) or false (F).**

1. A special program designed for building spreadsheets and calculating mathematical formulae with is called word processor.
2. Keyboard is an outputting device.
3. Computers that can be carried around by the user are called desktop computers.
4. A multimedia computer can process different forms of data including text, graphics, audio, animation and video.
5. A combination of education and entertainment is sometimes referred to as edutainment.
6. Copying data from a larger server system to a client is referred to as uploading.
7. An Internet system is sometimes referred to as an information superhighway.
8. Email attachments are the files attached to simple email text messages.
9. Hard disk looks like a set of aluminium disks coated in a magnetic material and enclosed in a vacuum-sealed case.

### **IV. Reading 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).

Note that the term **PC** usually refers to an IBM compatible personal computer i.e. an Apple Mac personal computer is not referred to as a PC. A computer that provides a service on a network e.g. storing files, sharing a printer, is known as a **server** computer. Server computers usually have a **UPS** (uninterruptible power supply) attached to them. This is a battery that automatically provides an electricity supply to allow the server to shut it self down properly if the main supply fails. The **processor** e.g. Pentium, is the most important part of the computer. It processes the data and controls the computer. Powerful computers used as servers often have more than one processor. There are two main types of **memory**:

a) **RAM** (random access memory) holds the program instructions and the data that is being used by the processor,

b) **ROM** (read only memory) holds the program instructions and settings required to start up the computer.

The combination of the processor and memory is sometimes referred to as the CPU (central processing unit), although sometimes the processor itself is referred to as the CPU. The other parts connected to the CPU are known as **peripherals**. These can include input devices, output devices, storage devices and communications devices. **Input devices** include: keyboards, scanners,

barcode readers, digital cameras, microphones and video cameras e.g. webcams (small digital video cameras used on the Web). **Output devices** include: **monitors** (VDU display screens), printers, plotters, loudspeakers and headphones. **Storage devices** include: magnetic tape, **floppy disks** (diskettes), hard disks, CD-ROMs, CD-R disks, CD-RW disks, DVDs and MO disks. A common **communications device** is a **modem** (a modulator/demodulator used for converting digital signals to analogue signals and vice versa to allow a computer to be connected to the ordinary telephone system).

A set of connectors used for carrying signals between the different parts of a computer is known as a **bus**. Data is transferred constantly between the processor and memory along the **system bus**. Each part of memory has its own **memory address** and the processor determines where processed data is stored by sending an address signal along an **address bus** and data along a **data bus**. This is synchronized by an electronic clock in the CPU that determines the operating speed of the processor. Transferring data between the processor and RAM can slow up the computer; therefore, some very expensive, extremely fast memory is usually used as a **cache** to hold the most frequently used data.

In a desktop computer, the **CPU** (central processing unit) and **storage devices** (pieces of equipment used for reading from and writing to a storage medium) are normally built inside a **system unit** which consists of a metal chassis enclosed in a flat desktop or a tower shaped case. Other peripherals are attached to the system unit by cables. Each peripheral uses its own **driver card** or **controller** (an expansion card that is plugged into special **expansion slots** in the system unit). **Expansion cards** contain the electronics required to communicate with and control the device e.g. **video** or **graphics cards** are used for monitors, **soundcards** are used for audio input/output and **NICs** (network interface cards) are used for connecting to other computers in a **network** (computing devices connected together). Extra memory can also be added to the computer using special **memory expansion slots** inside the computer. A portable computer that does not have enough space inside to fit expansion cards may use an external device called a **port replicator** to provide connections for peripherals.

**Storage devices** in the form of a **disk** or tape are used to store the programs and data that are not being used. Note that the American spelling of

*disk* is commonly used, although the British spelling, *disc*, is sometimes used. Before a program or data can be used, it must be transferred from the storage device to the main RAM memory. **Hard disks** consist of a set of magnetic coated metal disks that are vacuum-sealed inside a case to keep out the dust. The magnetic surfaces of the disks are **formatted** using a **read/write head** to provide magnetic storage areas. These storage areas form concentric circles called **tracks** and each track is subdivided into sections called **sectors**. The disks are rotated at high speed and read from or written to by the read/write head that moves across the surface of the disks. In server computers, hard disks can be connected together and made to operate as one unit using **RAID** (a redundant array of inexpensive disks). This can speed up the system and provide a way of recovering data if the system **crashes** (fails suddenly and completely, usually referring to the failure of a hard disk). There is a variety of optical storage devices that use laser light to read or write to a disk, including: **CD-ROMs** (compact disk read only memory), **CD-R** (recordable compact disk), **CD-RW** (re-writable compact disk), **DVD** (digital versatile disk - previously known as digital video disk).

An **input device** called a **barcode reader** is a special type of **scanner** for reading **barcodes** (a set of printed bars of varying thickness that are used to identify a product e.g. used to price items in supermarkets).

When comparing computers, the **power** of the computer is important. This is mainly determined by the **speed** and **capacity** (size) of each part of the computer.

Speed is measured in **hertz** (Hz) i.e. cycles per second.

Capacity is measured in **bytes** (B) where 1 byte = 8 **bits** (binary digits) = 1 character.

When specifying a computer the following are normally quoted:

- 1) the speed of the processor (M Hz - megahertz, GHz - gigahertz)
- 2) the capacity (size) of the memory (MB -megabytes)
- 3) the capacity (size) of the **magnetic storage devices** e.g. hard disk, floppy disk (MB -megabytes, GB - gigabytes)
- 4) the speed of the **optical storage devices** e.g. CD-ROM, DVD (given as a multiple of the speed of the first devices produced e.g. 24x = 24 times, 12x = 12 times)

5) the display monitor size (measured in inches diagonally across the screen surface)

6) the monitor image quality (**resolution**) given by the number of **pixels** (picture elements) that are used across and down the screen e.g. 800 x 600, or by the graphics standard used e.g. **VGA** (video graphics array), **SVGA** (super video graphics array) g the graphics card memory size (MB -megabytes)

7) the speed of the modem (measured in **kbps** - kilobits per second)

Two different number systems are used in computer specifications:

**a)** The **decimal system**, which consists of ten digits from 0 to 9, is used for measuring speed.

**b)** The **binary system**, which only has two digits (1 and 0), is used for measuring capacity.

e.g. 1.7 GHz = one point seven thousand million cycles per second  
256 MB =  $256 \times 2^{20}$  bytes = approximately two hundred and fifty six million bytes

Communication is provided between **applications programs** (word processors, drawing programs, etc.) and the computer **hardware** (the physical components of a computer system) by a set of programs collectively known as the **operating system** e.g. Microsoft Windows, MacOS.

**The following prefixes are also used in measurements:**

	Decimal system	Binary system
<b>kilo</b>	$10^3 = 1$ thousand	$2^{10} = 1,024$
<b>mega</b>	$10^6 = 1$ million	$2^{20} = 1,048,576$
<b>giga</b>	$10^9 = 1$ thousand million	$2^{30} = 1,073,741,824$

**I. Decide whether the following statements are true (T) or false (F).**

1) Mainframe is used generally for graphic design.

- 2) One can not call an Apple Mac a PC.
- 3) UPS is the most important part of the computer.
- 4) The combination of the processor and memory is sometimes referred to as the CPU.
- 5) Modem is a common communication device.
- 6) The British spell the word “disk” in another way.
- 7) In server computers, hard disks can not be connected together and made to operate as one unit.
- 8) Speed is measured in pixels.
- 9) The decimal system consists of ten digits from 1 to 9.

## **II. Answer the following questions.**

- 1) Why do server computers usually have a UPS (uninterruptible power supply) attached to them?
- 2) What is the most important part of the computer?
- 3) What are the two main types of memory?
- 4) What do peripherals include?
- 5) What is a bus?
- 7) What is capacity measured in?
- 6) What is a barcode reader used for?

## **III. Range (1 - 5) the following statements (a - e) according to the order they appear in the text.**

- 1) Storage devices in the form of a disk or tape are used to store the programs and data that are not being used.
- 2) Hard disks consist of a set of magnetic coated metal disks that are vacuum-sealed inside a case to keep out the dust.
- 3) A computer that provides a service on a network e.g. storing files, sharing a printer, is known as a server computer.
- 4) When comparing computers, the power of the computer is important.
- 5) The combination of the processor and memory is sometimes referred to as the CPU.

#### **IV. Give definitions to the following words.**

Mainframe, workstation, ROM, modem, bus, CPU, storage device, controller, system crash, CD-ROM, barcode, binary system, hardware.

#### **IV. Reading the text.**

### **COMPUTER APPLICATIONS**

As computer systems become more intelligent, they are used in a wider variety of work situations where previously it was necessary to employ people. Hospitals can increasingly use computers where highly trained people were required to deal with life-threatening situations. Computers can also be used in airports where highly trained experts were previously required to ensure safety and the police can make more use of computers to detect and investigate increasingly sophisticated crimes.

One of the uses considered in this unit is police speed **traps** used to catch drivers that are breaking the official speed limit. In earlier systems, **radar** equipment was used to bounce radio waves off the moving car. A small processor, known as a **microprocessor**, calculated the speed of the car from the changes in the radio waves and triggered an ordinary camera with a flashgun to take a photograph of the car if it was speeding. The details were stored on a **smart card** (a plastic card with a built-in computer system that can store large amounts of data). When the smart card was taken back to the police station, the driver's details were obtained from the **DVLC** (Driver and Vehicle Licensing Centre) **database** i.e. the central computerized records of all licensed drivers and vehicles.

Newer systems prevent '**surfing**' i.e. where the driver only slows down as they pass through the speed trap, by using two computerized units with digital cameras placed at a fixed distance apart. Each unit records the time that a vehicle passes it, as well as photographing and identifying the car licence number using **OCR software** (optical character recognition software that changes picture images of letters and numbers into digital form for use by a computer system). The computer then uses the difference in recorded times to calculate the speed of the vehicle. The registration numbers of vehicles

exceeding the speed limit are immediately **downloaded** (copied from the computer to a server computer) to the computer at police headquarters where each vehicle is matched with the DVLC database. Standard letters are then printed off addressed to the vehicle owners using **mailmerge** (a word-processing feature that produces a separate standard letter containing details obtained from each record in a database).

There are many ways in which computer systems can be used in large supermarkets, particularly for financial calculations and in stock control using **EPOS tills** (electronic point of sale cash tills). Each item on a supermarket shelf has a **barcode label** with a **barcode** (a standard set of vertical bars of varying thickness used to identify products) printed on it. The barcode number system giving standard price and item code numbers used throughout Europe is known as **EAN** (European Article Number). The barcodes are read by scanner devices called **barcode readers** that are attached to the EPOS tills. When a checkout operator moves the barcode label across the scanner, the label is scanned and the barcode number for that item is read. The scanner signals are converted to a **digital** form (where the changing signal is either off or on) and sent to the supermarket branch computer. The branch computer checks the digital EAN code against a computer **database** (a type of applications program used for storing information so that it can be easily searched and sorted) that holds a record of each type of item. In this way the item and the price of the item can be identified and the sale of the product can be recorded by the computer. The item and the price are shown.

### **I. Answer the following questions.**

1. How are computer systems used in modern work situations?
2. What are speed traps used for?
3. Which device calculates the speed of the car from the changes in the radio waves?
4. Where are the details stored?
5. What does “surfing” mean?
6. What is mailmerge?

7. How is a standard set of vertical bars of varying thickness used to identify products called?

8. What does the branch computer do?

## **II. Give definitions to the following words.**

Smart card, OCR software, to download, mailmerge, EPOS tills, barcode, EAN, barcode reader, database.

## **III. Decide whether the following statements are true (T) or false (F).**

1. Computers are used in many spheres of people's lives.
2. The police use speed traps to catch drunk drivers.
3. "Surfing" means swimming past the speed trap.
4. Microprocessor triggers an ordinary camera with a flashgun to take a photograph of the car if it was speeding.
5. OCR software helps to identify the car licence number.
6. Computers are widely used in supermarkets.
7. Each item on a supermarket shelf has a barcode label with a barcode printed on it.
8. There are not standard item code numbers used throughout Europe.

## **IV. Range (1 - 5) the following statements (a - e) according to the order they appear in the text.**

1. There are many ways in which computer systems can be used in large supermarkets.
2. The computer then uses the difference in recorded times to calculate the speed of the vehicle.
3. The barcodes are read by scanner devices called barcode readers that are attached to the EPOS tills.
4. The item and the price are shown.
5. Hospitals can increasingly use computers where highly trained people were required to deal with life-threatening situations.



## PART 2

### VOCABULARY

#### I. Complete the text with the following verbs:

*click, double-click, drag, grab, select, move, control*

##### Mouse actions

A mouse allows you to (1) \_\_\_\_\_ the cursor and move around the screen very quickly. Making the same movements with arrow keys on the keyboard would take much longer. As you (2) \_\_\_\_\_ the mouse on your desk, the pointer on the screen moves in the same direction. The pointer usually looks like the I-bar, an arrow, or a pointing hand, depending on what you are doing.

A mouse has one or more buttons to communicate with the computer. For example, if you want to place the insertion point or choose a menu option, you just (3) \_\_\_\_\_ (press and release) on the mouse button, and the option is chosen.

The mouse is also used to (4) \_\_\_\_\_ text and items on the screen. You can highlight text to be deleted, copied or edited in some way.

The mouse is widely used in graphics and design. When you want to move an image, you position the pointer on the object you want to move, press the mouse button, and (5) \_\_\_\_\_ the image to a new location on the screen. Similarly, the mouse is used to change the shape of a graphic object. For example, if you want to convert a square into a rectangle, you (6) \_\_\_\_\_ one corner of the square and stretch it into a rectangle.

The mouse is also used to start a program or open a document: you put the pointer on the file name and (7) \_\_\_\_\_ on the name – that is you rapidly press and release the mouse button twice.

#### II. Complete the press release with the following words:

*colour, megapixels, shot, video, optical, brighter, reduction*

Kodak has introduced the EasyShare M753 digital camera with 7.0 (1) \_\_\_\_\_ resolution, a huge 2.5-inch LCD screen, and a professional 3x (2) \_\_\_\_\_ zoom lens. It is the first camera to incorporate proprietary Kodak Perfect Touch Technology. At the touch of the button, this innovative feature creates better, (3) \_\_\_\_\_ pictures by bringing out detail in shadows without affecting lighter areas. It is ideal for underexposed caused by shooting beyond the flash range or in adverse lighting conditions.

The M753 uses the exclusive Kodak Colour Science chip for phenomenal image quality with rich (4) \_\_\_\_\_ and accurate skin tones. Seventeen programmed scene modes (e.g. party, fireworks, children) and five colour modes (high, low, natural and black and white) help capture the best (5) \_\_\_\_\_ with the least effort.

Other features include cropping, auto picture rotation, digital red-eye (6) \_\_\_\_\_, and blurry picture alert. For capturing more than just still pictures, camera also features high-quality (VGA) (7) \_\_\_\_\_ capture and playback.

### III. Complete these definitions (1 - 6) with the following words:

*resolution, pixel, aspect ratio, colour depth, video adapter, plasma screen*

- 1) \_\_\_\_\_ the smallest unit on a display screen or bitmapped image (usually a coloured dot)
- 2) \_\_\_\_\_ an expansion card that generates the video signal sent to a computer display
- 3) \_\_\_\_\_ the width of the screen in proportion to its height
- 4) \_\_\_\_\_ also called gas discharge display
- 5) \_\_\_\_\_ the number of pixels contained in a display, horizontally and vertically
- 6) \_\_\_\_\_ the number of bits used to hold a colour pixel; this determines the maximum number of colours that can be displayed

### IV. Complete these sentences with the following words:

*capacity, storage, archiving, hold, secondary*

1. There are basically three types of magnetic \_\_\_\_\_ device available to the computer user – hard drives, diskettes and tapes.
2. The \_\_\_\_\_ of a 3,5” floppy disk is only 1,44MB.
3. Hard drives can \_\_\_\_\_ hundreds of times more data than floppy disks.
4. A portable hard drive is a good choice for \_\_\_\_\_ storage.
5. Magnetic tapes are used for \_\_\_\_\_ information that you no longer need to use regularly.

**V. Match these words (1 - 5) with the definitions (a - e).**

- |                    |   |
|--------------------|---|
| 1) formatted       | a) a file system that defines the structure for keeping track of the files        |
| 2) directory       | b) the part of a drive that reads and records data on a disk                      |
| 3) read/write head | c) to make a copy of data or software in case the original disk is damaged        |
| 4) head crash      | d) initialized; when the tracks and sectors on magnetic disks are set             |
| 5) back up         | e) a serious disk malfunction; when the read/write head touches the rotating disk |

**VI. Complete these sentences with the following words:**

*authorization, fake, Internet auction, shopping cart, browse, log in, steal*

1. Occasionally I also buy things on \_\_\_\_\_ sites such as eBay, where people offer and sell things to the highest bidder.
2. First you enter a site dedicated to e-commerce and \_\_\_\_\_ their products.
3. Then you put the items you want to buy into a virtual \_\_\_\_\_ – a program that lets you select the products and buy with a credit card.
4. You may have to \_\_\_\_\_ with a username and a password.
5. For some transactions, you will be required to use a TAN, a transaction \_\_\_\_\_ number.

6. Be aware of phishing – you may receive \_\_\_\_\_ emails claiming to be from your bank and asking for personal information or account details in an attempt to \_\_\_\_\_ your identity.

**VII Match these words (1 - 6) with the definitions (a - f).**

- |               |   |
|---------------|---|
| 1) resolution | a) special effects that can be applied to pictures                          |
| 2) jagged     | b) a technique that generates realistic reflections, shadows and highlights |
| 3) filters    | c) geometrical figures with special properties                              |
| 4) wireframe  | d) irregular or uneven  |
| 5) rendering  | e) the number of pixels in an image   |
| 6) fractals   | f) the drawing of a model by using features like edges or contour lines     |

**VIII. Complete these sentences with the following words:**

*interpreted, animated, configured, used, pronounced, object-oriented, compiled*

1. Java lets you watch \_\_\_\_\_ characters on web-pages.
2. Java is an \_\_\_\_\_ language, similar to C++ but more dynamic.
3. First, the source code of a Java program is \_\_\_\_\_ into an intermediate format called bytecode. This is then \_\_\_\_\_ by any system processing Java interpreter.
4. The Java ME platform is widely \_\_\_\_\_ in mobile devices.
5. Nowadays, most mobile phones are \_\_\_\_\_ to use Java games.
6. Microsoft C# is a simplified version of C and C++ for the Web. It's \_\_\_\_\_ 'C sharp'.

**IX. Match these words (1 - 5) with the definitions (a - e).**

- |            |  |
|------------|--|
| hypertext  | the process of manipulating video images                                 |
| hypermedia | text with links that take you to other pages                             |
| streaming  | a technique for playing sound and video files while they are downloading |

webcast      a live event broadcast over the Internet  
video        a form of enriched multimedia which allows an interactive  
editing      and dynamic linking of visual and audio elements

**X. Complete these job definitions with the following job titles:**

*software engineer, computer security specialist, blog administrator, help desk technician, DTP operator, hardware engineer, network administrator, webmaster*

1. A \_\_\_\_\_ designs and develops IT devices.
2. A \_\_\_\_\_ writes computer programs.
3. A \_\_\_\_\_ edits and deletes posts made by contributors to a blog.
4. A \_\_\_\_\_ uses page layout software to prepare electronic files for publication.
5. A \_\_\_\_\_ manages the hardware and software that comprise a network.
6. A \_\_\_\_\_ designs and maintains websites.
7. A \_\_\_\_\_ works with companies to build secure computer systems.
8. A \_\_\_\_\_ helps end-users with their computer problems in person, by e-mail or over the phone.

## PART 3

### GRAMMAR

#### PRONOUNS

##### I. Choose the correct word or phrase.

1. The staff never takes \_\_\_\_\_ colleagues' things without asking.  
a) theirs            b) this            c) their            d) them
2. The boss hardly ever listens to \_\_\_\_\_.  
a) her            b) she            c) here            d) he
3. \_\_\_\_\_ are our partners.  
a) This            b) That            c) Those            d) There
4. What are those people?  
a) They are    b) Those are    c) Those are    d) They are the Blacks  
technicians    technicians    the Blacks
5. There aren't any files on the shelf. There are \_\_\_\_\_ on the desk, either.  
a) some            b) few            c) neither            d) none
6. They have two computers. \_\_\_\_\_ of them are seven-year old.  
a) Some            b) All            c) Both            d) One
7. She doesn't know \_\_\_\_\_ about economics.  
a) something    b) anything    c) nothing            d) none
8. I prefer to do everything \_\_\_\_\_.  
a) by oneself    b) myself            c) oneself            d) for my own
9. What's that woman?  
a) It's an    b) It's Mary    c) She's an    d) She's Mary Smith  
engineer            Smith            engineer
10. What are these?  
\_\_\_\_\_ are my papers.  
a) They            b) Its            c) These            d) This
11. What's that?  
\_\_\_\_\_ is our new device.  
a) It            b) That            c) This            d) Its

12. They don't have \_\_\_\_\_ new ideas.  
 a) no                    b) many                c) much                d) a lot of
13. I think \_\_\_\_\_ took your briefcase.  
 a) anyone              b) everyone          c) one                  d) someone
14. John and Max don't like \_\_\_\_\_.  
 a) each other        b) one another      c) neither              d) none of it
15. I was offered a hammer or an axe, but \_\_\_\_\_ tool suited me.  
 a) no                    b) neither            c) none                d) all

## VERB

### ACTIVE VOICE

#### Simple Tenses

##### I. Choose the correct form of the verb.

1. Nokia \_\_\_\_\_ mobile phones.  
 a) manufactures    b) manufacture    c) to manufacture    d) manufacturing
2. He \_\_\_\_\_ in the same company for forty years.  
 a) worked            b) work              c) working            d) had worked
3. There \_\_\_\_\_ a hotel opposite the station but it closed a long time ago.  
 a) use to be        b) get to used to    c) is used to be      d) used to be
4. 'You've left your computer on.' – 'Oh, I \_\_\_\_\_ and switch it off.'  
 a) go                  b) will go            c) went                d) goes
5. \_\_\_\_\_ I type your report?  
 a) Shall              b) Will                c) Would              d) Do

#### Continuous tenses

##### II. Choose the correct form of the verb.

1. Please don't make so much noise I \_\_\_\_\_.  
 a) am working      b) was working      c) working            d) is working
2. Some colleagues of mine \_\_\_\_\_ in this project.





6. We \_\_\_\_\_ all the problems by then.  
a) have discussed    b) will have    c) will discuss    d) have discussed  
discussed

### Perfect Continuous tenses

#### IV. Choose the correct form of the verb.

1. We \_\_\_\_\_ this method for some time.  
a) have used    b) are using    c) have used    d) have been using
2. The boy \_\_\_\_\_ for a long time and felt hot.  
a) had been    b) has been    c) was walking    d) has walked  
walking    walking
3. The level of water \_\_\_\_\_ all the time.  
a) has risen    b) was rising    c) has been rising    d) has risen
4. I \_\_\_\_\_ for an hour before the train came in.  
a) was waiting    b) have waited    c) had been    d) have been  
waiting    waiting
5. He said that by the first of May he \_\_\_\_\_ at that school for twenty years.  
a) had been    b) has been    c) would have    d) will have  
working    working    been working    been working

### Mixed tenses

#### V. Choose the correct verb form to fit into each sentence.

1. Elaine \_\_\_\_\_ in London for ten years, but now she is living in Paris.  
a) has lived    b) lived    c) had lived
2. We \_\_\_\_\_ in New York for two weeks and still live here.  
a) have lived    b) lived    c) had lived
3. By last night the police \_\_\_\_\_ more than ten bomb threats.  
a) has reported    b) reported    c) had reported
4. When the teacher retires next month, she will \_\_\_\_\_ for thirty years.  
a) teach    b) have been teaching    c) be teaching
5. Robert \_\_\_\_\_ for the company for very long before he was promoted.

- a) didn't work      b) hasn't been working      c) hadn't been working
6. By the next year many employees \_\_\_\_\_ their jobs.  
a) will have lost      b) will be losing      c) will lose
7. When John \_\_\_\_\_ his mistake, he apologized.  
a) has realized      b) did realize      c) was realizing
8. A: I'm sure you met Carol at the party last night.  
B: I don't remember her. What \_\_\_\_\_?  
a) was she wearing      b) did she wear      c) has she worn
9. When I entered the room, she \_\_\_\_\_ on the sofa.  
a) lay      b) is lying      c) was lying
10. We are going for a walk. Who \_\_\_\_\_ to go with us?  
a) is wanting      b) does want      c) wants
11. \_\_\_\_\_ the storm last night?  
a) Did you hear      b) Have you heard      c) Do you hear
12. We \_\_\_\_\_ from him since he left for Kenya.  
a) didn't hear      b) haven't heard      c) hadn't heard
13. - Granny has lost her passport. - When \_\_\_\_\_?  
a) has she lost it      b) had she lost it      c) did she lose it
14. It \_\_\_\_\_ me much time to get to work.  
a) takes      b) take      c) took
15. His smile was something she \_\_\_\_\_ before.  
a) has never seen      b) had never seen      c) never saw
16. How long \_\_\_\_\_ English?  
a) have you learned      b) have you been learning      c) did you learn
17. Mr. Hay rose from the comfortable armchair in which he \_\_\_\_\_.  
a) had been sitting      b) sat      c) had sat
18. Bad news \_\_\_\_\_ fast.  
a) travel      b) travels      c) are traveling
19. I \_\_\_\_\_ here since September.  
a) am      b) have been      c) was
20. I slipped away while the others \_\_\_\_\_.  
a) had lunch      b) had had lunch      c) were having lunch
21. Meagan really looked better than when he \_\_\_\_\_ her last time.

- a) saw                                      b) was seeing                      c) had seen
22. Will you try to find out what time \_\_\_\_\_ at the airport.  
a) does the plane arrive    b) the plane arrives            c) arrives the plane
23. You \_\_\_\_\_ a lovely song when I entered the room. What was it?  
a) sang                                      b) was singing                      c) were singing
24. My aunt \_\_\_\_\_ South America yet.  
a) hadn't been to    b) wasn't in                              c) hasn't been to
25. Mom isn't at home. She \_\_\_\_\_ the shops and she'll be back soon.  
a) has gone to            b) has been to                              c) went to
26. I thought I \_\_\_\_\_ my scarf into the back of the wardrobe, but I  
couldn't find it there.  
a) was throwing    b) have thrown                              c) had thrown
27. After it \_\_\_\_\_ raining, we went out.  
a) stopped                                      b) has stopped                              c) had stopped
28. Why are you looking so unhappy? – I \_\_\_\_\_ my purse.  
a) had lost                                      b) have lost                                      c) lost
29. She looked out of the window. It \_\_\_\_\_.  
a) was still snowing    b) is still snowed                              c) has still snowed
30. Oh, your case is very heavy. I \_\_\_\_\_ you to carry it.  
a) am going to help    b) ought to help                              c) will help
31. The doorbell rang just as he ... the house.  
a) has left                                      b) left    c) was leaving
32. It often \_\_\_\_\_ in this part of the world.  
a) raining                                      b) rain    c) rains
33. He \_\_\_\_\_ at eight in the evening.  
a) will come                                      b) come    c) would come
34. Last night the police \_\_\_\_\_ more than ten bomb threats.  
a) has reported                                      b) reported                                      c) had reported
35. Paul went back home, because he \_\_\_\_\_ to turn the gas off.  
a) forget    b) forgot    c) had forgotten
36. I \_\_\_\_\_ housework all day today yesterday.  
a) did    b) had done                                      c) was doing
37. I was lying in bed, when the doorbell \_\_\_\_\_.  
a) was ringing                                      b) rang    c) had rung

38. I \_\_\_\_\_ a lot of golf recently.  
 a) play                      b) played                      c) have played
39. When I got home everybody \_\_\_\_\_ TV.  
 a) watched                      b) was watching                      c) had watched
40. We \_\_\_\_\_ your mother for ages.  
 a) haven't seen                      b) didn't see                      c) hasn't seen

## THE NOUN

### I. Complete the table.

Singular	Plural
deer	
	data
	women
piano	
	cellos
fish	
	formulae
bacterium	
	analyses
stimulus	
foot	
	geese

### II. Choose the correct word or phrase.

1. Let's go to the \_\_\_\_\_ .  
 a) Smiths                      b) Smiths'                      c) Smith's                      d) Smith
2. \_\_\_\_\_ room is upstairs.  
 a) Deans                      b) Dean's                      c) Deans'                      d) Dean
3. \_\_\_\_\_ bags have blue stickers.  
 a) Susan's and                      b) Susan and Steve's                      c) Susan and                      d) Susan and Steves'  
 Steve's                      Steve
4. \_\_\_\_\_ projects were quite impressive.

- a) Student's      b) Students'      c) Students      d) Student
5. \_\_\_\_\_ room is on the second floor.
- a) Men's      b) Man's      c) Mens      d) Mens'

**III. Put "A" if the underlined noun in the sentence is abstract, and "C" if it is concrete.**

1. \_\_\_\_\_ Democracy is the best kind of government.
2. \_\_\_\_\_ Curiosity killed the cat.
3. \_\_\_\_\_ Patience is a virtue.
4. \_\_\_\_\_ The school needed new desks.
5. \_\_\_\_\_ There is nothing to fear but fear itself.
6. \_\_\_\_\_ The Chinese culture is ancient.
7. \_\_\_\_\_ Yesterday, I saw a good movie.
8. \_\_\_\_\_ Trust is a two-way street.
9. \_\_\_\_\_ Eat your vegetables to stay healthy.

**IV. Put "C" if the underlined noun in the sentence is countable, and "U" if it is uncountable.**

1. \_\_\_\_\_ I really love chocolate!
2. \_\_\_\_\_ She has coffee every morning.
3. \_\_\_\_\_ The dollar is the name of the official currency of many countries.
4. \_\_\_\_\_ You need to change the oil in the car.
5. \_\_\_\_\_ I have three final tests tomorrow.

**THE NUMERAL**

**I. Choose the correct word or phrase.**

1. Independence Day, commonly known as \_\_\_\_\_, is a federal holiday in the United States.
  - a) the Fourth of July      b) Fourth of July      c) Fours of July
2. Kate is having a party for her \_\_\_\_\_ birthday.
  - a) twenty-two      b) twenty-second      c) twenty-twoth
3. I felt very bad during my \_\_\_\_\_ trip.

- a) fivth-hour      b) fivehour      c) five-hour
4. Her sister is \_\_\_\_\_ years old. She is tall and she has long curly hair.  
a) twenty-seven    b) twenty-seventh    c) twentieth-seven
- 5) He died on \_\_\_\_\_, in the seventy-second year of his age.  
a) twenty-fifth of May    b) twenty five    c) the twenty-fifth of May
- 6) When Mary was in her \_\_\_\_\_, she left her city.  
a) twenty      b) twenties      c) twentyies
- 7) Susan has been the \_\_\_\_\_ girl to win such an expensive award since 2000.  
a) forteenth      b) fourteenth      c) fourtenth
- 8) Ted was the \_\_\_\_\_ citizen born in this city.  
a) nine millions    b) nine millionthes    c) nine millionth

**2. Write all the numbers and symbols in full, according to the way they are pronounced.**

16.5

17.38 %

0.185

£ 7.80

€ 3.15

F 250

3560

598,347

1,300,402

1 m

3 bn

September 7, 2012

April 6, 2000

**VERB**  
**PASSIVE VOICE**

**I. Rewrite the following sentence in Active voice.**

1. The program was written by our leading programmer.
2. Figures should be checked more carefully.
3. It is said that women live longer than men.
4. The proposal has been rejected by the committee.
5. Billion photos are uploaded to Facebook by users every month.
6. This program was developed in Java by our software specialists.
7. The research results will be presented at the meeting by Kristina.

**2. Rewrite the following sentence in Passive voice.**

1. They sent technician solve the problem.
2. Steve Jobs founded NeXT, a computer platform development company.
3. People always admire this picture.
4. No one has opened this box for the last hundreds years.
5. People speak English all over the world.
6. People will forget it soon.
7. We should give teenagers an opportunity to get a job.

**III. Choose the correct form of the verb.**

1. The children \_\_\_\_\_ to the zoo next week.  
a) are taken      b) will be taken      c) will take      d) will be taking
2. She \_\_\_\_\_ by a strange noise.  
a) was waken      b) waken      c) was wake      d) has waken
3. I hate \_\_\_\_\_ like a child.  
a) having treated      b) to treat      c) treating      d) being treated
4. Christo loves \_\_\_\_\_.  
a) being appreciated      b) to be appreciate      c) to appreciate      d) having appreciated
5. The permission \_\_\_\_\_ never \_\_\_\_\_.  
a) will/be give      b) will/be given      c) would/be given      d) is/give

6. The bus stop \_\_\_\_\_.

- a) will vandalized    b) has vandalized    c) has been    d) was vandalized  
vandalized

7. The whole gang \_\_\_\_\_ yesterday.

- a) arrested    b) was arrested    c) has been    d) will be arrested  
arrested

8. The train may \_\_\_\_\_ by the storm.

- a) be delay    b) to delay    c) delayed    d) have been delayed

#### **IV. Rewrite the following paragraph using Passive voice.**

Somebody gave me a goat for my birthday last year. They had bought it from a farm down the road. We keep it tied to a tree in our garden. My father normally looks after it, but last week his company sent him abroad on business. A few days later, our neighbour called me to the window. I hadn't tied the goat up properly. The goat was eating her washing!

#### **V. Complete the article with passive forms of the verbs in brackets.**

There is an old castle in Norwich which (1) \_\_\_\_\_ *is believed* (believe) to (2) \_\_\_\_\_ (haunt). It (3) \_\_\_\_\_ (call) North Castle and it (4) \_\_\_\_\_ (say) that ghosts can (5) \_\_\_\_\_ (see) there at night. The castle (6) \_\_\_\_\_ (build) 400 years ago and (7) \_\_\_\_\_ (own) by two old ladies who (8) \_\_\_\_\_ (believe) to bewitches. One day, long ago, they both disappeared and they (9) \_\_\_\_\_ (never/see) again. In 1985 the castle (10) \_\_\_\_\_ (buy) by a businessman and (11) \_\_\_\_\_ (convert) into a luxurious hotel. The castle (12) \_\_\_\_\_ (visit) by quite a few guests every year and special groups (13) \_\_\_\_\_ (organise) to watch for ghosts. been a long time since any ghosts (14) \_\_\_\_\_ (see), but one night a (15) \_\_\_\_\_ (play) on some visitors by a local couple, who dressed up as the "witches". They (16) \_\_\_\_\_ (see) by a guest, who said she (17) \_\_\_\_\_ (frighten) almost to death. The couple apologised the next day, and (18) \_\_\_\_\_ (tell) never to visit castle again, certainly not in the middle of the night dressed up as witches.



## REPORTED SPEECH

### Statements

#### I. Complete the following sentences.

- 1) "It is too late." – I said \_\_\_\_\_.
- 2) "I have replied." – He claimed that \_\_\_\_\_.
- 3) "I cannot come." – Mary explained that \_\_\_\_\_.
- 4) "I could fall down." – He was afraid \_\_\_\_\_.
- 5) "I will pay tomorrow." – He said \_\_\_\_\_.
- 6) "The Himalayas are the highest." – He knew that \_\_\_\_\_.
- 7) "I was with him last week." – Jill admitted that \_\_\_\_\_.
- 8) "I will finish this picture tomorrow." – Diana supposed that \_\_\_\_\_.
- 9) "I have not done it today." – I explained that \_\_\_\_\_.
- 10) "I have been watching a film." – He replied that \_\_\_\_\_.

#### II. Choose the correct sentence.

- 1) A. Tom said he wants to visit his friends that weekend.  
B. Tom said he wanted to visit his friends this weekend.  
C. Tom said he wanted to visit his friends that weekend.
- 2) A. Jerry said he was studying English a lot at that moment.  
B. Jerry said he was studying English a lot at the moment.  
C. Jerry said I was studying English a lot at that moment.
- 3) A. They said they have lived there for a long time.  
B. They said they lived here for a long time.  
C. They said they had lived there for a long time.
- 4) A. Peter said he got up every morning at seven o'clock.  
B. Peter said I got up every morning at seven o'clock.  
C. Peter said he gets up every morning at seven o'clock.
- 5) A. She told me that she worked there since she had left her last job.  
B. She told me that she had worked there since she had left her last job.  
C. She told me that she had worked there since she left her last job.

## Questions

**I. Make reported questions. Use 'she asked me' at the beginning of each sentence.**

- 1) "Where is he?"
- 2) "What are you doing?"
- 3) "Why did you go out last night?"
- 4) "Who was that beautiful woman?"
- 5) "How is your mother?"
- 6) "What are you going to do at the weekend?"
- 7) "Where will you live after graduation?"
- 8) "What were you doing when I saw you?"
- 9) "How was the journey?"
- 10) "How often do you go to the cinema?"
- 11) "Do you live in London?"
- 12) "Did he arrive on time?"
- 13) "Have you been to Paris?"
- 14) "Can you help me?"
- 15) "Are you working tonight?"
- 16) "Will you come later?"
- 17) "Do you like coffee?"
- 18) "Is this the road to the station?"
- 19) "Have you studied reported speech before?"
- 20) "Did you see him yesterday?"

## Orders

**I. Report the following orders.**

- 1) Andrew: "Clean the blue bike!"
- 2) Jessica: "Write a text message!"
- 3) Nelly: "Help Peter's sister!"
- 4) Fred: "Wash your hands!"

- 5) Anna: "Don't open the window!"
- 6) Tom: "Come at 8!"
- 7) Teacher: "Do your homework!"
- 8) Doris: "Dance with me!"
- 9) Sabine: "Meet Sandy at the station!"
- 10) Victoria: "Check your e-mails!"
- 11) Fred: "Don't disturb her!"
- 12) Helen: "Don't ask me about this!"
- 13) John: "Don't do it!"
- 14) Adrianna: "Don't go there!"

### **Mixed exercises**

#### **I. Turn the following sentences from into direct speech.**

- 1) The teacher asked the students who had broken the window.
- 2) He said that there was no one at home.
- 3) She told me not to forget to call John.
- 4) Helen asked what time the wedding was.
- 5) Jill asked if I had gone to the party the day before yesterday.
- 6) Lesley asked Sara if she would lend her some money.
- 7) The old lady asked her husband who that man was.
- 8) Paul asked why they had missed their flight to Canada.
- 9) My brother asked me whether I could help him with his science Project.
- 10) His mother told him to tidy his room.

### **MODAL VERBS**

#### **I. Rewrite the following sentences using can, could, may or might.**

- 1 It is possible that he is Italian.
- 2 Do you know how to play the piano?
- 3 You are not allowed to speak during the exam
- 4 It is not possible that they are still on holiday.

5 You are not allowed to smoke on the plane.

**II. Fill in can or be able to in the appropriate tense and form.**

1. I've been looking for your glasses but I \_\_\_\_\_ to find them yet.
2. By the time Phillip was ten, he \_\_\_\_\_ speak three languages.
3. If you don't tell me what your problem is, I \_\_\_\_\_ help you.
4. I got home early last night, so I \_\_\_\_\_ watch my favourite programme on TV.
5. I \_\_\_\_\_ eat anything when I was younger, but now I have to be more careful.
6. He \_\_\_\_\_ pass the exam because he had studied hard.

**III. Fill in: can't, might, must or could.**

I wonder where Paul is. He (1) \_\_\_\_\_ be at work because he never works on a Sunday. He (2) \_\_\_\_\_ be at Sally's, but I doubt it because they haven't been speaking lately. I wonder if he (3) \_\_\_\_\_ be at his cottage in the country. No, he (4) \_\_\_\_\_ be because he told me they've rented it to someone else for the summer. He (5) \_\_\_\_\_ have gone bowling, but I'm almost sure he told me he'd got tired of it. I know! He (6) \_\_\_\_\_ have gone swimming, because I remember him asking me if I wanted to go with him.

**IV. Fill in: should, shouldn't, ought to or had better.**

David: You (1) \_\_\_\_\_ really do something about your car.

Sally: What do you mean?

David: It's in terrible condition. You (2) \_\_\_\_\_ get a new one before the police stop you.

Sally: But I can't afford a new one!

David: Well, you (3) \_\_\_\_\_ at least have the exhaust seen to. And you (4) \_\_\_\_\_ have the brakes repaired before you kill somebody.

Sally: I suppose I (5) \_\_\_\_\_ But you (6) \_\_\_\_\_ lend me some money to pay for the repairs.

David: Sally, have you spent the money I lent you last week? You (7) \_\_\_\_\_ have spent it all!

## V. Fill in: mustn't, needn't or can't.

In this school students (1) \_\_\_\_\_ smoke. Students (2) \_\_\_\_\_ wear school uniforms, but they (3) \_\_\_\_\_ wear dirty clothes. Students (4) \_\_\_\_\_ leave school until 3 pm. They (5) \_\_\_\_\_ forget to do their homework. They (6) \_\_\_\_\_ bring a doctor's note if they are sick. Older students (7) \_\_\_\_\_ park their cars in the teachers' car park. Students (8) \_\_\_\_\_ walk or ride their bikes across the grass. Students (9) \_\_\_\_\_ be late for class or talk loudly in lessons. Students (10) \_\_\_\_\_ forget these rules, but teachers (11) \_\_\_\_\_ obey them as they have a separate set of rules to follow.

## CONDITIONALS

### I. Open the brackets:

1. If you (to leave) now, you would get there on time.
2. If Lillian had enough money, she (to buy) a new swimming-costume.
3. If I (to be) you, I would write a book on Ireland.
4. If Mr. Morrell (to speak) German more slowly, he would not make so many mistakes.
5. If you (to go) by train, you would arrive at seven o'clock.
6. Even if he (to try) a dozen times, he would not succeed.
7. I (not to drink) this dirty water, if I were you.
8. If I (to be) rich enough, I would buy a fur coat.
9. If I (to have) a sewing machine, I would make all my own clothes.
10. If I (to win) a large sum of money, I would spend my holidays abroad.
11. If you (to win) the first prize in the lottery, what would you do?
12. We would go boating if the weather (to be) warmer this afternoon.
13. If Kathy (to dress) differently, she would look nicer.
14. I would make more mince-pies, if I (to have) more mincemeat.
15. If I (to be) you, I wouldn't go and see that film.
16. Bob (to go) to the cinema last night, if he had had a ticket.
17. Fred (to meet) you yesterday, if he had had time.

18. Peter and his friends (to go) to the races last Saturday, if it hadn't rained.
19. George (to arrive) in time if he had gone by bus.
20. James (to take part in) the meeting if he had not fallen ill.

**II. Complete the following sentences with an appropriate conditional clause as in the example.**

If I found a gun in the street, *I would take it to the police.*

1. You wouldn't have been punished \_\_\_\_\_.
2. If you drink all that juice \_\_\_\_\_.
3. If you drive so fast \_\_\_\_\_.
4. If you should see Mark this evening, \_\_\_\_\_.
5. If you had taken my advice \_\_\_\_\_.
6. Unless the weather improves \_\_\_\_\_.
7. My father would have bought me a bicycle \_\_\_\_\_.
8. He would have been very angry \_\_\_\_\_.
9. If you aren't enjoying the film, \_\_\_\_\_.

**III. Fill in the blanks with the correct form of the verbs in brackets.**

Yesterday the famous bank robber, Fingers Smith, robbed another bank in the centre of town. As usual, he only stole £ 10. If he (1) \_\_\_\_\_ (leave) any clues, he (2) \_\_\_\_\_ (be) in prison now, but he's much too clever. He disconnected the security cameras: if he (3) \_\_\_\_\_ (not/do) that, the police (4) \_\_\_\_\_ (have) him on film now. The strange thing is, Fingers doesn't seem to be interested in the money; if he (5) \_\_\_\_\_ (be), he (6) \_\_\_\_\_ (can/steal) thousands of pounds by now. The police are determined to catch him, and the Chief is confident that they will.

**IV. Rephrase the following sentences using the beginnings given.**

1. He won't help you if you don't ask him. Unless \_\_\_\_\_.
2. Take your medicine, otherwise you won't get better. If \_\_\_\_\_.

3. You won't make any spelling mistakes provided you use a dictionary.

If \_\_\_\_\_.

4. If you park here, you'll be fined £ 20. Don't \_\_\_\_\_.

5. You'd better confess your crime. If \_\_\_\_\_.

6. She went home early because she was exhausted. If \_\_\_\_\_.

7. You won't understand the story unless you finish the book. If \_\_\_\_\_.

8. She can't go out if she doesn't promise to be back early. Unless

\_\_\_\_\_.

9. The bee won't sting you as long as you stay still. Provided \_\_\_\_\_.

### **V. Rephrase the following sentences using the beginnings given.**

1. Liz is tired all the time. She shouldn't go to bed so late.

If \_\_\_\_\_.

2. It's rather late. I don't think Ann will come to see us now.

I'd be surprised if Ann. \_\_\_\_\_.

3. I'm sorry I disturbed you. I didn't know you were busy.

If I'd known you were busy, I \_\_\_\_\_.

4. The dog attacked you, but only because you provoked it.

If \_\_\_\_\_.

5. I don't want them to be upset, so I've decided not to tell them what happened.

They \_\_\_\_\_.

6. Unfortunately, I didn't have an umbrella and so I got very wet in the rain.

I \_\_\_\_\_.

7. Martin failed his driving test last week. He was very nervous and that's why he failed.

If Martin \_\_\_\_\_.

## Навчальне видання

### МЕТОДИЧНІ ВКАЗІВКИ

до практичних занять та самостійної роботи з розвитку умінь та навичок професійного спілкування англійською мовою для студентів I курсу факультету комп'ютерних та інформаційних технологій

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