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Methodical recommendations

for organizing independent work

on an academic discipline

"FOREIGN LANGUAGE FOR PROFESSIONAL PURPOSES"

(for first-year full-time students first (bachelor's) level of higher education specialty 122 – Computer Sciences, 126 – Information systems and technologies, 174 – Automation, computer-integrated technologies and robotics)

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Methodical recommendations for organising independent work on an academic discipline “Foreign language for professional purposes” (for first-year full-time students first (bachelor’s) level of higher education specialty 122 – Computer Sciences, 126 – Information systems and technologies, 174 – Automation, computer-integrated technologies and robotics) / O. M. Beketov National University of Urban Economy in Kharkiv; comp.: O. V. Havrylova, O. O. Hnatysheva, O. L. Ilienko. – Kharkiv : O. M. Beketov NUUE, 2024. – 48 p.

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SECTION I

UNIT I
SOFTWARE ENGINEERING

Vocabulary

software engineering	software	data
systems analyst	clarifying	coding
debugging	output	hardware
Network system	conditional instructions	decision table
iteration	loop instructions	program flowchats
pseudocode	systems programs	srtificial intelligence
HTML	XML	markup languages
tag codes	fall back	direct implementation
parallel implementation	phased implementation	pilot implementation

Software engineering is the discipline of designing high quality software solutions. Software consists of programs (sets of instructions for controlling a computer) and data (the material that has to be processed). Programs are written in computer languages by people called programmers. A systems analyst is a person who designs or modifies information systems to meet users' requirements. This includes investigating feasibility and cost, producing documentation, and testing prototypes of the system. Producing a program, therefore, involves a number of stages including:

a) clarifying the problem by considering the requirements of the potential users;

b) designing the solution to the problem by first deciding on the overall structure of the solution;

c) coding the program by first choosing an appropriate programming language and inputting the program code;

d) testing and debugging the program (identifying and fixing any problems or faults in the program code);

e) documenting and maintaining the program including writing instructions for

using the program.

Systems analysts first need to talk to the people involved in the computing problem, including the people managing the system and the users or potential users of the system. They need to establish factors such as:

a) the nature of the problem;

b) what systems already exist;

c) to what extent any existing systems are computerised (changed so that they can be operated or controlled using a computer);

d) what output (the processed data or signals that come out of a computer system) will be required from the system;

e) who will be using the system and what parts of the system they need to be able to use;

f) the computing experience of the staff and what training would be required;

g) what hardware (the physical components of a computer system) already exists and what would need to be added, including the specification of the hardware and whether a network system is required (a system where a number of computers and peripheral devices are connected together).

They then have to plan the structure of the solution and check it through with the people involved to make sure it meets their requirements. Next, they have to choose a suitable programming language and write the program (a set of instructions, written ina computer language, that control the behaviour of a computer), continually testing and adapting it until it works to the Satisfaction of the customer and users. The system then has to be put into service and the users have to be trained. This involves documenting the program specifications and writing instructions for using the system.

Programming languages commonly use different structures for sequencing program instructions, including:

a) conditional instructions i.e. if a certain condition is true, then process this

instruction (if X then Y). Decision tables are used to indicate how a conditional structure will process data. They show ail the different inputs that might arise for each condition and the resulting outputs that would be produced by the conditional

instruction.

b) iterations or loop instructions i.e. process these instructions repeatedly until or while a particular condition is true, or false (do ... until ... or do ... while ...). Program flowcharts can be used to show the sequence of instructions in a program and are sometimes used for designing parts of programs such as iterations. Pseudocode is a method of writing a description of a computer program using a mixture of natural language and computer language code.

There are a large number of computer languages available for use by programmers. Each language is designed for use in solving particular types of problem and therefore has particular strengths and weaknesses.

A systems analyst has to decide which language is most appropriate in each situation. Languages such as C++ are particularly suitable for writing systems programs (programs that are used to control the basic functions of a computer system e.g. operating system programs). Languages such as Visual Basic and Pascal are easy to use and are particularly suitable for learning how to program. FORTRAN is designed for solving engineering problems, COBOL for writing business programs, Ada for military purposes, Prolog and LISP for working in artificial intelligence (an area of computing concerned with developing computer programs that perform tasks that can normally only be done using human intelligence). Logo is particularly suited for use by young children. Some languages such as HTML and XML are markup languages rather than programming languages i.e. they use tag codes (labels) for marking text for use in programs such as Web browsers. Languages such as Java and Perl have a number of specialised uses including adding features to Internet connections and webpages (hyperlinked documents).

Converting to new computer systems can be done in different ways. Each strategy has its advantages and disadvantages. These include:

a) direct implementation where the old system is simply removed and the new system installed. In this strategy only one system is used at any one time but there is no fall back (alternative system that can be used if problems occur in the main system) if the new system does not operate properly;

b) parallel implementation where the old and the new systems are both used at the same time until the users are satisfied that the new system is working properly;

c) phased implementation where the old system is gradually replaced by the new system, one part at a time;

d) pilot implementation where the new system is tried out in one section of the company to make sure that it works as required.

Exercises

1. Put these five stages of programming in the correct sequence.

a) Design a solution;

b) Code the program;

c) Document and maintain the program;

d) Clarify the problem;

e) Test the program

2. To which stage do each of these steps belong?

1) Clarify objectives and users.

2) Debug the program.

3) Write programmer documentation.

4) Do a structured walkthrough.

5) Select the appropriate programming language.

3. What would be the most appropriate language to use for each of the following situations.

1) A schoolteacher wants his young pupils to learn some basic mathematics by controlling a simple robot.

2) The owner of a small business wants to create a simple database program to keep track of his stock.

3) An engineer wants to develop a program for calculating the stresses in a mechanical device.

4) A student wants to create webpages for a personal website.

5) A system programmer wants to add some new modules to an operating system.

6) A programmer working for the USA army wants to create a program for controlling a new type of weapon.

7) A finance company needs to process data from its branch offices on its mainframe computer.

8) A website designer wants to enable the data on his website to be easily processed by a number of different programs.

9) A student studying artificial intelligence wants to write some programs for a course project.

10) A college lecturer wants his students to learn the principles of programming.

11) A professional programmer wants to create and sell a program for use in language learning.

12) A website designer wants to password-protect a section of website.

UNIT II
PEOPLE IN COMPUTING

Vocabulary

webmaster	Help-desk troubleshooter	Applications programmer
Security specialist	hacker	Systems programmer
IT support engineer	IT manager	IT systems manager
Off-the-shell systems	In-house systems	System analyst
Software engineer/designer	Computer services engineering technician	Network support person
Systems support person	Analyst programmer	Low-level computer languages
System crash	Machine code	Printed circuit boards

There is a wide range of jobs in computing and different titles are sometimes given to the same type of job. Jobs mentioned in this unit include:

- A Webmaster - a person who administers a Web server.

- A help-desk troubleshooter — a person who works as part of a telephone service that helps users solve problems that occur on computer systems.

- An applications programmer — a person who writes applications programs (computer programs designed to be used for a particular purpose e.g. wordprocessors, spreadsheets or database programs).

- A security specialist — a person who tests the security of networks systems and advises customers how to introduce and maintain security policies including:

a) setting up secure password systems (secret codes used to control access to a network system);

b) installing firewalls (a combination of hardware and software used to control the data going into and out of a network);

c) keeping out hackers (skilled programmers who attempt to gain unauthorised access to network systems);

d) dealing with viruses (programs written with the purpose of causing damage or causing a computer to behave in an unusual way).

- A systems programmer — a person who specialises in writing systems software (a program or set of programs that are used to control the basic functions of a computer system e.g. operating system programs).

Being employed in any of these jobs requires the person to have particular formal qualifications, personal qualities and technical skills. Qualifications mentioned in this unit include:

a) Standard grades in Maths. This is a basic level school qualification in mathematics.

b) HNC in Computing. This is a Higher National Certificate in computing including the study of hardware (the physical components of a computer system) and software (programs and data). This is a college qualification that can usually be obtained by a period of part-time study.

c) HND in Computing Support. This is a Higher National Diploma in installing, maintaining and troubleshooting (to find and fix faults in a system) computing systems and training users. This is a higher college qualification than an HNC but not as high as a University degree. It usually requires a period of full-time study.

An IT (Information Technology) support engineer is a professional who provides help for computer users by designing, building and maintaining information technology systems (systems and equipment such as computers for dealing with information). A support engineer might start out in their career by working on a help-desk (a telephone service for helping users solve problems that occur on computer systems).

An IT manager manages projects, technology and people. An IT systems manager is responsible for developing and implementing computer software that supports the operations of the business. Off-the-shelf systems are ready-made systems that are purchased from systems suppliers. In-house systems are developed by the employees of the company. A university degree is usually required but not necessarily in computing science (the study of computers and their use). The best qualification for becoming a manager is experience.

A systems analyst studies systems in an organisation and decides how to computerise them (change the system into one controlled by computers). They analyse requirements and report on options for using information technology (the study and practice of techniques or use of equipment for dealing with information).

A software engineer/designer produces the programs which control the internal operations of computers. They use program libraries (sets of programmed functions that are made available for use by any program) to produce programs. They also design, test and improve programs for a variety of purposes including computer-aided design and manufacture (the production of technical designs and the production of goods using machines controlled by computers).

A computer services engineering technician is responsible for installation, maintenance and repair of computers and peripherals (associated equipment). They install, test, troubleshoot, upgrade (add components to improve the features or

performance of a system) and carry out routine maintenance on hardware, ranging from personal computers (a computer designed to be used by one person at a time) to mainframes (the largest and most powerful type of computer, usually operated by a team of professionals).

A network support person or computer engineer maintains the link between PCs (personal computers) and workstations (powerful desktop computers used by power users for work that requires a lot of processing e.g. graphic design) connected in a network (a number of computers and peripheral devices connected together). They use telecommunications (technology concerned with communications over long distances), software, electronic skills and knowledge of networking software to troubleshoot systems. This may involve work with the controlling software, on the wiring, printed circuit boards (the electronic boards that hold the components of a circuit and connect them together), software or microchips (small integrated electronic circuits) on a file server (a powerful network computer that stores computer files and makes them available to users on a network), or on cables either within or outside the building.

An applications programmer writes applications programs (computer programs designed to be used for a particular purpose e.g. wordprocessors, spreadsheets or database programs).

A systems support person is an analyst programmer (a person whose job is a combination of systems analysis and computer programming) who is responsible for maintaining, updating (bring up to date i.e. change into the latest version) and modifying the software used by a company. Some specialise in systems software (software that handles the basic operation of the computers). This involves use of machine code (computer language that consists entirely of a combination of 1s and Os) and specialised low-level computer languages (computer languages, such as machine code or assembly language, that is closer to the form that a computer understands than to that of a human language). They may sort out problems encountered by users including amending an area of code (text of a program or part of a program using a

computer language) in the software, retrieving files and data lost when a system crashes (fails suddenly and completely, usually referring to the failure of a hard disk).

Exercises

1. What do the following people in computing do?

1) Webmaster

2) Help-desk troubleshooter

3) Applications programmer

4) Security specialist

5) Systems programmer

2. For which of the careers described are these statements true? More than one career may match each statement.

1) You may work for only a few days or a week for a company.

2) It's good idea to buy books on languages such as C++.

3) You are responsible for developing and implementing the software a company needs to run its operations.

4) You need to be able to break down a problem into a number of smaller tasks.

5) It's worth paying for a training course if you get serious about this career.

6) Microsoft Certified Systems Engineer is a useful qualification for your career.

7) Your objective is to become self-employed.

8) It's important you have the right personality to lead a team.

3. Study these job requirements. Then try to match the requirements to the list of jobs which follows.

1	2	3
- at least 5 years (2 at senior level) in: Unix, SYBASE or ORACLE or	- able to manage, lead and develop a team	- proven track record in the delivery of e-

Windows OS, Terminal Server, TCP/IP, Internet - strong project management (2 years) - willingness to travel abroad	- knowledge of C, C++, Delphi - experience of object-oriented design within a commercial environment - ability to deliver software projects against agreed scheduled and within agreed estimates	solutions in banking environment - knowledge of Unix, Windows and Oracle - willingness to travel internationally
4 - minimum 4 years lifecycle development experience - demonstrable skills using VB, SQL, RDBMS - able to develop core s/w - excellent communication skills	5 - minimum of 18 months commercial experience of Web development - knowledge of HTML, Java, ASP - full portfolio of URLs as examples	6 - experience of Windows OS, Exchange, Monitoring Software, SQL Server, Verta TCP/IP - solid grasps of networking - 2 to 5 years experience in a network environment

A Visual Basic Developer

B IT Engineer (Network & Database)

C Web Developer

D Network Support

E E-commerce Consultant

F Team Leader

UNIT III

COMPUTING SUPPORT OFFICER

Vocabulary

Hard disk drive	Panes	Divider
Folders	Subfolders	Navigation pane
Tree diagram	Toggle box	Compacted
Guidelines	Drag	Drop
Undo command	Desktop	Status bar
Start button	Run command	Dialog box

Computing Support involves setting up and maintaining computing systems, troubleshooting hardware and software problems and training computer users.

A hard disk drive is used for storing programs and data as separate files. Windows Explorer is the name of the program included with Microsoft Windows operating systems for managing stored files. The program opens in a window which is divided into two parts called panes. The line separating the panes is called a divider and can be moved, using a mouse to change the size of the panes. Using a program such as Windows Explorer, the user can divide the drive into virtual storage areas called folders (or directories) and give each folder a different name (or label). Each folder can contain other folders called subfolders (or sub-directories). The user can then copy or move files into different folders and subfolders. Windows Explorer displays drives and folders on the left-hand pane (called the navigation pane) in the form of a tree diagram with the folders indented below the drive they are stored in and the subfolders indented below the folder they are stored in. Asmall box called a toggle box with a + (plus) or- (minus) sign inside is displayed beside each drive and folder that contains folders or subfolders. When a + is displayed in the box, the folders and subfolders inside the drive or folder are hidden (in the text in this unit the Computing Officer refers to this as the drive being compacted). When the user clicks on the box, the folders and subfolders

stored in that drive or folder are displayed with lines known as guidelines indicating what folders belong inside what drives. The toggle box sign also changes to a minus. Therefore, by clicking on the box, the user can expand and contract the display to show or hide folders and subfolders.

To create a new folder, the user uses the mouse to select the drive or folder that will contain the new folder. They then click on the File button on the menu bar at the top of the screen. This opens the File menu and they choose the New option on the File menu. They then choose a Folder from the submenu. This creates a folder called 'New Folder' inside the drive or a folder that was selected at the beginning and gives the user the option of renaming the new folder. When a particular drive or folder is selected, the folders, subfolders and files it contains are displayed in a similar tree diagram in the right-hand pane. The user can drag files from one folder to another on the screen using the mouse. To do this they select the file and hold down the left mouse button. As they move the cursor with the mouse, the file moves with it. They can drop a file into another folder by moving the cursor over the name of the folder and letting go of the left mouse button. The user can reverse a change they have made by using the Undo command on the Edit menu on the menu bar at the top of the screen.

The main operating system's background screen is called the desktop. In Microsoft Windows operating systems, the desktop has a bar along the bottom of the desktop called the status bar. This is used to indicate what programs are currently open. By changing the status bar property settings, it can be made to only appear on the display screen when the cursor is moved down to the bottom of the screen. It disappears again when the cursor is moved away from the status bar. At the far left of the status bar is a button icon called the Start button. Clicking on the start button causes the Start menu to open up. By selecting the Programs option on the start menu, users can normally select the Windows Explorer option on the submenu to start the Windows Explorer program. Another way of Starting programs is to choose the Run command option on the Start menu. This opens up a dialog box (a message window with different options for the user to choose) with a text box and some command buttons inside it.

The user can then start a program by typing the name of the program file in the text box and clicking on the OK command button.

Exercises

1. How to perform these computer operations in Windows or Mac OS?

a) Copying a file

b) Saving a file.

2. Describe the effect of these actions:

1. If you don't virus-check floppies.
2. If there was a power cut while you were using your computer.
3. If you install a faster processor.
4. If you forgot your password.
5. If you press the delete key.
6. If you use a search engine.
7. If you double-click on an icon.
8. If you use power-saving optins.

UNIT IV

WEBPAGE CREATOR

Vocabulary

Webpages	Homepage	Website
Web server	database	Search engine
Bug	Upgrade	Drivers
Develoopment tools	Freeware	Shareware
Publish	Web address	Domain name
Tags	Hyperlink	Register
Update	Static site	Listed

Webpages are documents designed for use on the World Wide Web which is an Internet service that allows users to view linked webpages stored on Web server computers. A set of related documents stored on a Web server is known as a website and the starting webpage of a website is referred to as the homepage. Webpages are viewed using a program called a browser.

Many websites deal with a particular area of interest or topic and almost every topic imaginable is dealt with by some website. Special websites known as search engines allow users to find websites related to a particular topic by searching a database (a type of applications program used for storing information so that it can be easily searched and sorted) of links to other websites. Some websites allow users to download files (copy files from a server computer to a client computer). Files avaitable for downloading include applications programs that allow the user to perform specific tasks such as wordprocessing, upgrades to programs that add features or fix bugs (faults in the program), software drivers (programs that are used to control peripheral devices such as printers), development tools (software that can be used for writing programs or creating material such as webpages). Downloadable programs that are free to download and use are known as freeware. Programs that are free to download and try but should be paid for if the user wishes to continue to use them, are known as shareware.

Websites can be created by anyone who has the necessary programs and equipment. When the website creator creates their website, they publish it (copy it to a Web server computer). This is referred to in the text as ‘putting up a site’. Every website has a Web address that takes the user to the first page of the website i.e the homepage. The Web address usually starts with ‘www’ and ends with ‘com’ if it is a company (co.uk is used for a company in the United Kingdom). The parts of the Web address are separated by dots (.) e.g. www.themovieshrine.com but there is no dot at the end of the address. The domain name is the part of the Web address that indicates what network the website is stored on. Sometimes the Web address used is not the actual address of the website. When the address is typed into a browser program, the browser is automatically re-directed to the actual web address. This is usually done by an JSP

(Internet service provider – an organisation that provides Internet connections for a fee) to make the Web address look as if it is owned by a private company.

Webpages are created by adding HTML (hypertext markup language) tags to plain text to determine the way that the webpage will be displayed in a browser program and to create hyperlinks (dynamic links that the user clicks on to display other webpages). Webpages can be created using a very basic worprocessor program known as a text editor, but special programs are available that allow the user to create webpages without knowing about HTML e.g. Netscape Composer. This program is part of a package of programs for managing websites called Netscape Communicator, A website owner can register their website on a search engine. This means that they submit their Web address and details of their website to be included in the search engine database i.e. to be listed on the search engine. One of the best known search engine websites is called Yahoo. As well as providing a search engine, websites such as Yahoo provide a variety of facilities including enabling users to form newsgroup clubs that discuss various topics using email. After a website has been created and published, it is important that the creator updates the webpages frequently to vary and improve the website, keep the information up to date and make sure that the hyperlinks stitl connect to existing websites. A static site is a website that does not change its content. It is common for an email address to be provided on the website to allow users to contact the website creator to provide feedback about the website. Creating a professional website involves more than just publishing webpages. The website needs to be planned carefully if it is to be a success. This involves a number of stages including analysing the demand and other related websites, designing the webpages and the overall structure of the website, publishing and advertising the website including registering it on search engines and getting other websites to create links to it, and evaluating the website after it has been published by using user feedback and statistics on the use of the website.

Exercises

1. You are going to build your own website. Answer some questions.

What's your site called?

What's it about?

What's the URL?

What makes it special?

When did you last update it?

2. Visit a website of your choice and evaluate a site according to seven points.

1. Design
2. Navigation
3. Ease of use
4. Accuracy
5. Up to date
6. Helpful graphics
7. Compatability

UNIT V

THE EX-HACKER

Vocabulary

Geek	Anorak	Hack
Hacking	Hotmails	Posting
Newsgroup	Bulletin board	Defacing
Blackmailing	Security expert	Cyberspace
'White hat' hacker	Bug	Log in (log on)
Firewall	Callback system	Auditing

A hacker is a person who attempts to gain unauthorised access to a network system. They are often young teenagers although they are usually fairly skilled programmers (people who write computer programs). Sometimes, the type of person who becomes a hacker is referred to as a ‘geek’ (an expert lacking in social skills), or as an ‘anorak’ (a slang term for an eccentric, socially inept person with little or no fashion sense and having an obsessive interest in a hobby or subject). Although ‘geek’ was originally a derogatory term it is now used in computing to mean a dedicated expert. Although it is illegal, people become hackers for different reasons including: making money, criminal purposes, or to expose political information. But often people hack (break into a computer system) just because it is an exciting challenge. Parents are often unaware that their children are hacking into computer systems although they usually receive very large telephone bills. Young hackers are often caught by boasting about their successes to their friends.

Since hacking (attempting to gain unauthorised access to a network system) is illegal, hackers want to keep their true identity secret but they often like to call themselves by special names such as ‘the Analyser’. The Internet has made hacking more common and hackers are found throughout the world. They sometimes form hacking groups or teams that work together and exchange ideas. These groups also like to be known by names such as ‘Hackers Unite’.

Hackers like to attack and penetrate computer systems belonging to large, important organisations such as the Pentagon’s computer systems, computer systems belonging to US military bases and Hotmail, the free email service provided by the Microsoft Corporation. In fact, hackers compete with each other to be the first to hack into really powerful systems. Often, breaking into a system is done gradually, with the hacker gaining entry to a system then planting passwords in the system, allowing them to gain access to the system more easily in the future.

When a hacker gains access to a system they don’t usually break into the system using the Internet and steal all the data on the system, as is often portrayed in the cinema. In fact, most hacks (break-ins) are done by company staff misusing the

company network system. Hackers have been known to do a variety of things to computer systems, including:

a) Downloading files (copying files from a server computer) and leaking confidentia information. Posting information is the term used for making information available to a large number of users in a newsgroup (an Internet discussion group that uses a restricted area on a server computer to display messages about a common interest) or on a bulletin board (an electronic noticeboard system that enables users to display messages for other users to read).

b) Exposing email (electronic mail) correspondence managed by well known email services, causing the service to be shut down while the exposed weakness in the system is repaired,

c) Programming email server computers to reroute email (send to a different email address than the one it was originally sent to).

d) Hijacking websites by redirecting the Web address (URL) to point to another website.

e) Defacing websites by changing the text and graphics on the webpages, sometimes leaving very rude messages on the system.

f) Blackmailing the owners of websites by threatening to damage their systems by doing something like releasing a virus (a program that can reproduce itself and is written with the purpose of causing damage or causing a computer to behave in an unusual way) onto their system, although such a threat often turns out to be nothing more than a hoax.

Sometimes, young hackers put their experience and knowledge to good use when they become older. Many former hackers have been hired by large companies as security experts. They are employed to test out the company systems by trying to hack into them to find any weaknesses in the systems, Cyberspace is the combination of all the data on all the computer networks throughout the world, accessed using the Internet. A person who uses their skills to make cyberspace safer is referred to as a ‘white hat’ hacker.

A computer system can be hacked (broken into) in various ways including:

a) guessing somebody's password (secret code used to control access to a network system);

b) finding a bug (a fault in a system) that allows certain passwords to access information they are not supposed to access;

c) phoning a company, pretending to be a company employee and asking for a password. People tend to be too trusting.

Connecting to a computer network involves logging in (sometimes referred to as logging on) by typing a username or ID (identification username) and a password. Usernames that are often used on networks systems include ‘guest’, ‘demo’ and ‘help’.

To avoid a computer system being hacked into, the people managing the system must work hard to keep ahead of the hackers. There are different ways of avoiding being hacked into including:

a) installing a firewall (a combination of hardware and software used to control the data going into and out of a network);

b) using a callback system (a system that automatically disconnects a telephone line after receiving a call and then dials the telephone number of the system that made the call, to reconnect the line. It is used in remote access systems to make sure that connections can only be made from permitted telephone numbers.);

c) having really secure passwords (secret codes used to control access to a network system) — don’t use common names or dictionary words;

d) auditing the system regularly (checking the system regularly using event logs to find failed access attempts).

Some people do not like to give out their credit card numbers on the Internet. Hackers have been known to get databases (applications programs used for storing information so that it can be easily searched and sorted) of credit card numbers by hacking computer systems. However, in the opinion of the ex-hacker in this unit, using your credit card on the Internet is no more dangerous than giving your credit card number on the telephone or throwing away a credit card receipt. There are various things you can do to avoid credit card theft on the Internet including:

a) using a separate credit card for Internet purchases;

b) having a small credit limit on the credit card you use;

c) buying a pre-paid charge card for small purchases.

In the future, smart cards (plastic cards containing a processor and memory chip that can be used to store large amounts of confidential data) will be used instead of credit cards. This will require smart card readers (devices used for reading smart cards) to be attached to computers.

Exercises

1. Think about the following questions.

1. How could you hack into a system?
2. How could you stop people hacking into a system?

2. Group these terms into the five headings, A to E.

Anti-virus software, backups, bandwidth, browser, domain name, encryption, firewalls, FTP, GPS, IRC, ISP, hyperlink, logic bomb, pagers, passwords, router, trigger routine, Trojan, URL, Usenet, XML

A Viruses and other destructive programs	B Data protection	C Communication systems	D Internet	E World Wide Web

UNIT VI
ELECTRONIC PUBLISHING

Vocabulary

Telecommunications engineer	E-publisher	eBook reader
Electronic storage media	Magnetic tape	MS-DOS operating system
Teleworking	Interface	Synchronous
Module	Multi-tasking	Microprocessor
Multi-user	Autocorrect	Backup

A telecommunications engineer is a person who works with systems concerned with communications over tong distances.

An e-publisher is a book publisher that produces ebooks (electronic books a book that is displayed using a computing device instead of being printed on paper).

An ebook reader is a computing device that displays the text and images of an electronic book. Users can download books (copy from a server computer) over the Internet. The display screens have a back light i.e. the screens are lit from the back.

Current electronic storage media (material used for storing programs and data) include magnetic tape (a thin plastic ribbon wound on a reel or a cassette and commonly used for backing up data) and CDs (compact disks — common name for compact disk read only memory; a read only storage media in the form of a disk that is read using laser light).

A mouse is a common cursor control input device used with a graphical user interface. It commonly has two or three button switches on top and a ball underneath that is rotled on a flat surface.

Intel is the name of the company that produces most microprocessors used in computers (the main electronic chip in a microcomputer that does the main processing and controls the other parts of the computer).

Bill Gates and Paul Allen were the founder members of the Microsoft Corporation, the most successful computer software company.

The Sinclair ZX8o was the first commercially available microcomputer produced in the United Kingdom.

The IBM Personal Computer is the family of computers manufactured by the computer company called International Business Machines. It set the standard for future personal computers, commonly referred to as PCs.

MS-DOS was the first operating system produced by the Microsoft Corporation (the set of programs that controls the basic functions of a computer and provides communication between the application programs and the hardware).

Acorn was the name of the company that designed and manufactured the BBC Micro (one of the first microcomputers produced in the United Kingdom and used in schools; its development was sponsored by the British Broadcasting Corporation).

The Apple Macintosh is the name of a family of personal computers produced by Apple Computer Incorporated. It was the first microcomputer to use a graphical user interface.

Windows 3.0, Windows NT (new technology) and Windows XP are members of the family of Windows operating systems produced by the Microsoft Corporation.

The Intel Pentium is the name of one of the family of microprocessors produced by the Intel Corporation.

Apple is the common name for Apple Computer Incorporated, a well-known producer of computers that introduced the GUI (graphical user interface) on computers such as the Apple Macintosh.

0S X is an operating system designed for Apple computers.

The Archimedes is the name of a family of computers designed and manufactured by the computer manufacture known as Acorn.

Unix is a popular multi-user (can be used by many people at the same time), multi-tasking (can run more than one program at a time) operating system originally designed for mainframe computers (the largest and most powerful type of computer, operated by a team of professionals) although a wide variety of versions now exist.

Various prefixes such as mega and giga are used in computing. Because the binary number system is commonly used in computing (a number system that only uses two digits i.e. 1 and 0), the value of the prefixes is not exactly the same as in the decimal number system (a number system that uses ten digits i.e. 0,1,2,3,4,5,6,7,8,9). For example: mega in the decimal system = 106 = 1 000 000 (one million) mega in the binary system = 220 = 1 048 576 (approximately one million).

- teleworking is working at a distance;
- binary is a system of numbers with 2 as its base;
- interface is a way of communicating between two systems or between a user and a computer;
- megabyte is approximately one million bytes of information;
- synchronous describes a program which allows two-way communication between users and computers;
- a module is a set of computer instructions operating as one unit;
- multi-tasking means performing many tasks at the same time;
- a supercomputer is a computer higher in scale than any other;
- ATM (Automatic Teller Machine) is a machine which provides cash to bank customers without requiring a human operator;
- a microprocessor is a very small but powerful processor;
- a multi-user system is a system used by many people at the same time;
- autocorrect is a wordprocessing feature which corrects by itself.

Backups are copies of data on a storage device used to keep the data safe. A full backup is a type of backup that copies all the selected files on a system, whether or not they have been edited or backed up before. A differential backup is a type of backup that copies all the selected files on a system that have been changed since the last time a full backup was carried out. A full backup plus the most recent differential backup is known as a backup set.

Exercises

1. Which of these should be published in electronic form and which in traditional paper version?

1. a national newspaper
2. a textbook on information technology
3. a laser printer manual
4. Shakespeare's plays
5. a detective story
6. a traveler's guide to India
7. schoolbooks
8. an encyclopedia

2. What opinions do you think these people will have about e-publishing?

1. a telecommunications engineer
2. an author
3. an electronic publisher
4. the developer of an e-book reader
5. a keen reader.

SECTION II

UNIT I

HARDWARE

1. Match the verbs with the nouns.

1. recharge	a. digital photos
2. click on	b. faxes
3. dial	c. a number on your mobile phone
4. give	d. a presentation
5. move	e. something with the mouse
6. print out	f. the battery
7. send and receive	g. the mouse
8. take some	h. twenty pages

2. Choose the best verb.

1. To turn on the computer, _____ the "Start" button.

a. touch **b.** press **c.** switch

2. The printer has _____ of ink.

a. finished **b.** ended **c.** run out

3. Unfortunately, my scanner isn't _____ at the moment.

a. working **b.** going **c.** doing

4. Please _____ the CD-ROM.

a. insert **b.** introduce **c.** inject

5. The projector isn't working because it isn't _____.

a. plugged **b.** plugged in **c.** plugged into

6. The batteries in my digital camera are nearly dead. They need _____.

a. to change **b.** exchanging **c.** changing

7. I have to _____ a computer screen for eight hours a day.

a. see **b.** look at **c.** watch

8. Switch off your computer, and _____ it from the wall socket.

a. de-plug **b.** unplug **c.** non-plug

9. I turned off the photocopier and _____ the plug.

a. pulled out **b.** extracted **c.** took away

10. _____ any key to continue.

a. Kick **b.** Smash **c.** Hit

3. Choose the best word.

1. The mouse moves on a _____.

a. mouse mat **b.** mouse carpet **c.** mouse table

2. TV and computer screens are usually measured in _____.

a. feet **b.** miles **c.** inches

3. Before you start work, _____ the height of your chair

a. adjust **b.** change **c.** rearrange

4. To get sound from your computer, plug in a pair of _____.

a. loudhailers **b.** loudspeakers **c.** loud voices

5. The computer is connected to the telephone line via a _____.

a. module **b.** modem **c.** mod

6. You can increase the functions or performance of a computer with an _____.

a. extension card **b.** exploding card **c.** expansion card

7. Mobile phones and PDAs can communicate with computers via _____.

a. Bluebeard ® **b.** Blueberry ® **c.** Bluetooth ®

8. There's a spare _____ in the workstation…

a. electric hole **b.** power point **c.** electrical opening

9. …so you can plug in your mobile phone _____.

a. charger **b.** power **c.** electrification

10. SD cards can be read in a computer's _____.

a. storage reader **b.** memory reader **c.** card reader

4. Fill in the gaps.

The keyboard

shift key **alt key** **control key** **escape key**

delete key **tab key** **caps lock key** **backspace key**

1. To go back one space, hit the _____.
2. To change to capital letters, press the _____.
3. To change the capital letters permanently, hit the _____.
4. To insert a tabulation, press the _____.
5. To activate the "Ctrl" functions, press the _____.
6. To activate the "alt" functions, hit the _____.
7. To stop the computer doing something, you can press the _____.
8. Select the text you want to remove, and hit the _____.

You can say "key" or "button"

standard keyboard **ergonomic keyboard**

key in (or type in) **enter** **data input**

9. Please _____ your password.
10. It took me two hours to _____ all that text.
11. A keyboard is a _____ device.
12. Do you have a _____?

No. I have a special _____. It's better for my arms and back.

5. Fill in the gaps.

The mouse

pointer **on** **optical** **roll**

scroll up **scroll down** **touchpad** **left button**

right button **joystick** **single** **double**

scroll wheel **hold down** **repetitive strain injury**

1. _____ to see pages above.
2. _____ to see pages below.
3. To select text, _____ the left button, and move the mouse pointer.

4. If you use a mouse for many hours every day, you can get _____ in your fingers.

5. With a laptop computer, plug in a mouse, or use the _____ in front of the keyboard.

6. To play some games, you need to use a _____ instead of a mouse.

7. To move up and down a page, you can _____ the mouse wheel.

8. This mouse doesn't have a ball. It's an _____ mouse.

9. One click of a mouse button is called a _____ click.

10. Two clicks of a mouse button are called a _____ click.

11. Click _____ the folder to open it.

6. Choose the best adjective.

1. Oh dear. I pressed the _____ button.

a. incorrect **b.** wrong **c.** false

2. I can't use my mobile phone. The battery's _____.

a. over **b.** flat **c.** exhausted

3. The battery isn't completely flat, but its very _____.

a. down **b.** short **c.** low

4. My video camera is very _____.

a. easy to use **b.** uncomplicated **c.** obvious

5. My new computer has a very _____ processor.

a. quick **b.** high speed **c.** fast

6. The X19 notebook computer features a very _____ design.

a. compact **b.** little **c.** small

7. Keeping files on paper is _____ solution.

a. an old-tech **b.** a past-tech **c.** a low-tech

8. Keeping files on a computer database is a _____ solution.

a. new-tech **b.** now-tech **c.** high-tech

9. My new PDA is the _____ model.

a. latest **b.** newest **c.** most modern

10. In our office, we've set up a _____ network.

a. wire-free **b.** no wires **c.** wireless

11. A call from New York to Toyko is _____ distance.

a. far **b.** long **c.** faraway

12. I don't think this printer is _____ with my computer.

a. compatible **b.** connectable **c.** suitable

13. My laptop is only 3 centimetres _____.

a. thick **b.** tall **c.** wide

14. The screen on my laptop isn't very _____.

a. light **b.** white **c.** bright

15. In three or four years, my new computer will probably be _____.

a. old fashioned **b.** behind the times **c.** obsolete

16. When you connect this to your computer, it will work immediately. It's _____.

a. plug and go **b.** plug and play **c.** plug and use

7. Choose the best adjective.

1. Oh dear. I pressed the _____ button.

a. incorrect **b.** wrong **c.** false

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8. Fill in the gaps.

Printing

cartridge	**collate**	**cover**	**feed**
double-sided	**landscape**	**mono**	**out**
out of	**portrait**	**jammed**	**print-heads**
reload	**replacement**	**via**	

1. When the ink runs out, you have to change the _____.

2. _____ cartridges can be ordered online.

3. To change the cartridge, you have to lift the _____.

4. The printer is connected to the computer _____ a USB cable.

5. The printer is _____ paper. _____ the paper tray.

6. I think some paper is _____ inside the printer.

7. My printer keeps getting jammed. I think there's a problem with the paper _____.

8. Shall I print this _____ in colour or black and white?

9. "Black and white" is also known as _____.

10. If there's a problem with the print quality, perhaps the _____ need cleaning.

11. Can your printer do _____ printing?

12. To _____ means to put all the pages into the correct order.

9. Which type of printer is each sentence about?

	inkjet printer laser printer	inkjet printer laser printer
1. cheaper to buy	X	
2. cheaper to run		
3. faster printing speed		
4. takes up more space		
5. uses liquid ink		
6. uses toner		
7. more reliable		
8. cartridges need changing more often		

10. True or false?

1. Inkjet cartridges can be refilled up to three times.

2. Colour images are printed by mixing red, green and yellow ink.

3. "ppm" stands for pages per minute.

4. Most inkjet printers can print out at 100 ppm or more.

5. Inkjet cartridges are very difficult to change.

6. Photo-paper is a lot more expensive than plain paper.

7. Recycled paper is made out of old bottles.

8. Some Inkjet printers have three print qualities: draft, normal and best.

9. Before you can use a new printer, you have to install the driver from a CD-ROM.

10. When a print job has started, it can't be cancelled.

11. Choose the best word.

1. When you pay by credit card, your card is _____.

a. swooped **b.** swiped **c.** swapped

2. A laptop computer with a screen you can write on is called a _____.

a. tablet PC **b.** table PC **c.** flat screen PC

3. An image on TV or computer screen is made up of thousands of _____.

a. points **b.** pixels **c.** bits

4. You can draw directly onto a computer screen with a _____.

a. bright pen **b.** light pen **c.** pixel pen

5. A camera connected directly to the internet is called _____.

a. an internet camera **b.** a web watcher **c.** a webcam

6. The woman in the photo is wearing a _____.

a. headpiece **b.** headphone **c.** headset

7. She talks to customers on the telephone all day. She works in a _____.

a. telephone centre **b.** call centre **c.** talking centre

12. Fill in the gaps.

Inside a computer

disconnect	**fan mains**	**electricity**
overheating	**shock**	**spikes**
supply	**surge protector**	**transformer**

1. Laptops are powered by batteries or _____.

2. Mains electricity is converted to lower voltage by a _____.

3. A _____ protects electronic equipment from damage caused by power _____.

4. If you remove the cover from a computer, make sure you _____ the electricity _____. Otherwise, you may get an electric _____.

5. The computer is cooled by a _____. This prevents the processor from _____.

13. Fill in the gaps.

Data Storage

burn	**capacity**	**card**	**drawer**
eject	**free space**	**hard drive**	**stick**

1. The data and applications on your computer are stored on the _____.
2. To run this application you need at least 50MB of _____ on your hard drive.
3. My computer's hard drive has a _____ of 120GB.
4. Do you like this CD? I can _____ you a copy if you want.
5. The opposite of "Insert the DVD" is "_____ the DVD".
6. I can't eject the CD. I think the _____'s stuck.
7. Digital cameras usually store pictures on a memory _____ or a memory.

14. Fill in the gaps.

Connectivity

1. Scanners, printers and webcams are _____.

a. extras **b.** peripherals **c.** externals

2. Add extra USB _____ to your computer….

a. ports **b.** doors **c.** windows

3. … with a USB _____.

a. centre **b.** point **c.** hub

4. ADSL is also known as _____.

a. wideband **b.** broadband **c.** longband

5. I want to get a _____ ADSL modem.

a. quick-speed **b.** fast-speed **c.** high-speed

6. The internet is much faster with a broadband connection than with _____.

a. dial-up **b.** phone-up **c.** call-up

7. With a wireless router, you can _____ your broadband connection with other users.

a. divide **b.** combine **c.** share

8. This wire's too short. I need an _____ cable.

a. extended **b.** extension **c.** extender

9. You can connect a USB plug to a PS/2 port by using _____.

a. an adaptor **b.** a bridge **c.** a connector

UNIT II
SOFTWARE

1. Choose the correct word to fill the spaces.

1. Turn on your computer. It will usually take a few minutes to _____.

a. boot itself **b.** boot up **c.** get booted

2. Windows XP, Macintosh OSX and Linux are _____.

a. operating systems **b.** operating tools **c.** operators

3. On my computer, I have a picture of my cat as the _____.

a. desktop background **b.** desktop picture **c.** desktop scene

4. Microsoft Word, Adobe Acrobat and CorelDraw are programs or _____.

a. applicators **b.** appliers **c.** applications

5. To open Microsoft Word, click on the _____.

a. picture **b.** symbol **c.** icon

6. I keep all my digital photos in a _____ called "Photos".

a. folder **b.** packet **c.** box

7. Is it possible to open Microsoft Excel _____ in Word?

a. texts **b.** files **c.** pages

8. In Microsoft Word, to start typing a new letter, open a new _____.

a. document **b.** page **c.** paper

9. When you _____ a document, it's sent to the recycle bin.

a. destroy **b.** erase **c.** delete

10. Deleted documents stay in the recycle bin until you _____ it.

a. wash **b.** empty **c.** clean

11. In Windows, the icon is just a _____ to the application. If you delete the icon, the application will still be on your computer.

a. connector **b.** shortcut **c.** link

12. If the computer crashes, you can try pressing the _____ button.

a. restart **b.** recommence **c.** replay

13. When I've finished using my computer, I always _____.

a. close it down **b.** shut it down **c.** shut it off

14. If I leave my computer on without using it, after a while it goes into _____ mode.

a. stand down **b.** Waiting **c.** Standby

2. Match the words on the left with the words on the right.

1. **arrange** the	a. a Microsoft Word file
2. **cut** and **paste**	b. a new window
3. **install**	c. photo. It's too big.
4. **open** the document in	d. an application
5. **resize** the	e. some text
6. **save** it as	f. icons on the desktop

1. **copy** the	a. for a lost file
2. **customize** your	b. a program
3. **launch**	c. "search" function

4. **search**	d. text into a new document
5. **send** the file	e. to a different folder
6. **use** the	f. desktop

1. accidentally **deleted** an	a. menu
2. **exit**	b. important file
3. **click** on that button	c. an application
4. **pull down** a	d. as a web page
5. **replace** the existing	e. on the task bar
6. **view**	f. file

1. **close down** an	a. after a session
2. **log off**	b. all folders
3. **look in**	c. application
4. **put** the file	d. hard drive
5. **run** a	e. on a USB memory key
6. **wipe** the	f. program

3. Match the descriptions on the left with these famous applications.

Applications

1. word processor	**a.** Adobe Photoshop
2. spreadsheet	**b.** Internet Explorer
3. virus protection	**c.** Microsoft Word
4. browser	**d.** Microsoft Excel
5. image editor	**e.** Microsoft PowerPoint
6. media player	**f.** Norton AntiVirus
7. email software	**g.** Outlook Express
8. presentation software	**h.** Adobe PageMaker
9. graphic design software	**i.** RealPlayer

4. Choose the best words.

1. Software which is easy to use is…

a. user-easy **b.** user-friendly **c.** usable

2. Software which is obvious to use is…

a. intuitive **b.** guessable **c.** comprehensible

3. Software which is not obvious to use is…

a. counter-intuitive **b.** unintuitive **c.** non-intuitive

4. Software for use by children and schools is…

a. learning **b.** teaching **c.** educational

5. Software for use by businesses is…

a. commercial **b.** businesslike **c.** busy

6. Software made specially for one company is…

a. one-off **b.** unique **c.** tailor-made

7. Software for use at home is…

a. for home use **b.** for house use… **c.** for household use

8. Software which has been illegally copied is…

a. unreal **b.** pirated **c.** fake

9. Software which has been bought from the company that produced it is…

a. real **b.** justified **c.** Licensed

5. Match the word processing tool with the task.

Word processing

1. word count	**a.** produces form letters and address labels
2. spell checker	**b.** counts the number of words, lines and paragraphs
3. auto format	**c.** finds all instances of a word or phrases in a document
4. template	**d.** checks the text for spelling errors
5. find	**e.** automatically changes the styles of headings, lists etc.
6. replace	**f.** shows how a document has been altered

7. print preview	**g.** records a sequence of commands, and applies them when required
8. track changes	**h.** a pre-formatted blank document – just type your text into the fields
9. mail merge	**i.** shows how the document will look in print

6. Choose the best words.

1. Making changes to a text is called _____.

a. altering **b.** renewing **c.** editing

2. To change normal text to italic, first you must _____ the text you want to format.

a. choose **b.** take **c.** select

3. A very pale image behind the text is called _____.

a. an ink mark **b.** a watermark **c.** a grey mark

4. To divide the text into two pages, insert a _____.

a. page break **b.** page stop **c.** page change

5. The numbers at the bottom of the page are _____.

a. page numbers **b.** sheet numbers **c.** paper numbers

6. An extra note at the bottom of the page (usually in a smaller font size) is called a _____.

a. bottom note **b.** foot **c.** footnote

7. In word processing, to put things into alphabetical order is to _____.

a. sort **b.** organise **c.** order

8. A list of contacts, addresses etc. is called _____.

a. an archive **b.** a list **c.** a database

9. Producing a document on your computer and sending it direct to a printing press is _____.

a. computer publishing **b.** desktop publishing **c.** electronic publishing

10. Cut or copied text is temporarily stored in the _____.

a. clipboard **b.** clip **c.** Clipart

7. Match the word with the definition.

Image editing

1. crop	**a.** turn an image
2. sharpen	**b.** reverse an image
3. soften	**c.** improve the appearance of an
4. zoom in	image
5. zoom out	**d.** remove part of an image
6. flip	**e.** copy part of an image to
7. rotate	another point in that image
8. touch up	**f.** view part of the image in more detail
9. clone	**g.** view more of the image in less detail
10. rasterize	**h.** convert a vector image to a bitmap image (see B5 below)

8. Choose the best word.

1. A basic spreadsheet is a _____ of spaces for data.

a. grid **b.** cage **c.** ladder

2. A spreadsheet consists of columns and _____.

a. lengths **b.** lines **c.** rows

3. A spreadsheet grid is called a worksheet. A file containing one or more worksheets is called a _____.

a. workout **b.** work **c.** workbook

4. In the worksheet above, the _____ cell is in column B, row 3.

a. important **b.** active **c.** focus

5. Use the mouse pointer to select a single cell or _____ of cells.

a. bunch **b.** group **c.** block

6. It's easy to adjust the column _____.

a. size **b.** width **c.** space

7. Spreadsheets can perform mathematical _____.

a. calculations **b.** deductions **c.** jobs

8. To get a worksheet to perform a mathematical calculation, you have to enter a _____.

a format **b.** form **c.** formula

9. A number in a spreadsheet cell is often called a _____.

a. digit **b.** numeral **c.** value

10. To remove the contents of a cell is to _____ that cell.

a. clean **b.** wash **c.** clear

11. To remove a complete row is to _____ that row.

a. wipe **b.** delete **c.** erase

12. Changing the fonts, colours etc. of a spreadsheet is called _____.

a. formatting **b.** forming **c.** Reforming

9. Choose the best word.

Presentation software

1. In Microsoft PowerPoint, when creating a new presentation, you can choose between a blank presentation, a design template and the AutoContent _____.

a. witch **b**. wizard **c.** bogeyman

2. PowerPoint can be used to create presentation _____.

a. slideshows **b.** picture shows **c.** exhibitions

3. You can choose a _____ to move from one slide to another.

a. changing effect **b.** moving effect **c.** transition effect

4. You can include moving pictures in your presentation. These are called _____.

a. films **b**. movies **c.** animations

5. You can choose a _____ for your presentation.

a. colour pattern **b.** colour arrangement **c.** colour scheme

6. You can give your presentation over the internet as an _____.

a. online broadcast **b.** online show **c.** online spectacle

7. It's usually clearer to present statistics in the form of a table or _____.

a. chart **b.** figure **c.** track

8. If you wish, the software will help you _____ of your presentation.

a. practice the times **b.** rehearse the timing **c.** try out the times

9. You can choose to record the _____ on your computer…

a. narration **b.** speaking **c.** voice

10. …rather than giving it _____.

a. in real life **b.** for real **c.** live

UNIT III
THE INTERNET

1. Choose the best words.

1. ADSL (stands for asymmetric digital subscriber line) is more commonly known as_____.

a. longband **b.** broadband **c.** wideband

2. Broadband internet connection is much faster than _____.

a. dial-in **b.** dial-through **c.** dial-up

3. Before you can connect to the internet for the first time, you have to _____ an account withvan ISP.

a. set **b.** set up **c.** set in

4. Each time you want to connect to your ISP's system, you have to enter a log-in name and a _____.

a. security word **b.** safe word **c.** password

5. You can set your computer to _____ your log-in details, so you don't have to type them in each time.

a. store **b.** remember **c.** recall

6. With a broadband connection, you usually have to pay a _____.

a. fixed monthly price **b.** fixed monthly fee **c.** fixed monthly cost

7. With dial-up, you can usually choose a _____ tariff.

a. pay-as-you-go **b.** pay-what-you-want **c.** pay-if-you-like

8. Some broadband contracts limit the amount of _____ you can have each month.

a. pages **b.** traffic **c.** use

9. Looking at web pages can be called "navigating the Web" but is more commonly called _____.

a. "surfing the net" **b.** "skiing the net" **c.** "swimming the net"

10. You can often find the answer to a question by _____ on the internet.

a. looking at it **b.** looking for it **c.** looking it up

11. When your computer is not connected to the internet, it is _____.

a. out of line **b.** offline **c.** off the line

12. Internet banking is also called _____.

a. online banking **b.** on the line banking **c.** inline banking

13. An unexpected disconnection from the internet is called a _____.

a. lost connection **b.** missed connection **c.** dropped connection

14. A file which is copied from the internet onto your computer is called _____

a. an upload **b.** a download **c.** a load

15. Downloading files from the internet can _____ your computer with a virus.

a. infect **b.** contaminate **c.** Dirty

2. Match the activities with the internet features.

1. Keep a public diary of your journey through South America	**a.** webmail
2. Lose lots of money	**b.** online music store
3. Find out about the First World War	**c.** instant messaging
4. Download songs	**d.** online radio
5. Listen to music in real time	**e.** portal
6. Check your email from any computer	**f.** blog
7. Find links to other websites	**g.** online encyclopedia
8. Exchange messages in real time with friends or colleagues	**h.** currency converter
9. Check the latest exchange rates	**i.** e-zine
10. Read new articles about a subject that interests you	**j.** online casino

3. Choose the best words to complete the sentences.

Internet terms

1. "The website gets a thousand hits a week" means the website has a thousand _____ a week.

a. sales **b.** visits **c.** search engine matches

2. The words, images and other material that make up a website are called _____.

a. the contents **b.** the content **c.** the filling

3. Designs and drawings in websites are usually called _____.

a. web pictures **b.** web graphics **c.** web illustrations

4. Moving pictures in websites are usually called _____.

a. cartoons **b.** movies **c.** animations

5. Websites with sounds and/or video clips and/or animations have _____ content.

a. multimedia **b.** many-media **c.** mixed-media

6. A space in a website where you enter information (address, password etc.) is called a _____.

a. box **b.** strip **c.** field

7. A hyperlink (see 3.3) is often called just _____.

a. a link **b.** a hyper **c.** an HL

8. In real time (see 3.4) means _____.

a. during working hours **b.** instantly **c.** in British Standard Time

9. A place with computers for public internet use is usually called an internet café or _____.even if they don't serve coffee.

a. web café **b.** computer café **c.** cyber café

10. Internet cafés offer internet _____.

a. connection **b.** availability **c.** access

11. A program that adds functions to a browser (eg. Shockwave) is called a _____.

a. plug **b.** plugged-in **c.** plug-in

12. Temporary internet files are stored in the _____.

a. cash **b.** cache **c.** cashe

13. Colours which all browsers can display without problems are called _____ colours.

a. browser safe **b.** browser acceptable **c.** browser easy

4. Choose the best words to go into each of the spaces.

Internet security

1. A person who illegally accesses somebody else's computer over the internet is called a _____.

a. pirate **b.** hack **c.** hacker

2. A website which (in theory) cannot be accessed by a hacker is _____.

a. strong **b.** secure **c.** clean

3. A website which can only be viewed by authorised people has _____ access.

a. reduced **b.** small **c.** restricted

4. Unwanted advertising emails are popularly known as _____.

a. meatloaf **b.** spam **c.** sausages

5. Software which blocks attempts by others to access your computer over the internet is called a _____.

a. firewall **b.** fire blanket **c.** fire engine

6. It's essential to _____ your anti-virus protection regularly.

a. up-to-date **b.** date **c.** update

7. Anti-virus software can _____ your computer for viruses.

a. detect **b.** review **c.** scan

8. Anti-virus software can also _____ viruses on removable media, such as floppy disks.

a. detect **b.** control **c.** see

9. When your anti-virus software subscription _____…

a. ends **b.** stops **c.** expires

10. … it's a good idea to _____ it immediately.

a. renew **b.** renovate **c.** Replace

Електронне навчальне видання

Методичні рекомендації
до організації самостійної роботи
із навчальної дисципліни

«ІНОЗЕМНА МОВА ЗА ПРОФЕСІЙНИМ СПРЯМУВАННЯМ»

(для здобувачів першого курсу денної форми навчання першого (бакалаврського) рівня вищої освіти зі спеціальностей 122 – Комп'ютерні науки, 126 – Інформаційні системи та технології, 174 – Автоматизація, комп'ютерно-інтегровані технології та робототехніка)

(Англ. мовою)

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