TechKnowledge

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TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES NAMED AFTER MUHAMMAD AL-KHWARIZMI

TechKnowledge

B2 level English manual for the credit system students in the directionof "Computer Engineering in ICT sphere" (5330500)
in Higher Education

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PREFACE

The aim of learning and teaching foreign languages in Uzbekistan has become the mostcrucial issue while stepping in the world economy. Decree of the President of the Republic of Uzbekistan PP-1875 of 10 December 2012 «On measures on further improvement of teaching of foreign languages» provokes enhancement of foreign language learning in the whole education system of the country. Since the adoption of the system-generating decree all the work in this area has been intensified and major reforms in modernization of teaching foreign languages at all levels of continuing education have started. "TechKnowledge" is English manual for students of Computer Science and Technical English in Higher Education. It aims to help these students to extend and develop a wide variety of language skills and to acquire a knowledge of technology in English. Reach selection of motivating and informative, authentic and semi-authentic texts to improve both reading and listening skills with variety topics are presented in themed topics. Interactive activities focus on learners' "can do" statements and follow the principles of the Common European Framework of Reference requirements.

The material in "English in ICT" is based on skills development and communicative tasks. The book consists of 14 topical lessons and each lesson starts with colorful lead-in activity shifting students' focus on the topic. Lead-in activity followed by listening and speaking, reading and writing activities respectively.

• The **reading** texts are mostly authentic or adapted from original sources - specialist magazines, computer programs, reference manuals and websites. The tasks are designed to develop a variety of reading strategies, such as skimming, scanning, matching texts to pictures, etc.

• The **listening** passages include conversations, interviews, online tutorials, podcasts, lectures, etc. It can be helpful to start the listening tasks with a pre-listening activity, such as pre-teaching vocabulary, 'brainstorming' the topic, etc.

• The **speaking** tasks develop oral skills through quizzes, discussions, information-gap and problem solving activities.

• The **writing** tasks include describing objects and diagrams, summarizing texts, writing essays with pros and cons, making predictions, writing posts for online forums, writing emails, faxes and letters, etc.

"TechKnowledge" manual does not require specialist knowledge of computers, but it is advisable for teachers to understand the basic concepts and terminology of each unit. This book is designed not only for TUIT students but also can be implemented in teaching English in other Technical Educational Establishments where English has become a requisite for working with computers.

Moreover, this book is intended to help professionals using computers to understand wide range of texts about IT technologies in English.

Considered at methodological board of TUIT as if "28" January 2021.

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LESSON 1. COMPUTER USER

Work in groups. 1. Share information on how you use computers in your free time. 2. Compare answers with other groups and make a list of uses for your class.

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=Rmqh10-J_i8)and compare with your answer

Computer User

🎧 *Exercise 1.***You are going to listen to the conversation of four people about how they use computers. Before you listen to, try to predict the uses they describe.**

User	Possible use
primary school teacher	
Open University student	
artist	

1 How does the story-telling program encourage children to work together?

2 In what way is the children's reaction to this program different from other uses they make of computers?

3 What is the OU student studying?

4 What opportunity has she to meet other students?

5 What can you do with Pets 3?

6 What does Louise do with clipart?

7 How did the artist display work to dealers in the past?

8 What is the difficulty in selling through a website?

📖 **3. Read the text and discuss the following words in bold.**

Computers Make the World Smaller and Smarter

The ability of tiny **computing devices** to control complex operations has transformed the way many tasks are performed, ranging from scientific research to **producing consumer products**. Tiny 'computers on a chip' are used in medical equipment, home appliances, cars and toys. Workers use **handheld** computing devices to collect data at a customer site, to generate forms, to control inventory, and to serve as desktop organizers.

Not only is computing equipment getting smaller, it is getting more **sophisticated**. Computers are part of many machines and devices that once required continual human **supervision** and control. Today, computers in **security systems** result in safer environments, computers in cars improve energy efficiency, and computers in phones provide features such as call forwarding, **call monitoring**, and call answering. These **smart machines** are designed to take over some of the basic tasks previously performed by people; by so doing, they make life a little easier and a little more pleasant.

Smart cards store vital information such as health records, drivers' licenses, bank balances, and so on. Smart phones, cars, and **appliances** with built in computers can be programmed to better meet individual needs.

A smart house has a built-in monitoring system that can turn lights on and off, open and close windows, operate the oven, and more. With small computing devices available for **performing smart tasks** like cooking dinner, programming the VCR, and controlling the flow of information in an organization, people are able to spend more time doing what they often do best - being creative. Computers can help people work more creatively.

Multimedia systems are known for their educational and entertainment value, which we call 'edutainment'. Multimedia combines text with sound, video,

animation, and graphics, which **greatly enhances** the interaction between user and machine and can make information more interesting and appealing to people. Expert systems software enables computers to 'think' like experts. **Medical diagnosis** expert systems, for example, can help doctors pinpoint a patient's illness, suggest further tests, and prescribe appropriate drugs.

Connectivity enables computers and software that might otherwise be incompatible to communicate and to share resources. Now that computers are **proliferating** in many areas and networks are available for people to access data and communicate with others, personal computers are becoming interpersonal PCs.

*Exercise 4.***Find the answers to these questions in the following text.**
1. Name some types of devices that use' computers on a chip'.
   What uses of handheld computers are mentioned in the text?
2. What are the benefits of using computers with the following items?
   a. Security systems
   b. Cars
   c. Phones
3. What smart devices are mentioned in the text?
4. What are smart cards used for?
5. What are the advantages of multimedia?

Exercise 5. **Re-read the text**
1. Match the terms in Table A with the statements in Table B.

Table A	Table B
a Edutainment	**i** Software that enables computers to 'think' like experts
b Multimedia	**ii** Use computers to stay in touch with the office while working at home
c Expert system	**iii** Internet system designed to provide free, interactive access to vast resources for people all over the world
d Telecommute	**iv** Multimedia materials with a combination of educational and entertainment content
e Information superhighway	**v** A combination of text with sound, video, animation, and graphics

Exercise 6. **Mark the following statements as True or False:**

a. Desktop organizers are programs that require desktop computers. _____

b. Computers are sometimes used to monitor systems that previously needed human supervision. _____

c. Networking is a way of allowing otherwise incompatible systems to communicate and share resources. _____

d. The use of computers prevents people from being creative. _____

e. Computer users do not have much influence over the way that computing develops. _____

<u>Grammar revision:</u>

Past Simple and Present perfect

Study these examples of the Present perfect from the recording of the artist.

1 *I've scanned* in about a third of these photographs.

2 *I've organized* the paintings into themes.

3 I've added a sound track.

Why doesn't the speaker use the Past simple?

4 / *scanned* in about a third of these photographs.

5 / *organized* the paintings into themes.

7 I made one for Alisher's birthday *last week.*

8 We tried it out *last term.*

We use the Present perfect to describe past actions with present relevance. The artist uses the Present perfect because he is describing a CD he has just made and what he is going to do with it in the near future.

We use the Past simple to describe completed actions in the past. It is often used with time expressions such as *last year, before PCs were introduced, in 1998*. Note these examples from the recording:

*Exercise 7.***The artist is being interviewed. Make questions to match his answers. Use the correct form of the Past simple or Present perfect.**

 For example:

Question: *What did you do yesterday?*

Answer: *Worked on the computer.*

Put the tenses in this dialogue in the correct form: Past simple or Present perfect.

1) A: What (do) today?

2) B: I (work) on my project. I (search) the Web for sites on digital cameras.

3) A: (find) any good ones?

4) B: I (find) several company sites - Sony, Canon, ... but I (want) one which (compare) all the models.

5) A: Which search engine (use)?

6) B: Dog pile mostly. (ever use) it?

Exercise 8. **Put the tenses in this dialogue in the correct form: Past simple or Present perfect.**

1 **A** What (do) today?

2 **B** I (work) on my project. I (search) the Web for sites on digital cameras.

3 **A** (find) any good ones?

4 **B** I (find) several company sites - Sony, Canon, ... but I (want) one which (compare) all the models.

5 **A** Which search engine (use)?

6 **B** Dog pile mostly. (ever use) it?

7 **A** Yes, I (try) it but I (have) more luck with Ask Jeeves. Why don't you try it?

8 **B** I (have) enough for one night. I (spend) hours on that project.

9 **A** I (not start) on mine yet.

10 **B** Yeh? I bet you (do) it all

Exercise 9.

Describe how you use computers in your study and in your free time.

_____

_____

_____

LESSON 2. INFORMATION TECHNOLOGY

Pre-reading task

1. What is Information Technology?
2. Describe the recent level of technology development.
3. Read the text "Information Technology".

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=EyVKFNxjLH0)and compare with your answer

📖 Information Technology

Information Technology (**IT**) is the application of computers and internet to store, retrieve, transmit, and manipulate information, often in the context of a business or other enterprise. **IT** is considered a subset of information and communications technology (ICT) and has evolved according to the needs. It is worthwhile noting that the term **IT** is commonly used as a synonym for computers and computer networks, but it also encompasses other information distribution technologies such as television and telephones. Several industries are associated with information technology, including computer hardware, software, electronics, semiconductors, internet, telecom equipment, engineering, healthcare, e-commerce, and computer services.

Thanks to the continuous development of computers, the original computing systems became minicomputers and later personal computers took the lead. Nowadays, mobile phones are dethroning the personal computer and computing is evolving faster to become disembodied more like a **cloud**, becoming accessible more easily whenever needed. Information technology has transformed people and

companies and has allowed digital technology to influence society and economy alike. It has, in this sense, shaped societies and adapted itself to people's needs.

History

If you want a brief history of Information Technology, here is one. Humans were the first "computers". Then, machines were invented to carry out the computational tasks. Now these machines have given way to new form of information technology. Information has become disembodied accessible from anywhere through cloud technology. Recent advances in IT is the consequence of the development in computing systems.

Humans have been storing, retrieving, manipulating, and communicating information since the Sumerians in Mesopotamia developed writing in about 3000 BC, but the term *information technology* in its modern sense first appeared in a 1958 article published in the *Harvard Business Review*; authors Harold J. Leavitt and Thomas L. Whisler commented that "the new technology does not yet have a single established name. We shall call it information technology (**IT**)." Their definition consists of three categories: techniques for processing, the application of statistical and mathematical methods to decision-making, and the simulation of higher-order thinking through computer programs.

Exercise 1. **Find the correct answer *a* or *b***

1.Information technology is changing principally because of:

a. the changing needs

b. New technological advances

2.According to the author the first computers were:

a. calculators

b. humans

3.Development of information technology is the result of:

a. advances in computing systems

b. development of machinery in general

4.Computing systems are taking the form of clouds means:

a. computers have become smaller

b. computing power are becoming disembodied.

***Exercise 2.*Complete the blanks in this text using the correct form of module verb *can* or *be able to*. In some cases there is more than one possible answer.**

Imagine ……..[1]open doors and switch on computers as you approach them. Professor Omonov ……..[2]because he had an electronic chip fitted into his arm for a month. He……..[3]demonstrate to the press how computers would greet him with, 'Good morning, Professor Omonov' as he walked past. Next he wants to record the signals from his brain to his arm to see if he ……..[4] program a computer to operate his arm. In the long term, this may help people who……..[5]use their limbs. His wife too will have a chip implanted. They hope……..[6]feed messages into each other's brains. According to the Professor, one day we……..[7]communicate directly with machines. If he is right, we……..[8]drive a car from the passenger seat and we……..[9]operate a computer without using a mouse or keyboard. However, there is also the alarming prospect that someone……..[10]hack into your brain.

***Exercise 3.* Match the actions in Column A with appropriate effects from Column B. Then join each action and effect using an *if*-sentence.**

Column A	Column B
1 you press Print Screen	**a** you can drag it across the screen
2 you press Ctrl + Alt + Del in Windows 98	**b** it would speed up the computer
3you added more memory	**c** you may lose data
4 you installed a modem	**d** you would have more space at your desk
5 you used a better search engine	**e** you would be able to connect to a telephone line
6 you forget to save regularly	**f** you can make a copy of the screen
7 you hold down the mouse button over an icon	**g** you would find more relevant results
8 you used an LCD display	**h** it displays a list of active programs

Exercise 4. **Complete the gaps in this dialogue with *will* or *would* or the reduced forms *'ll* and *'d* where appropriate.**

A   What …….. you do when you finish your diploma?

B   I …….. like take a course in multimedia.

A   How long …….. that take?

B   If I choose the certificate, it …….. take 6 months but if I chose the master's, it take a full year.

A   What …….. be the advantage of the master's?

B   I guess I …….. have better job prospects.

A   When …….. you decide?

B   It depends on my finals. If I …….. do well, I go for the master's.

Exercise 5. **Now study the text above and answer the questions:**

1. What is the memory size of this PC?
2. Which input devices are supplied?
3. What size is the monitor?
4. How fast is the processor?
5. What is the capacity of the hard drive?
6. Which operating system does it use?
7. What multimedia features does the computer have?

Exercise 6. **Function of an Item**

We can describe the function of an item in a number of ways. Study these examples.

Using the Present simple

1 ROM *holds* instructions which are needed to start up the computer.

Used to-infinitive. Used for + -ing form.

2 ROM is *used to hold* instructions which are needed to start up the computer.

3 ROM is *used for holding* instructions which are needed to start up the computer.

Emphasizing the function

4 *The function of ROM is* to hold instructions which are needed to start up the computer.

Exercise 7.Put these instructions for opening a computer in the correct sequence.

a Release the two catches underneath and lift up to remove panel.

b Shut down your computer by choosing Shut Down from the Apple menu or the Special menu.

c If there are security screws on the vertical plate on the back of the computer, remove them with a Philips screwdriver.

d Unplug all the cables except the power cord from your computer.

e Pulling gently, slide the tray out.

*Exercise 8.***Link each word in column *A* with a word which it often occurs with from column *B*. In some cases, more than one link is possible.**

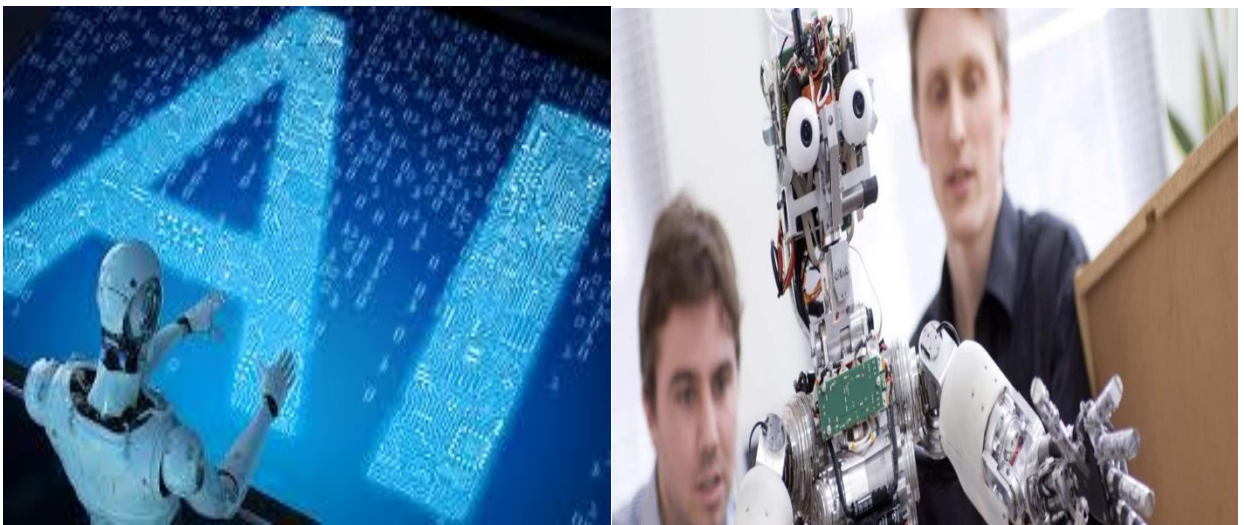| Column A		Column B	
1.	Bulletin	a)	board
2.	Domain	b)	button
3.	File	c)	engine
4.	Graphical	d)	link
5.	Mobile	e)	map
6.	Search	f)	message
7.	Site	g)	name
8.	Synchronous	h)	page
9.	Text	i)	phone
10.	web	j)	transmission

LESSON 3. ARTIFICIAL INTELLIGENCE

Pre-reading task

1.**What is an artificial intelligence?**
2. **In what spheres artificial intelligence is being used nowadays?**
3. **Will robots ever control the world?**
4. **What are the differences between artificial intelligence and human intelligence?**

Try to answer the questions above and then watch [*this video*](https://www.edureka.co/post-graduate/machine-learning-and-ai) *(https://www.edureka.co/post-graduate/machine-learning-and-ai)and compare with your answer*

Artificial Intelligence

1. Will Artificial Intelligence Steal your Job?

📖 **Read the text and translate the words in bold.**

Imagine a world where you are competing against machines to be more creative, in order to survive economically.

Will the rise of AI take away our jobs?

There's something very **sensational** about how machine learning, automation and disruptive new uses of deep learning and robots will impact our tasks at work and make our jobs obsolete. We can expect this to occur gradually over the next 30 years in: Retail, customer service, **manufacturing,** transportation, media & content, finance & banking, delivery & logistics, construction, human resources, sales & marketing, government & administration, healthcare.

More disruptively perhaps autonomous vehicles and delivery robots will easily transform transportation, **trucking,** delivery and logistics as a whole impacting millions of jobs globally. Meanwhile as a machine learning begins to impact **healthcare** more, a radical improvement in robotics, LiDAR and drone technology impacts everything from the retail sector to the **construction industry**. The "end of cashiers" and the traditional sales in retail could also signal a greater reliance on machines than people in traditional market and retail store environments. **The agents that will profit the most form AI are understandably the most optimistic about its impact to the global economy as good and positive.** But in a Capitalism that's already showing signs of failing the middle class and consumers, with radical wealth inequality on its way, automation and AI is the wave that puts us over the edge into civil unrest. In such a scenario, it's AI that helps police the dark inequality of the technological state. The same facial **recognition AI** that today is plagued by bias and faulty loopholes. Capitalism and democracy can be sufficiently hacked by an elite or foreign nation states by the very technologies they are telling us will increase global GDP. The idea that AI augments human beings is more than a bit **ridiculous**. It's a bit like the Silicon Valley narrative that promised the internet would **"connect"** us like never before. It didn't speak to the consequences of what those technologies would eventually become or do to us as **consumers**, workers, as leisure addictions and human beings unable to resist the psychological hijacking of mobile devices, apps and technological consumption of **widespread** distraction that costs the global economy in worker productivity.

Exercise 2. **Find the definition of the words used in the text.**

1. A physical feeling or perception from something that comes into contact with the body____

2. No longer in use, gone into disuse_____

3. Self- aware, acting on one's own or independently_____

4. Favoring fundamental change_____

5.The act of relying on someone or something; trust_____

6. A personal care beauty treatment which involves cleansing and moisturizing of the human face_____

7. To disturb or irritate, especially by continued or repeated acts_____

8. A method of escape that can be exploited in order to avoid its affect_____

9. To withstand or put up with a difficult situation_____

10. The act of one who forcibly stop of some vehicle to reach a destination____

Exercise 3. **Questions 1-8**

Do the following statements agree with the claims of the writer in reading passage.

True – if the statement is true.

False- if the statement is false.

Not given- if the information is not given in the passage.

1. In the future, the development of AI makes our abilities unnecessary.
2. Due to the progressing of the technology without stopping over the years, the unemployment remains the same at 10-15% during some years.
3. According to <u>McKinsey,</u> 45% of present jobs can be performed by hands.
4. With the advancements in AI there will be changes in the future of media and news and journalism.
5. In a competitive labor market AI will make labor force cheaper with automating jobs.
6. The AI-wars with China will actually slow the impact of technology upon the job market and labor pool of skills.
7. The prospect of AI will threaten in humanity if it is not being stopped.

8.According to study by Frey and Osborne, they said that about 47 percent of total US employment would be at risk"

Exercise 4. Listen to the text and decide whether the sentences are True, False or Not given Questions.

1.A study organized in 2019 at the university will examine mechanisms utilising artificial intelligence used to get involved with online discussions and _____.

2. Who headed the project carried out by a research group_____.

3. The study received $____ in funding from the Media and Society programme.

4. A person who is working at the Department of Computer Science_____

5. The group aims to study ____that can help individuals and communities better prepare for situations.

Exercise 5. **GERUND or INFINITIVE? Complete the sentences accordingly.**

1. Are you interested in _____ (join) a social networking site?
2. You'd better _____ (save) your pocket money to buy a new Smartphone.
3. Let me _____ (take) a photo of you.
4. It's so easy _____ (post) selfies online.
5. _____ (chat) online is a lot of fun.
6. He promised _____ (play) online games less.

*Exercise 6.***CONDITIONAL SENTENCES: Complete the gaps with the verbs in brackets.**

1. I _____ (tell) your parents if you don't stop with those offensive remarks.
2. If I _____ (be) you, I wouldn't post those pictures.
3. If you need any help, just _____ (ask) me.
4. I _____ (feel) very upset if he posted that photo of me without my permission.
5. If she _____ (not be) here in time, I'll go without her.
6. He'd have more time if he _____ (not play) so many online games.

Exercise 7. **WRITING.** *You want a friend to go to the cinema with you. Phone up and leave a message. You should:*

- Invite him/her to go with you
- Tell him/her the day and time
- Suggest a place to meet

Write 35-45 words.

Exercise 8. Write an essay in about 120 words, do either 1 or 2.

Some people believe that developments in the field of artificial intelligence will have a positive impact on our lives in the near future. Others, by contrast, are worried that we are not prepared for a world in which computers are more intelligent than humans. Discuss both of these views and give your own opinion.

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

LESSON 4. POFESSIONAL PROGRAMMER

1. **What do you understand from the picture?**
2. **What is programming language?**
3. **What is the function of the developers?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=2-VKC8g2u1Y)and compare with your answer

Professional Programmer

When you leave school you understand that the time to choose your future profession has come. It's not an easy task to make the right choice of a job. I have known for a long time that leaving school is the beginning of my independent life, the beginning of a far more serious examination of my abilities and character.

I have asked myself a lot of times: "What do I want to be when I leave school?" A few years ago it was difficult for me to give a definite answer. As the years passed I changed my mind a lot of times about which science or field of industry to specialize in. It was difficult to make up my mind and choose one of the hundreds of jobs to which I might be better suited.

A couple of years ago I wanted to become a doctor. I thought it was a very noble profession. I was good at biology and chemistry in the 8th and 9"1 forms. I wanted to help people who had problems with health. I knew that a doctor should be noble in work and life, kind and attentive to people, responsible and

reasonable, honest and prudent. A doctor, who is selfish, dishonest, can't be good at his profession. I tried to do my best to develop good traits in myself.

Now I have already decided what to do. I'd like to be a teacher. I know that it's very difficult to become a good teacher. You should know perfectly the subject you teach, you must be well-educated and well-informed. An ignorant teacher teaches ignorance, a fearful teacher teaches fear, a bored teacher teaches boredom. But a good teacher develops in his pupils the burning desire to knowledge. As John Steinbeck once said, a great teacher is a great artist and you know how few great artists there are in the world. Teaching might even be the greatest of the arts. It's a great responsibility to bring up children. I think that's the reason why teachers are deeply respected.

More and more people realise that every educated person should know a foreign language. That's why I'm going to become an English teacher. I always remember these famous words and I'm going to teach them to my pupils: "He, who doesn't know a foreign language, doesn't know his own language".

Exercise 1. **Are the following statements True, False or Not Given according to the information in the text.**

1) I'm not interested in computer science _____
2) Professional of a programmer will give many opportunities_____
3) Computers not greatly simplify day-to-day life. _____
4) It is much easier to do some things on the computer_____
5) Computer is important for us. _____

Exercise 2. **Give the equivalents for the following words**

1)programmer —

2)computer science —

3) simplify —

4)solve —

5)Information-

Exercise 3. Listening task. Listen to the tape and fill the gaps from the following small passage.

Write No More than four words!

Having personal responsibility is the polar (1)_____. It means not making excuses, citing other people or attributing circumstances to external events, (2) _____. Personal responsibility means accepting that you, and only you, are in charge of your own destiny. It means acknowledging and accepting that you are responsible for (3) _____you make, the way you behave, (4)_____you take and the way you think and feel. Personal responsibility means (5) _____for what you think, say, and do. Personal responsibility is rooted in the knowledge that (6) _____, thought or feeling results from choice (7)_____. Only you can choose how you respond. Personal responsibility is an attitude, a philosophy, a way of being. So Personal Career Responsibility means accepting that what you've done, where you are now and where you want to get to, is (8) _____to you.

Exercise 4. **Read the text again and answer the questions.**

1) What is your favorite website?
2) How can you protect your computer from viruses?
3) What is www?
4) What is a computer virus?
5) What is Software Piracy?

***Exercise 5.* Match the words with definitions:**

1) software	**A.** putting secret information into code;
2) code	**B.** the physical parts of computer;
3) hardware	**C.** connected to the Internet;
4) data processing	**D.** numbers entered/held in a computer;
5) information security	**E.** checking products for problems;
6) online	**F.** the act of using information;
7) technical support	**G.** programs/instructions added to computer;
8) data	**H.** helping people use/understand technology;
9) quality assurance	**I.** program language;
10) encoding	**J.** the act of protecting information;

***Exercise 6.* Match the words (1-5) with the definitions (A-E).**

1)Hyperlink –	**A.** a collection of related Internet pages.
2) Website –	**B.** a program that lets you look at web pages
3) HTML –	**C.** a word image that you can clock on to navigate.
4) Web host –	**D.** a computer language used to make web sites.
5) Web browser –	**E.** a company that provides space for a websites.

Modal verbs: can, must, may

Form

These are modal auxiliary verbs.

Can will   Could would   must   should

They have certain things in common:

1. *They go with another verb and add meaning.*

*He **can** play the guitar.*

*I **must** wash my hair.*

2. There is no 's in the third person singular. The form is the same

for all persons.

*She **can dance** very well.*

*He **should try** harder.*

*It **will rain** soon*

*We **must hurry**.*

4. There is no don't/doesn't in the negative.

*I would**n't** like to be a teacher.*

They ca**n't** speak French.

will not = won't

*It **won't** rain tomorrow*

Most modal verbs refer to the present and future. Only can has a

Past tense form, could.

*I **could** swim when I was three.*

Form

must + infinitive without *to*

The Forms of *must* are the same for all persons

Positive and negative

I	must	try harder.
You/We/They	mustn't	steal.
He/ She		

Note

Questions with **must** are possible, but **have t**o is more common.

What time do we have to leave?

Use

1. Must expresses strong obligation. Generally, this obligation comes From 'inside' the speaker.

*I **must** have a shower.* (I think this is necessary.)

*We **must** get a new car.*

2. You must … can express a strong suggestion.

*You **must** see the Monet exhibition. It's wonderful.*

*You **must** give me a call when you're next in town.*

Exercise 7. **Complete these sentences. Use *can / can't + one* of the following verbs: *come, find, hear, see, speak.***

1. I'm sorry, but I can't come to your party next Saturday.
2. I like this hotel room. You .... the mountain from the window.
3. She got the job because she .... five languages.
4. You are speaking very quietly. I .... you.
5. Have you seen my red dress? I ....it.

Exercise 8. **Complete the sentences. Use** *must + one* **of these verbs:**
be, buy, go, help, hurry, learn, meet, phone, read, wash, win.

1. We .... to the bank today .We haven't got any money.
2. I forgot to phone Bobur last night. I ....him today.
3. I .... I haven't got much time.
4. Nodir is a very good investigator. You .... him.
5. You .... to drive. Its very useful.
6. This is an excellent dictionary .You .... it.
7. We .... some food .We have got nothing for dinner.

Exercise 9. Write an essay.
A. In about 120 words, do either 1 or 2.

1. What are the pros and cons of the internet?
2. How important is your smart phone to you?

_____
_____
_____
_____
_____
_____
_____
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_____
_____
_____
_____
_____

LESSON 5. OPERATING SYSTEM OS

- **How do you enter Unix commands?**
- **Which Unix commands does it show?**
- **What is the output of each command?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=ACsLvXuaKxw)and compare with your answer

Operating system OS

The operating system (OS) is the most important program that runs on a computer. Every general-purpose computer must have an operating system to run other programs and applications. Computer operating systems perform basic tasks, such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the storage drives, and controlling peripheral devices, such as printers.

For large systems, the operating system has even greater responsibilities and powers. It is like a traffic cop — it makes sure that different programs and users running at the same time do not interfere with each other. The operating system is also responsible for security, ensuring that unauthorized users do not access the system.

A Software Platform for Application

Operating systems provide a software platform on top of whichother programs, called application programs, can run.The application programs must be written to run on top of a particular operating system. Your choice of operating system, therefore, determines to a great extent the applications you can run. For PCs, the

most popular operating systems are DOS, OS/2, and Windows, but others are available, such as Linux.

Exercise 1. **Match the words to their definitions.**

1.infrastructure	**a.**a public meeting where things are sold to the person who offers the most money for them
2.competition	**b.**a group of shops together in one area, often in one large building
3.auction	**c.** a situation in which organizations try to be more successful than other organizations
4.shopping center	**d.**the business of buying and selling stocks and shares
5.stock market	**e.**the basic systems and structures that a country or organization needs in order to work properly, for example roads, railways, banks etc

*Exercise 2.***Complete the gaps in this summary of the text on operating systems using these linking words and phrases:**

Although because but in addition such as therefore

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

***Exercise 3.*Rewrite each of these sentences like this:**

Example: An important function of the operating system is to manage the computer's resources.

Managing the computer's resources is an important function of the operating system.

1. One task of the supervisor program is to load into memory nonresident programs as required.
2. The role of the operating system is to communicate directly with the hardware.
3. One of the key functions of the operating system is to establish a user interface.
4. An additional role is to provide services for applications software.
5. Part of the work of mainframe operating systems is to support multiple programs and users.
6. The task in most cases is to facilitate interaction between a single user and a PC.
7. One of the most important functions of a computer is to process large amounts of data quickly.
8. The main reason for installing more memory is to allow the computer to process data faster.

***Exercise 4.*Complete the gaps in this summary of the text on operating systems using these linking words and phrases:**

Although, because, but, in addition, such as, Therefore

The user is aware of the effects of different applications programs……. operating systems are invisible to most users. They lie between applications programs, ….. word processing, and the hardware. The supervisor program is the most important. It remains in memory, …… it is referred to as resident. Others are called non-resident ……. they are loaded into memory only when needed. Operating systems manage the computer's resources, ……. the central processing unit. ……. they establish a user interface, and execute and provide services for applications

software. .... Input and output operations are invoked by applications programs, they are carried out by the operating system.

***Exercise 5.*Complete these sentences with the correct form of the verb: infinitive or *-ing* form.**

1 Don't switch off without (close down) your PC.
2 I want to (upgrade) my computer.
3 He can't get used to (log on) with a password.
4 You can find information on the Internet by (use) a search engine.
5 He objected to (pay) expensive telephone calls for Internet access.
6 He tried to (hack into) the system without (know) the password.
7 You needn't learn how to (program) in HTML before (design) web pages.
8 I look forward to (input) data by voice instead of (use) a keyboard.

***Exercise 6.*Work in pairs, A and B. Each of you has information about some popular operating systems. Find out from the information you have and by asking each other, the answers to these questions:**

- Which operating system is used on Apple Macintosh microcomputers?
- What is Pen point designed for?
- Name one system used on IBM mainframes.
- Which operating system is Linux related to? What will happen when the last command is entered?
- Which other Unix commands do you know?

***Exercise 7.*This description of the Mac OS X is drawn from the table below. Write a similar description of Linux.**

Mac OS X is a Unix-based operating system designed for use on Apple Mac computers. It includes memory-protection, pre-emptive multitasking and symmetric multiprocessing support. Graphics are provided by a graphics engine known as Quartz. It has advanced-PDF standards support, OpenGL and Quick time integrated into the OS. The operating system features are accessed through a graphical user interface called Aqua.

	MAC OS X	LENUX
type	Unix-based	Unix-based
computer	Apple Mac	wide variety
features	memory-protection,	variety of
graphics engine	pre-emptive multitasking,	distribution kits
standard support	symmetric	available
user interface type	multiprocessing	XFree86
user interface	support	command line, GUI
source code	Quartz	KDE, Gnome
availability	advanced-PDF,	freely available
	OpenGL, Quick time	
	GUI	
	Aqua	

Exercise **8. Work in pairs, A and B. Each of you has information about some popular operating systems. Find out from the information you have and by asking each other, the answers to these questions:**

1 Which operating system is used on Apple Macintosh micro computers?
2 What is Pen point designed for?
3 Name one system used on IBM mainframes.
4 Which operating system is Linux related to?
5 Name an IBM operating system similar to MS-DOS.
6 Which operating system replaced MS-DOS?
7 Which systems are in fact graphically orientated shells for MSDOS?
8 How many versions of Windows 9X were developed?
9 Which operating systems are designed for networks?
10 Which operating system is used by DEC VAX minicomputers?

LESSON 6. COMPUTER NETWORKS

Pre-reading task

1. **What do you mean by Network?**
2. **What do you mean by Node?**
3. **What do you mean by Network Topology?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=95_36NgiaMY)and compare with your answer

Computer Networks

Fig 1
Components of a typical LAN

A computer network is a digital telecommunications network which allows nodes to share resources. In computer networks, computing device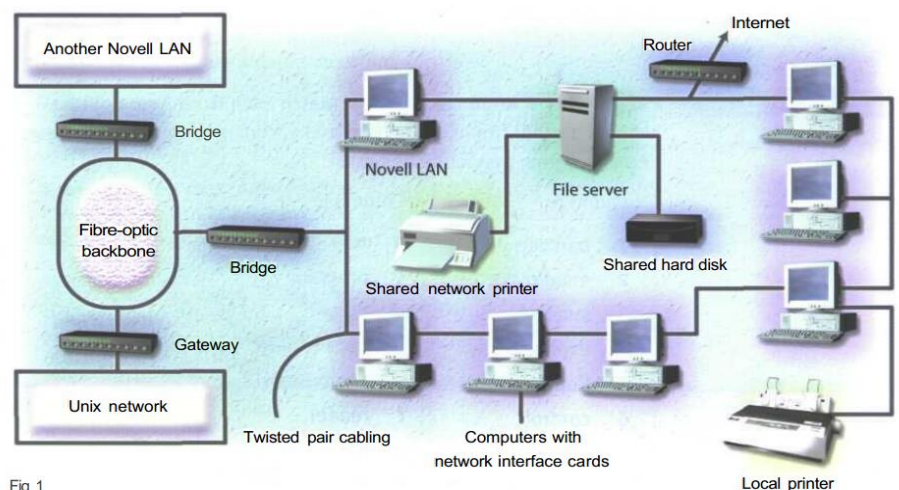s exchange data with each other using connections (data links) between nodes. These data links are established over cable media such as wires or optic cables, or wireless media such as Wi-Fi. Network computer devices that originate, route and terminate the data are called network nodes. Nodes are generally identified by network addresses, and can include hosts such as personal computers, phones, and servers, as well as networking hardware such as routers and switches. Two such devices can be said to be networked together when one device is able to exchange information with the other device, whether or not they have a direct connection to each other. In most cases, application-specific communications protocols are layered (i.e. carried as payload) over other more general communications protocols. This formidable collection of information technology requires skilled network management to keep it all running reliably. Computer networks support an enormous number of applications and services such as access to the World Wide Web, digital video, digital audio, shared use of

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application and storage servers, printers, and fax machines, and use of email and instant messaging applications as well as many others. Computer networks differ in the transmission medium used to carry their signals, communications protocols to organize network traffic, the network's size, topology, traffic control mechanism and organizational intent. The best-known computer network is the Internet.

Exercise 1. **Now read these definitions to check your answers. You may also refer to the Glossary.**

A bridge is a hardware and software combination used to connect the same type of networks.
Bridges can also partition a large network into two smaller ones and connect two LANs that are nearby each other.
A router is a special computer that directs communicating messages when several networks are connected together.

High-speed routers can serve as part of the Internet backbone.
A gateway is an interface that enables dissimilar networks to communicate, such as two LANs based on different topologies or network operating systems.
A backbone is the main transmission path, handling the major data traffic, connecting

Different LANs together.
A LAN is a network contained within a small area, for example a company department.
A modem is a device for converting digital signals to analogue signals and vice versa to enable a computer to transmit and receive data using an ordinary telephone line.

Exercise 2. **Listen to the tape and fill the gaps from the following small passage.**

Write No More than three words or Numbers!

Network Communications

The application layer is the only part of 1. _____a communications process that a user sees, and even then, the user doesn't see most of the work that 2._____ does to prepare a message for sending over 3._____ . The layer converts a message's 4. _____ from human-readable form into bits and attaches a header identifying the sending and receiving computers. The presentation layer

ensures that the message is 5. _____ in a language that the receiving computer can interpret (often ASCII).

This layer translates the language, if necessary, and then compresses and perhaps encrypts the data. It adds another header specifying 6. _____ as well as the compression and encryption schemes.

Grammar revision.

Article

1.The indefinite article a or an in used   with singular, count nouns to refer to a thing or an idea for the first time.

*We are **a cat** and **a dog**./ There's **a supermarket** in Adam Street.*

2. The definite article the is used with singular and plural, count and uncount nouns when both the speaker and the listener know the thing or idea already.

We have a cat and a dog. The cat is old, but the dog is just a puppy.

I'm going to the supermarket. Do you want anything? (We both know which supermarket)

Definite article. The definite article used:

1. before seas, rivers, hotels, pubs, theatres, museums, and newspapers.

the Atlantic   the British Museum

The Times   the Ritz

2. if there is only one of something

the sun   the Queen   the Government

3. with superlative adjectives.

*He's **the richest man** in the world./Jane's **the oldest** in the class*

Indefinite article. The indefinite article is used:

1. with professions.
   *I'm **a teacher**./ She is **an architect**.*
2. with some expressions of quantity.

a pair of / a little / a couple of / a few

3. with some expressions of frequency.
   once a week/ three times a day
4. in exclamations with what +a count noun
   What a** lovely **day!/ What a pity!

No article. There is no article:

1. before plural and uncount nouns when talking about thing in general.
I like potatoes. / Milk is good for you.
2. before countries, towns, streets, languages, magazines, meals, airports, stations and mountains
   I had launch with John./ I bought Cosmopolitan at Victoria Station.

Before some places and with some forms of transport

at home	In/to bed	at/to work
At/to school/university	By bus	By plane
By car	By train	On foot

Exercise 3. **Write in blanks *a* or *an* and translate the sentences into Uzbek.**

1. I bought …newspaper.
2. We went to … party last night.
3. My brother is …artist.
4. It is … beautiful day today.
5. I ate … sandwich and …apple.
6. Tashkent is … industrial country.
7. Anvar is … good lawyer.
8. Barno works at … factory.
9. It is … very difficult question.
10. We stayed at … expensive hotel.
11. This judge lives in … old house.
12. I bought … hat and …umbrella.

Exercise 4. **Which of the following nouns can be used with indefinite article *a / an*.**

Sugar, pen, pencil, water, table, city, snow, oil, map, plan, happiness, men, women, animals, money, donkey, bread, mistake, work, musician, information, knowledge, trousers, sky, child, mountain, policeman, dog, policemen, house, umbrella, milk, egg, boy, girl, teacher, professor, example, armchair, chair, son, daughter, star, sun, planet, moon, earth.

Exercise 5. **Complete these definitions with the correct participle of the verb given in brackets.**

1   A *gateway* is an interface (enable) dissimilar networks to communicate.

2   A *bridge* is a hardware and software combination (use) to connect the same type of networks.

3   A *backbone* is a network transmission path (handle) major data traffic.

4   A *router* is a special computer (direct) messages when several networks are linked.

5   A *network* is a number of computers and peripherals (link) together.

6   A *LAN* is a network (connect) computers over a small distance such as within a company.

7   A *server* is a powerful computer (store) many programs (share) by all the clients in the network.

8   A *client* is a network computer (use) for accessing a service on a server.

9   A *thin client* is a simple computer (comprise) a processor and memory, display, keyboard, mouse and hard drives only.

10   A *hub* is an electronic device (connect) all the data cabling in a network.

Exercise 6. **Link these statements using a relative clause with a participle.**

    1   a   The technology is here today.

           b   It is needed to set up a home network.

    2   a   You only need one network printer.

           b   It is connected to the server.

    3   a   Her house has a network.

           b   It allows basic file-sharing and multi-player gaming.

    4   a   There is a line receiver in the living room.

     b   It delivers home entertainment audio to speakers.

5   a   Eve has designed a site.

     b   It is dedicated to dance.

6   a   She has built in links.

     b   They connect her site to other dance sites.

7   a   She created the site using a program called Netscape Composer.

     b   It is contained in Netscape Communicator.

8   a   At the center of France Telecom's home of tomorrow is a network.

     b   It is accessed through a Palm Pilot-style control pad.

9   a   The network can simulate the owner's presence.

     b   This makes sure vital tasks are carried out in her absence.

10 a   The house has an electronic door-keeper.

     b   It is programmed to recognize you.

*Exercise 7.***Work in two groups, A and B. Group A list all the advantages of a network. Group B list all the disadvantages. Then together consider how the disadvantages can be mini missed.**

Group A Advantages of a network	Group B Disadvantages of a network

***Exercise 8.*Using the lists you compiled in Task 3, describe the advantages and disadvantages of networks. Try to link some of the advantages and disadvantages as in these examples.**

Advantages	Disadvantages
Allow data be shared.	Permit viruses to spread quickly.
Users can share software on the server	Server failure means no one can work.

- Although networks allow data to be shared, they permit viruses to spread quickly.
- Users can share software on the server; how ever server failure means that no one can work.

LESSON 7. PERIPHERALS

1. **How do digital cameras differ from conventional cameras?**
2. **How do they work?**
3. **What are their advantages and disadvantages compared to conventional cameras?**

Try to answer the questions above and then watch this video (http://www.pluralsight.com/courses/software-engineering-essentials)and compare with your answer

Peripherals.

A peripheral or peripheral device is *"an ancillary device used to put information into and get information out of the computer"*. Three categories of peripheral devices exist based on their relationship with the computer: **an input** device sends data or instructions to the computer, such as a mouse, keyboard, graphics tablet, image scanner, barcode
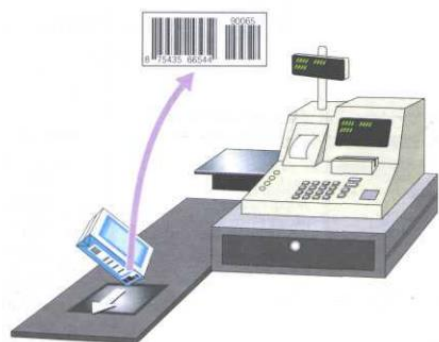
reader, game controller, light pen, light gun, microphone, digital camera, webcam, dance pad, and read-only memory);

an output device provides output from the computer, such as a computer monitor, projector, printer, headphones, and computer speaker);

and **an input/output** device performs both input and output functions, such as a computer data storage device (including a disk drive, USB flash drive, memory card, and tape drive). Many modern electronic devices, such as digital watches, smart phone, Internet capable, and tablet computers, have interfaces that allow them to be used as computer peripheral devices.

Exercise1. Put each verb in brackets into the present simple or present continuous.

a) What (usually, you, do) *do you usually do* at the weekend?

b) Don't worry about the cat. It (only eat)_____ once a day.

c) Manzura can't work out the answer, (you, know)__what it is?

d) What's the matter? Why (you, stare)_____at me like that?

e) (you, speak)_____English? I'm looking for a hotel.

f) Aziza (stay)_____ with me while her house is being

g) decorated.

h) You should go on a diet, (you, put)____on weight.

i) (they, speak)_____French or German? I can't tell the difference.

Exercise2. Complete each sentence with a suitable form of the verb in brackets.

a) I'm soaked to the skin! If only I (bring)____*had brought*___an umbrella!

b) This pullover was cheap. I wish I (buy) ………. two of them!

c) I like your school. I wish I (go) ………. there too.

d) I must get in touch with Sue. If only I (know) ………. her

e) phone number!

f) This bus is really slow! I wish we (take) ………. the train.

g) I'm disappointed in this camera. I wish I (not buy) ………. it.

h) I answered three questions well. If only I (finish) the whole test!

i) I can't understand Marjona! I wish I (speak) French.

Exercise 3. **Answer to the following questions.**

1. What does a CCD contain?
2. What is a pixel?
3. How can you view pictures before they are downloaded to a PC?
4. When you have downloaded the images, what can you do with them?
5. Is special software required?
6. Why is the resolution important?
7. What does the capacity of a digital camera depend on?
8. Why is it worth getting a rechargeable battery?

Exercise 4. Study this data about storage devices.

Then complete the blanks in the following sentences comparing contrasting the different types.

Devise	Read/Write	Speed	Media Capacity	Media Removable	Cost
Floppy disk	Read and write	Slow	Very low	Yes	Low
Fixed hard disk	Read and write	fast	Very high	No	Medium
Removable hard disk	Read and write	Medium to fast	High	Yes	Medium
CD-ROM	Read only	Medium	High	Yes	Low
CD-R	Recordable	Slow	High	Yes	Medium
CD-RW	Read and write	Medium	High	Yes	Medium
CD-MO	Read and write	Medium	High	Yes	High
DVD-ROM	Read only	Medium	High	Yes	Medium
DVD-RAM	Read and write	Medium	Very high	Yes	High
Magnetic Tape	Read and write	Very slow	High	Yes	Medium

1. You can write to hard disks ....optical disks.
2. Floppy disks have a......................capacity other devices.
3. CD-ROMs and floppy disks are.........................low priced.
4. DVD-RAM has a........................capacity   other optical disks.
5. CD-ROMs cannot be re-record some other optical disks can be.
6. …….. hard disks, you can read from and write to CD-MO drives.
7. ………CD-ROMs, CD-Rs are recordable.
8. Magnetic tape is much ....other devices.

9.   …..….DVD-RAM and fixed hard disks have very high media capacity.
10.   Floppy disks are cheap……….. DVD-RAM is expensive

Exercise 5. <u>Underline</u> the correct phrase in each sentence.

1.   What time *go you/<u>do you go</u>* to bed on Saturdays?
2.   Why *are you waiting/do you waiting* outside the door?
3.   Don't ask Temur. He *doesn't know/not knows* the answer.
4.   *I having/I'm having* my lunch at the moment.
5.   When *you leave/do you leave* the house in the morning?
6.   I don't understand. What *is happening/is happen*?
7.   Excuse me, *does you know/do you know* the time?
8.   This is a great party *I'm having/Am I having* a lovely time.

Pre-reading task

1.What is Computer Hardware?

2.What is Computer Software?

## *What are the differences between hardware and software?*

Computer hardware is any physical device used in or with your machine, whereas software is a collection of code installed onto your computer's hard drive. For example, the computer monitor you are using to read this text and the mouse you are using to navigate this web page are computer hardware. The Internet browser that allowed you to visit this page and the operating system that the browser is running on are considered software.

Further information and examples

All software utilizes at least one hardware device to operate. For example, a video game, which is software, uses the computer processor (CPU), memory (RAM), hard drive, and video card to run. Word processing software uses the computer processor, memory, and hard drive to create and save documents.

Hardware is what makes a computer work. A CPU processes information and that information can be stored in RAM or on a hard drive. A sound card provides sound to speakers, and a video card provides an image to a monitor. Each of these are examples of hardware components.
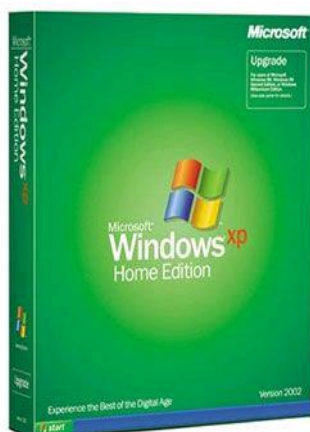
Can a computer run without software. In most situations, yes, a computer can run without software being installed. However, if an operating system or interpreter is not found, it either generates an error or

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doesn't output any information. A computer needs an operating system that allows both the user and software to interact with the computer hardware.

Installing programs onto the computer in addition to an operating system gives the computer additional capabilities. For example, a word processor is not required, but it allows you to create documents and letters.

Can a computer run without hardware?
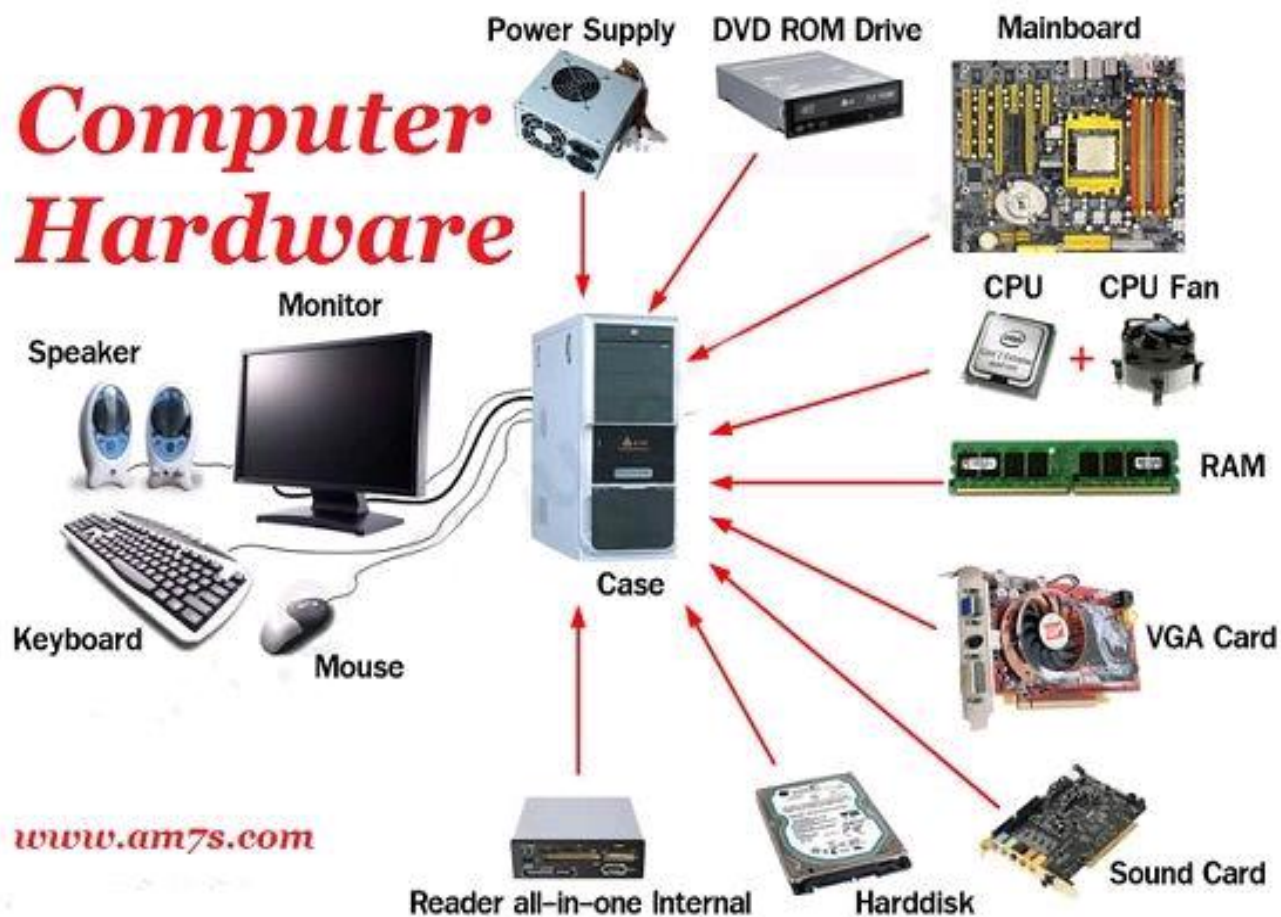
Most computers require at least a display, hard drive, keyboard, memory, motherboard, processor, power supply, and video card to function properly.

If any of these devices are missing or malfunctioning, an error is encountered, or the computer will not start. Adding hardware, such as a disc drive (e.g., CD-ROM or DVD), modem, mouse, network card, printer, sound card, or speakers are not required, but give the computer additional functionality

Tip: Hardware that is not required by the computer is referred to as a peripheral.

🎧 *Exercise 1. LISTEN to the tape and fill the gaps.*

When I was a kid, I _____ software. If someone showed me this word, I would have no _____. Today, of course, it's probably one of our _____ words. We can't live nowadays without software. We need an operating _____ our computers. Then we need software to make documents, store our music and photos, play games, surf the Internet, and a _____. Without software, the world would probably stop. The great thing about software is _____ and better. A few years ago, software didn't do much. It was very simple. Today, there's very little _____. I'm not sure what my favorite software is. _____ choose from.

Exercise 2. **Choose the correct letter A, B, C or D.**

1. Tests that are already on the market

    A. need some form of reconstruction.
    B. fail to ensure validity and reliability.
    C. guarantee validity and reliability.
    D. waste large amounts of time.

2. Some knowledge of reading and writing

    A. is commonly not necessary for aptitude tests.
    B. is normally a requirement in aptitude tests.
    C. is less important in aptitude tests than other tests.
    D. is as important as prior learning in aptitude tests.

3. With interest inventories, subjective interests are examined to

    A. test people's general knowledge.
    B. help people change their career.
    C. compare individual's backgrounds.
    D. forecast future behavior or activity.

4. Intelligence tests could come under aptitude tests

    A. because they can be used to forecast future performance.
    B. since they are not used very widely.
    C. as they can be broken down into different sub-groups.
    D. because they are sometimes used to diagnose learning disabilities.

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Exercise 2. Questions 5-7

Make the following statements agree with the claims of the writer in Reading Passage?

YES   if the statement reflects the claims of the writer

NO   if the statement contradicts the claims of the writer

NOT GIVEN   if it is impossible to say what the writer thinks of this

5. The Wechsler Scales are the only type of intelligence test now used.

6. Where large quantities of data need to be collected fairly quickly self-response questionnaires work well.

7. The Likert Scale ensures greater accuracy than other techniques.

Question 8

Choose the correct letter A, B, C or D.

8. Which of the following is the most suitable heading for Reading Passage

    A. Different types of intelligence test
    B. How personality can be tested
    C. The importance of aptitude tests
    D. The various software tools of research

Exercise 4. **Underline the correct word in each sentence.**

a)   There's a small shop <u>*at*</u>*/by* the end of the road.
b)   Nargiza was standing *on/with* one foot.
c)   Lola has moved *at/to* Barcelona.
d)   Don't walk *at/in* the road! It's dangerous!
e)   From the plane we could see the mountains *below/under*.
f)   Bahodir spent his holiday *at/in* Hungary.
g)   When the horse came to a small stream it jumped *above/over* it.
h)   Jamila's house is *at/on* the other side of the street.
i)   Lobar cut her foot *at/on* some broken glass.
j)   Kamol was sitting *in/on* an armchair.

Exercise 5. **If the word underlined is not appropriate, write a new word in the space. Tick (✓) the space if the word is correct.**

a) Jasur's sister has a job <u>at</u> Uzbekistan airways Airport.   ✓   .

b) I met Davron yesterday <u>by</u> the city centre.   _____ .

c) Zilola had a large hole <u>at</u> her left boot.   _____ .

d) Jasur sits <u>in</u> the back of the class.   _____ .

e) There was a small table <u>at</u> the bed.   _____ .

f) The robber was holding a gun <u>in</u> one hand.   _____ .

g) There was a beautiful portrait hanging <u>at</u> the wall. _____ .

h) Shaxzod didn't feel well and his doctor sent him <u>to</u> hospital   _____ .

i) The children usually sit <u>at</u> the back seat of the car.   _____ .

j) To reach our village we take a road <u>above</u> the mountains. _____ .

Exercise6. **Complete each sentence with one suitable preposition.**

a) Munisa lives ....   Amir Temur Road.

b) Can you put the plates back…..the shelf please?

c) Please don't stand ……your desks!

d) I'd really like to live ….. the country.

e) Go down this street, and you'll see the cinema …..the right.

f) The police searched …… the building but there was no one

g) I met Anora ……the bus yesterday.

h) Sorry, Islom isn't here at the moment. He's …..

i) Ahror wants to know what's ….television this evening.

j) Jamshid and Suraj arrived ……   the bus stop, the bus left.

Exercise 7. **Decide which answer (A, B, C or D) best fits each space.**

A case of mistaken identity

   When Dildora got off the train, (1)__*B*____ was a woman waiting for her (2) the platform. '(3) ?' she asked. '(4) a ear waiting for you (5) ' Dildora was not very surprised, (6) she thought that her aunt must have been (7) busy to meet her (8) the station.(9)   she did not recognize the woman, (10) was dressed very formally, and had a small briefcase (11) her arm, she was (12) tired after the journey that she was happy to get (13)   the car. The woman, (14), just said a few words to the driver, and then walked away. Dildora wondered (15) she was. 'It's strange that she didn't even introduce herself,' she thought.

1) A who	B there	C whose	D it
2) A below	B to	C on	D in
3) A You Diana, are you	B You're Diana, isn't it	C Are you Diana	D You aren't Diana
4) A There's	B Theirs	C Its	D It's
5) A out	B in	C inside	D outside
6) A so	B despite	C too	D as
7) A so	B too	C enough	D very
8) A at	B to	C in	D for
9) A However	B Since	C In spite of	D Although
10) A she	B who	C and	D whose
11) A at	B in	C under	D by
12) A enough	B so	C too	D very
13) A with	B by	C at	D into
14) A however	B despite	C although	D in spite of
15) A whether	B there	C who	D however

Exercise 8. **Complete each sentence with one suitable preposition.**

There was another woman (a)___*on*___ the bus, and Kamila sat(b)….. her and started chatting. She said she was going(c)….. Forbes Road too. 'I've got an interview (d)…… a place called Tashkent City,' said Kamila. 'Is it (e)….. the bus stop? It's not far. It's (f)….. the right (g)….. the end of the street the woman replied. 'In fact, I live (h)….. When I look out of my window, I can see people working (i)…. ' When they arrived(j)…. the stop, they got off and walked up the street together.

LESSON 9. MULTIMEDIA

1.What are some examples of multimedia?
2.Multimedia is used in which areas?
3.How does it work?

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=Fg06vz1Krcc)and compare with your answer

MULTIMEDIA

Multimedia is a technology which stores data as text, photo, animation, music, video, etc. and gives the method to collect and modify the data as required.

*Exercise1.*Let's see how much you know about multimedia!

1.What is media?
A. Person **B.** Anything which conveys a message electronically **C.** Anything which conveys a message
2.What Media types are Included in a Photo?
A. Still Image **B.** Animation **C.** Video **D.** Simulation
3.Which of these are Multimedia TYPES? (choose 3)
A.Video **B**. Published Book **C.** Animation **D**. Audio **E**. Computer Games

4.What is a Multimedia Product?

A. still 2D Image **B.** An animation for the viewers to enjoy **C.** An object

*Exercise2.***Listento the dialogue and make notes.**

_____

_____

_____

_____

*Exercise 3.***Listen to the typescript again and answer these questions.**

1.In which fields multimedia is used?

2.How has multimedia changed the ways of learning?

3.What is Importance of multimedia approach in learning?

*Exercise 4.***Read about components of multimedia and answer the questions.**

1.How many types of graphics are there?

2.What does include audio formats?

3.What programs allow developers to create complex visual effects?

1. TEXT
- Express specific information
- act as reinforcement for information contained in other media items

6. INTERACTIVITY
Games are usually thought of as fostering a grat amount of interactivity. However, order entry applications and many other business applications are also interactive, but in more constrained way.

2. AUDIO
Audio files appear as part of application content and also to aid interaction.
Audio formats include MP3, WMA, Wave, MIDI and RealAudio.

ELEMENTS / COMPONENTS OF MULTIMEDIA

3. VIDEO
Digital video appears in many multimedia applications, particularly on the web.
Common digital video formats include Flash,MPEG,AVI,WMV and QuickTime.

4. ANIMATION
Animated components are common within Web and dekstop multimedia application.
Animation also can include interactive effects, allowing users to engage with the animation action using their mouse and keyboard.

5. IMAGE
- Digital image files appear in many multimedia applications.
- Digital image files use a variety formats and file extensions. Among the most common are JPEGs and PHGs.
- Digital photographs can display application conteny or can alternatively form part of a user interface.

Raster (PNG)   Vector (SVG)

Graphic design software programs such as Photoshop and Paint allow developers to create complex visual effects with digital images.

There are 2 types of graphics :
- Raster image
- Vector image

Exercise 5. **Decide which answer (A,B,C or D) best fits the space.**

Multimedia and student-centered learning

In the last three (1) …………………., the PC and multimedia technologies have progressed by leaps and bounds. With this rapid (2) ……………….., it has now become feasible and affordable to integrate multimedia technology into the teaching and learning process. This infusion of multimedia into teaching and learning has (3) ………………… considerably the instructional strategy in our educational institutions and changed the way teachers teach and students (4) ………………….. Multiple media can now be used in presenting the instructional materials and delivered in a multi-modal environment. The presentation is non-linear and is able to foster a two-way communication or (5) ………………… between the user and the computer. Learning can take place at the learner's own pace and time. This mode of learning is student-centric or self-directed learningwhich will cater to individualistic (6)…………………. in learning unlike the mass learning method as practiced in the teacher-centric or directed instruction model.

In the student-centered learning mode, the students must play an active part in their learning and construct their own knowledge or meaning of what they learn. The learners (7) ……………how to reach the desired learning outcomes themselves.

Multimedia technology is becoming increasingly (8) …………………… in education as a means to motivate students in their learning and to provide them many ways to express their ideas and (9)…………………. their information. It also allows the teacher the flexibility to present their curriculum in an innovative manner. The use of multimedia technology in creating a student-centered learning (10) ………………... gives very positive results and enables students in the class to develop skills that will make them active knowledge workers.

1. A) decades B) decides C) divides D) derives
2. A) pros B) progress C) politics D) prospect
3. A) charged B) allowed C) altered D) allows
4. A) read B) write C) watch D) learn
5. A) interface B) interaction C) interact D) internet
6. A) needs B) must C) should D) could
7. A) detection B) defect C) determine D) decide
8. A) population B) popular C) people D) study
9. A) play B) dislike C) past D) display
10.A) nature B) mature C) environment D) class

Exercise 6. **Read the rest of this text to find the answers to these questions:**

1 How do you play MP3 files?
2 What does the Windows Media Player file do with an MP3 file?
3 What is a standalone player?
4 What special features can players offer?
5 What information can you obtain by clicking on the track info button?
6 What does a skin enable you to do?
7 How do you play music from a CD-ROM on an MP3 player?
8 What hardware and software do you need to make your own audio CDs?

Exercise 7. **Work in pairs, A and B. With the help of the notes provided, explain to your partner one aspect of multimedia.**

Student A ………………..
Student B ………………..

Link your notes into a text describing one aspect of multimedia.
Choose either the Student A or the Student B notes.

Exercise 8. **Complete each sentence using *if, unless* or *would.***

a.   If he asked me to help him, I _would_.
b.   We'll have lunch outside in the garden, it's too cold.
c.   Alisher win more races if he trained harder.
d.   Come on! we hurry, we'll miss the plane!
e.   You like to see my stamp collection?
f.   The manager won't be long you take a seat, please.
g.   I'm sure that Maftuna go to the cinema with you, if you asked her.
h.   You feel like a chat, phone me tonight.
i.   What you do if you saw a snake?
j.   I don't feel happy I swim every day.

LESSON 10. THE INTERNET

1. **What is privacy?**
2. **What is security?**
3. **How can I find people online?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=Dxcc6ycZ73M)and compare with your answer

The Internet

The Internet is a huge network of computers spanning this planet and is now started to bring in the surrounding area like space. Some computers like servers share data, others just surf the web as clients downloading the data. Public Internet began in the late 70's. In the 70*s web users used an interface called telnet, but now that program is mainly obsolete. Telnet is most widely deployed in accessing college email accounts. The Internet is very helpful, because it's a huge database of knowledge, from the pictures of family trips to an analysis of quantum mechanics. Everyone should have the Internet because of its near instantaneous communication and huge wealth of knowledge. But how to go on the Internet and do a search for information we need. There are two ways to do it.

The first is when you know an internet address of data you need and the second one is when you try to find information you need by using a search program. In the beginning we have got to enter any browser you like. It could be an Internet Explorer, Netscape Navigator or Opera, etc. If we have a broadband connection, we connect to the Internet at once. If not, we have to set up and connect to our dial-up service. Finally, if we want to find some information in the Internet, we are to type an address of this data in the browser we use or simply use the existing search-programs such as the google search program, rambler search program, yandex search program or yahoo search program. They are very simple and popular networks of sites. In these programs we can just type the word or name of thing, we would like to find and then press enter. A search program solves this problem. We get our results in the same window. After we get our results, we simply choose whatever site best matches our query or keep searching.

Speak about Internet service using the words and word combinations from words above

*Exercise 1.***Decide if the statements are True (T) or False (F)**
1. Nowadays the most popular Internet service is e-mail. ____
2. Originally, Internet was a military experiment in the USA of 70-s ____
3. The amount of money charged by the insurer to the policyholder for the coverage set forth in the insurance policy is called the premium**.____**
4. Many major companies are built entirely around information systems.____
5. A person or entity who buys insurance is known as an insured or as a policyholder._____
6. Enunciation of exact demand is, therefore, the second phase of activities for providing information service.____

🎧 *Exercise 2.* **Listen to the tape and fill in the blanks with appropriate words and phrases.**

Internet service. Modern life is easy and fun. We have all the amenities. We do not need to go to the movies, because we have big TVs at home. The children have 1. _____ with large displays. Modern technology is useful and convenient. In my opinion, Internet is the most 2. _____ thing. Computers are also an important invention, but Internet is better than any other type of 3._____. Originally, Internet was a military experiment in the USA of 60-s. But soon it became clear that everyone in the world can use it.

Everybody knows that the Internet is a global computer 4. _____, which embraces hundreds of millions of users all over the world. The Internet has already entered our ordinary life. It's hard to imagine our lives without Internet nowadays. It has become 5. _____ of every person's life. It is clear that the accurate number of users can be counted fairly approximately, nobody knows exactly how many people use the Internet today, because there are hundreds of millions of users and their number is growing.

Exercise 3. **Put the verbs in brackets into the past continuous or simple past.**

1. Lola _____ (comb) her hair while she _____(listen to) the news on the radio.
2. The children _____(watch)television while Akmal _____(eat) a doughnut.
3.Lola Karimova _____(wash) the dog while Nodir _____(do) my homework
4. It was sunny when Maftuna ____(hang out)her washing.
5.Holiq_____ (look) out of the window while Bart _____ (read) a book.
6. This morning, Hamid _____ (go) to work and Lola _____ (wait) for Laziza.
7. Millhouse_____(stand) at the bus stop and he _____ (talk) to Bobur.
8.Hamdam Solikov _____(wash) his car while the dog _____(run) across the road.
9.Botir's father cut himself while he _____(shave).
10.Laziza_____(brush) her teeth while Marjon_____(put on) her make up.

Exercise 4.<u>Underline</u> **phrases which are not necessary in these sentences. Sometimes every phrase is necessary.**

a) My wallet has been stolen <u>by someone</u>.
b) We were taught by a different teacher yesterday.
c) Nasir was operated on at the hospital by a doctor.
d) The meal was served by a waiter in a red coat.
e) We were shown round the museum by a guide.
f) Two letters were delivered this morning by the postman.
g) Three men have been arrested by the police.
h) Yesterday a window was broken by someone.

Exercise 5. **Match each of the Internet services in Column A with the uses in**

Column A	Column B
IRC MOOs Email FTP WWW Telnet Usenet	Logging on to your computer at a distance Sending and receiving messages Downloading a file from a server Chatting to other users in real-time Accessing newsgroups Browsing web pages Talking part in simulations in a shared environment

Exercise 6. **For each question, complete the second sentence so that it means the same as the first, using no more than three words.**

a) Mahmud took a deep breath and dived into the water.
After Mahmud *had taken*_____ deep breath, he dived into the water.
b) Begzod was fatter. Begzod to be so thin.
c) Gafur was sure his keys were not in his pocket.
Gafur was surehis keys.
d) When he was younger Davron played tennis.
Davron tennis when he was younger.
e) Last summer, Jamila got up early every morning.
Last summer, Jamila used toearly every morning.
f) We missed the bus so we took a taxi.

55

We took a taxi because the bus.

g) In those days, we spent the summer in the mountains.

In those days, we the summer in the mountains.

Exercise7. **Put each verb in brackets into the present simple or present continuous.**

1.   Ugh, don't show me that picture! I (hate) *hate*   mice!
2.   Who (you, go) ……… to the match on Saturday with?
3.   In the winter, what (you, wear) ………?
4.   I can't stand horror films. I (think)   ……… they're silly!
5.   Diana (not, usually, sit) ……… next to Ellen.
6.   Why (you, look at) ……… me like that?
7.   Excuse me. (this bus, stop) ……… outside the station?
8.   I (not take) ……… the bus to school today.

Exercise 8. **Match each sentence (a-h) with a suitable response (1-8).**

a)   What do you usually do on your birthday? **1**
b)   Would you like to meet again on Saturday? ………..
c)   What do you usually do when there is an earthquake? ………..
d)   Have you finished your homework?   ………..
e)   What are you doing?   ………..
f)   What are you doing on Friday? ………..
g)   Are you in the school basketball team? ………..
h)   What do you do?   ………..

1   I have a party.
2   I lie under the table.
3   I work in a travel agency.
4   Yes, we play every Friday.
5   I'm still doing it.
6   It's hot in here. I'm opening some windows.
7   I'm going back to Canada tomorrow.
8   I'm having a party.

LESSON 11. WEBSITE

1. **When was the first website created?**
2. **How many websites are on the Internet?**
3. **Difference between a website and web page?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=vzdA66d6xDs)and compare with your answer

Website

A site or website is a central location of various web pages that are all related and can be accessed by visiting the home page of the website using a browser. For example, the Computer Hope website address URL (Uniform Resource Locator) is https://www.computerhope.com. From our home page, you could get access to any of the web pages (like this one) contained on our website. The image to the right shows how the Computer Hope website looked in 2011.

How to open a website

To view a website requires a browser (e.g., Internet Explorer, Edge, Safari, Firefox, or Chrome). For example, you are reading this web page using a browser. Once in a browser, you can open a website by entering the URL in the address bar. For example, typing "https://www.computerhope.com" opens the Computer Hope home page. If you don't know the URL of the website you want to visit, you can use a search engine to find the website on the Internet.

When was the first website created?

The first website was built at CERN by Tim Berners-Lee and launched on August 6, 1991. You can visit and browse the first website at the http://info.cern.ch/ address.

___

Exercise 1.What features make a good website? Make a list of the key features you look for. Then compare your list with others in your group.

_____
_____
_____
_____
_____
_____

Exercise2.Study these seven points for evaluating websites. What questions would you ask to evaluate a website on each point?

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

Exercise 3. Complete each sentence, using _would_ or _used to_ and the verb in brackets. More than one answer may be possible.

a) Jasur (have) _used to have_   a beard but he shaved it off.
b) My mother (read)   to me every night.
c) In the holidays we (meet) at the beach every morning.
d) I (not like) spinach, but now I do.
e) Hilola (write) to me often, but now she phones.
f) Tamara (live) in the house opposite.
g) When I was young, the summers (be) warmer.
h) Whenever our teacher let us leave early, we (cheer) !

Exercise 4. **Combine the two sentences to make one sentence. Use *when* and the past perfect.**

1. I washed and got ready. I went out to meet my friends.
    When I'd washed and got ready. I went got out to my friends.
2. I knew much more about the job. I visited their offices.

3. I looked at the new dress for ages. I asked how much it cost.

4. I felt much more independent. I passed my driving test.

5. Anne went on holiday. She saved enough money.

6. The team finally won the match. They ran round the pitch to celebrate.

Exercise 5. **Put each verb into a form of the present perfect simple.**

a. What's the matter? (you cut) *Have you cut* yourself?
b. I (have)   a headache ever since lunchtime.
c. Nadia (never see) any Chinese films.
d. Someone (steal) Mr Grant's bike.
e. The passengers are tired because they (not sleep) all night.
f. I'm afraid we (just break) your window. Sorry!
g. Malik (not win) a prize this time, I'm afraid.
h. (you ever eat) Spanish food? It's great!

Exercise 6. **Complete each sentence with a time word or phrase from the box.**

| yet | for | ~~since~~ | often | | ever | never | already | so far | just | always |

1. Amir has lived in the city centre ___*since*___ 1996.
2. Thanks for the present! I've wanted a pet goldfish!
3. Have you drunk pineapple juice? It's fantastic!

4. I've heard some fantastic news! I've passed my exams!
5. Hurry up! Haven't you finished ? You're so slow!
6. Nigora has worked in this company five years.
7. I've been on a big ship before. It's an interesting experience!
8. We're very busy today. we've sold over a hundred bikes.
9. I've passed this building, but this is the first time I've been inside.
10. Can I have a different book? I've read this one.

Exercise 7. <u>Underline</u> **the correct sentence, 1 or 2, in each mini-dialogue.**

1. A: Can you come dancing tomorrow night?
   B: 1 Sorry, I'll play basketball.
       2 <u>Sorry. I'm playing basketball.</u>
2. A: What are your plans for the summer?
   B: 1 I'll spend a month in the mountains.
       2 I'm going to spend a month in the mountains.
3. A: What do you think about the weather?
   B: 1 It'll probably rain tomorrow.
       2 It's raining tomorrow.
4. A: What about tomorrow at about 5.30?
   B: 1 OK, I'll see you then.
       2 OK, I'm seeing you then.
5. A: Aisha is buying a dog next week.
   B: 1 Really? What is she calling it?
       2 Really? What is she going to call it?
6. A: It would be nice to see you next week.
   B: 1 Are you doing anything on Wednesday?
       2 Will you do anything on Wednesday?

Exercise 8. Evaluate any one of these sites using the seven points listed in Task 2 and any of the advice given on website design in this unit.

www. environment-agency. gov. uk
www. compaq. com
www. abcissa. force9. co. uk/birds
news. bbc. co. uk
www. orange. co. uk

LESSON 12. WEBPAGE CREATOR

Pre-reading task

Match these reviews of websites to their titles. Some words and parts of words have been omitted. Try to replace them.

1 Babel fish
2 Fish I.D.
3 Strangely Satisfying
4 Sheep net
5 Download.com

Webpage Creator

Reviews of Websites

A

_____

If you want to buy old comics, old toys such as plastic fish for your bath, nodding dogs for your car and many other strange and bizarre items, this site is for you.

B_____

Everything you ever wanted to know or didn't want to know about *****. Breeds, pictures and fascinating facts including the information that almost all ***** are either white or black. Guaranteed to raise a smile.

C　　　　　　_____

Trouble identifying *****? This site has pictures, quizzes, a special corner for children and a handy reference on all kinds of aquatic life. It also hosts a discussion area for all concerned with the marine environment.

D_____

Can't remember the word in English or any other major language? Try ***** for an instant translation. Easy to use. Just type in your text. Choose the

language you want and select 'Search'. You can also translate websites. Only drawback is that you get a literal translation. Don't expect ***** to cope with slang or idioms.

E_____

Whether it's demos, full freeware or shareware products you are looking for, the chances are you'll be able to find it here. Rather usefully the site also contains all major drivers and development tools - pretty much anything you could ever want to help you get the most out of your PC really. Well worth *a* visit whatever it is you're looking for.

Try to answer the questions above and then watch [this video](https://www.youtube.com/watch?v=YzqCY5B18ng) (https://www.youtube.com/watch?v=YzqCY5B18ng)and compare with your answer

Exercise 1. **Carry out a survey of websites built by your group mates. Complete this table for at least 4 sites.**

Name	
Site name	
Topic	
Site address	
Why Special	
Last Updated	

Exercise 2. **Listen to the recording again to find the answers to these questions.**

1 Why did John choose this topic?

2 What package is Netscape Composer a part of?

3 What previous experience did he have of website creation?

4 What's the price of his 'free' domain name?

5 What does he mean by *'Yahoo! just seems to swallow submissions'?*

6 What do you think Yahoo! Clubs are?

7 List 4 tips he gives for other website builders.

8 List 4 website addresses he mentions.

***Exercise 3.*Visit a website of your choice. Take notes on any special features.**
You may refer to these seven points for evaluating a site listed in Unit 14, Task 2, if you wish. Then make a short presentation to the class on what makes your chosen site special.

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

***Exercise 4.*Planning your website.**

Study this flowchart for planning a website. Use it as the basis for a short text providing advice on website planning. Your text should have three paragraphs corresponding to the three stages in this diagram:
1 Analysis
2 Design and implementation
3 Evaluation
Begin your text like this:
You need to plan your website carefully before you go ahead and
create it. There are three stages to the planning process:

Exercise 5. Write a brief evaluation of the site you choose. If you are unable to access a website, list the good and bad points of these home pages

***Exercise 6.*Complete the sentences with a verb from the list. Use the Present Perfect (*see, buy, be, translate, detect, learn, go, live teach*).**

1**.** He has already detected this crime.
2. We ....in Samarkand since 1994.
3. I .... not ....you since spring.
4. We ....already ....this text.
5. ....you ever .... to Bukhara? – Yes, I.........................
6. We............. .... about books during the year at the same time
we............. ....   to speak and write better than before.
7. I ....a new dress. Do you want to see it.
8. I'm looking for Alisher. Where .... he................?

Exercise 7.*Write *for* or *since.

1. Anvar has been ill ....a long time. He has been in hospital ....March.
2. This house is very old. Nobody lives in it. It has been empty .... many years.
3. Rashid has studied at the Tashkent University of Information Technology …..2002.
4. He has been a computer programmer .... 10years.
5. Uzbekistan has been an Independent Republic .... 1991.
6. The tram is late. We have been waiting it .... 20minutes.
7. My uncle has worked at the Ministry of Internal Affairs ..... 15years.

Exercise 8. Speaking. Work in pairs, A and B. You both have information about some websites. Find out if your partner can suggest a website to help you with your problems.
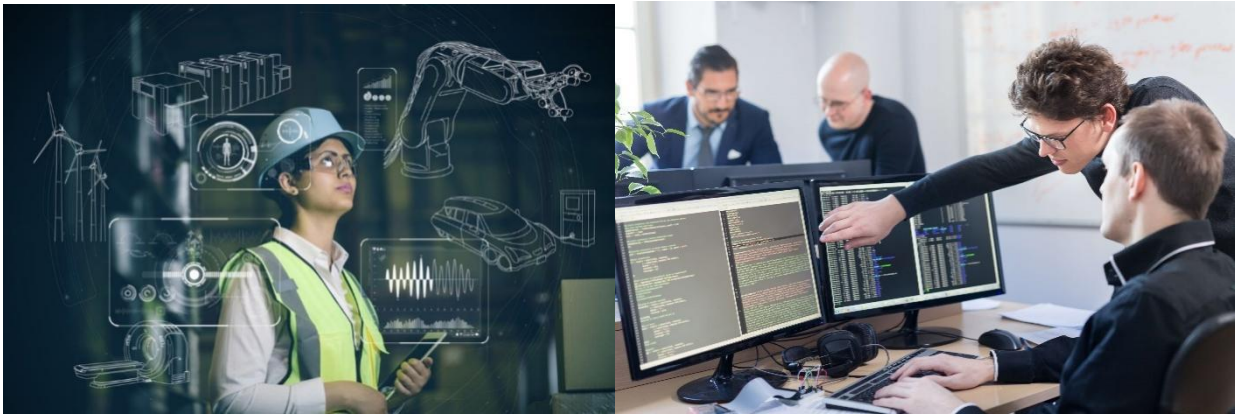
LESSON 13. SOFTWARE ENGINEERING

Pre-reading task

1. **What does Software Engineering mean?**
2. **What is the program counter?**

Try to answer the questions above and then watch this video (https://www.youtube.com/watch?v=Wg0s1XCfISs)and compare with your answer

Software Engineering

Read the text and answer the questions.

OBJECT-ORIENTED PROGRAMMING

One of the principal motivations for using OOP is to handle multimedia applications in which such diverse data types as sound and video can be packaged together into executable modules. Another is writing program code that's more intuitive and reusable; in other words, code that shortens program-development time. Perhaps the key feature of OOP is encapsulation - bundling data and program instructions into modules called 'objects'. Here's an example of how objects work. An icon on a display screen might be called ' Triangles'. When the user selects the Triangles icon - which is an object composed of the properties of triangles (see fig. below) and other data and instructions - a menu might appear on the screen offering several choices. The choices may be (1) create a new triangle and (2) fetch a triangle already in storage. The menu, too, is an object, as are the choices on it. Each time a user selects an object, instructions inside the object are executed with

whatever properties or data the object holds, to get to the next step. For instance, when the user wants to create a triangle, the application might execute a set of instructions that displays several types of triangles - right, equilateral, isosceles, and so on.

Many industry observers feel that the encapsulation feature of OOP is the natural tool for complex applications in which speech and moving images are integrated with text and graphics. With moving images and voice built into the objects themselves, program developers avoid the sticky problem of deciding how each separate type of data is to be integrated and synchronized into a working whole.

A second key feature of OOP is inheritance. This allows OOP developers to define one class of objects, say 'Rectangles', and a specific instance of this class, say 'Squares' (a rectangle with equal sides). Thus, all properties of rectangles - 'Has 4sides' and 'Contains 4 right angles' are the two shown here - are automatically inherited by Squares. Inheritance is a useful property in rapidly processing business data. For instance, consider a business that has a class called 'Employees at the Dearborn Plant' and a specific instance of this class, 'Welders'. If employees at the Dearborn plant are eligible for a specific benefits package, welders automatically qualify for the package. If a welder named John Smith is later relocated from Dearborn to Birmingham, Alabama, where a different benefits package is available, revision is simple.

*Exercise 1.***Find the answers to these questions in the following text.**

1 What advantages of using object-oriented programming are mentioned in the text?
2 What are the three key features of OOP?
3 What multimedia data types are referred to in the text?
4 List the different types of triangle mentioned in the text.
5 What feature avoids the problem of deciding how each separate type of data is integrated and synchronized into a working whole?
6 What specific type of rectangle is named in the text?
7 What common properties of a rectangle are mentioned in the text?
8 What features are made quicker by code reusability?

Exercise 2. You are going to hear an interview between a systems analyst and a hotel owner who wants to introduce a better computer system. What questions do you think the analyst will ask? Make a list; then compare your list with others in your group.

Listen again to find the answers to these questions:

1 What system does the hotelier have at present?

2 What problem is there with the existing system?

3 What form of output does the hotelier want?

4 Who will use the new system?

5 Which members of staff will require the most training?

*Exercise 3.***Work in pairs, A and B. You each have information about some Programming languages. Together decide what would be the most appropriate language to use for each of these 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 web pages for a personal website.

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

6 A programmer working for the US 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 a website.

Student A_____

Student B_____

***Exercise4.*Use a verb from the box to rewrite each sentence in reported speech, beginning as shown. Do not change the meaning.**

advised	apologized	congratulated	invited	offered	~~promised~~
		refused	suggested		

a) 'I'll definitely be at your house before 8.00, Samira,' said Nodir.
   Nodir *promised* Samira *he would be at her house before 8.00*

b) 'Would you like to come to the cinema, Laziz?' asked Oybek.
   Laziz_____ .

c) 'I wouldn't eat too much if I were you, Damir,' said Anora.
   Anora _____ .

d) 'How about going for a walk?' said Nizam.
   Nizam _____ .

e) 'I'm terribly sorry for breaking the window,' said Kamola.
   Kamola _____ .

f) 'Shall I do the washing-up?' said Bobur.
   Bobur _____ .

g) 'Well done, you've passed your driving test,' said Tamila's mother.
   Tamila's mother her _____ .

h) 'No, I won't open my mouth!' said Aziza.
   Aziza _____ .

***Exercise 5.*<u>Underline</u> the correct word or phrase in each sentence.**

1. If *we'd be/<u>we're</u>* late for class, our teacher *<u>will be</u>/was* angry.
2. If we *would live /lived* on another planet, *we'll see/we'd see* the Earth in the sky.
3. If we *take/will take* a taxi, *we arrived/we'll arrive* sooner.
4. If we *won't hurry/don't hurry, we'll be/we'd be* late.
5. If we *were/are* birds, we *would be able to/are able to* fly.
6. If you *don't wear/wouldn't wear* your pullover, *you'll feel/you felt* cold.
7. If I *studied/will study* harder, I *get/would get* better marks.
8. If I *have/had* a motorbike, / *rode/I'd ride* it to school.
9. If you *will lend/ lend* me your bike, *I'll let/I let* you borrow my skateboard.
10. If I *had/have* lots of money, *I gave/I'd give* some to all my friends.

Exercise 6. **Rewrite each comment, beginning as shown. Do not change the meaning.**

a) Supposing you had wings, what would you do?
   What   would you do if you had wings   ?
b) Why don't you leave now? That's what I'd do.
   If   ?
c) Imagine you lived on Mars. How would you feel?
   How   ?
d) I think you should buy a bike. That's what I'd do.
   If   ?
e) Imagine you were rich. What would you do?
   What   ?
f) Supposing Jalol came with us, what would you say?
   What   ?
g) Why don't you take the bus. That's what I'd do.
   If   ?
h) Imagine you owned a robot. What would you do?
   What   ?

Exercise7.**For each question, complete the second sentence so that it means the same as the first, using no more than three words.**

a. Could you not talk so fast, please?
   Could you <u>talk more slowly</u> , please?
b. The last film we saw was more frightening than this one.
   This film   as the last one.
c. Nobody in the class cooks better than Sam.
   Samad is   in the class.
d. You ran a lot faster than I did.
   I didn't run   you.
e. Small cars are more economical than large cars.
   Large cars are small cars.
f. Skating isn't as exciting as skiing.
   Skiing is skating.
g. Rasul doesn't work harder than Alan.
   Rasul works just Richard.
h. Alim isn't as interested in football as his brother is.
   Alim's brother in football than he is.

i. Bobur is the youngest in the family.
Everyone else in the family Bobur.
j. I haven't eaten as much as you.
You've eaten   .

Exercise 8. **Put an apostrophe where necessary.**

1. Tell Ziyoda its Lolas turn, not hers.
   Tell Ziyoda it's Lola's turn, not hers.

2. Malikas younger brothers called Bill.
   _____ .

3. Nodirs sandwiches were tastier than ours.
   _____ .

4. The films beginning is good but its ending is weak.
   _____ .

5. Are these keys yours or hers?
   _____ ?

6. Dildora fills in the patients record cards at the doctors.
   _____ .

7. When its raining, everybodys raincoats get wet.
   _____ .

8. The managers assistant reads all the customers letters.
   _____ .

9. Your sisters dog runs faster than ours.
   _____ .

10. Ones our teachers car and the others a visitors.
    _____ .

.

LESSON 14. IT SECURITY AND SAFETY

1. **Which one of the following could lead to the spread of a malicious program?**
2. **Which one of the following describes what you should do if you receive a chain letter email?**
3. **Is there a difference between IT security and cyber security?**

Try to answer the questions above and then watch [this video](https://www.youtube.com.) (https://www.youtube.com.)and compare with your answer

IT security and safety

Many people assume they are just alternating terms for the having a form of security on electronic devices. Others believe that they cannot work as separate entities, that they become useless if not combined.

Cyber security and IT security do share similarities; they do also create maximum protection and efficiency when combined. Despite similarities, there are key differences that distinguish the two.

IT security

IT security can be referred to as information security or data security. IT security is utilized to ensure the protection and safety of all information created and available to an organization. The security process is inclusive of all electronics along with physical data.

IT security allows processes and procedures to be in place to ensure that all information is protected. This prevents unauthorized access, misuse, destruction or disruption of data.

The primary purpose is to ensure that information remains of high integrity, confidential and accessible. This is essential, to ensure that the quality of information is not diminished, along with ensuring that personal or valuable information remains confidential and only available to those authorized.

Physical data is often easier to protect in locked filing cabinets, but electronic data requires greater protection

IT security incorporates various forms of technology and methods to protect all information and information systems. Physical data is often easier to protect in locked filing cabinets, but electronic data requires greater protection.

This can include passwords to access specific files, ensuring all personnel use password protection for all electronic devices along with establishing secure individual and company networks.

IT security procedures allow data to be protected while ensuring the quality and integrity of the information. Incorporating security measures for information and information systems reduces the risk of unauthorized access or misuse of confidential information.

Cyber security

Cyber security's primary purpose is to protect electronic data from unauthorized access gained through cyberspace. Unauthorized access can be referred to as cyber-attacks; they are any form of unauthorized access to a company's data that corrupts or damages the integrity of the data.

Cyber security ensures that all confidential, valuable or vulnerable information cannot be downloaded, shared or utilized by an unknown third party.

Cyber security limits and prevents this threat or attack of unauthorized access to a company's information. It allows the necessary precautions to be in place to ensure the safety of all electronic data. Cyber threats go beyond securing valuable data, they can influence operations, inhibit actions and have control over networks.

Hacking or corruption of data not only affects the quality of the data but can be expensive and time-consuming to correct. There are also the risks of what a third party can achieve by holding this information, especially if it is financial or highly confidential. Hacking and unauthorized access of networks can occur for many reasons. Cyber threats include downloading files from websites or apps that contain viruses. Having weak or easily guessed passwords or storing data in one place, such as the cloud without backups.

IT and cyber security go hand in hand; both are essential in protecting the information of your company. Both security systems should be incorporated into your organization to ensure that all channels being used are secure and protected against any threat, corruption or misuse. To summarize, below is a table highlighting some key differences between the two security systems.

🎧 *Exercise 1.* **Listen to the typescript and define whether the statements are True or False.**

1. Only hackers may steal someone else's computer. True/False

2. Hackers can't change financial date in others' computers and use it Illegally. True/False

3. Serious financial fraud has been increased because of online shopping. True/False

4. Fraudsters want to develop their usual techniques. True/False

5. Many computer users aren't anxious about their systems not being affected by computer viruses. True/False

6. All computer users must be guide. True/False

🎧 *Exercise 2.* **Listen again and circle the most suitable answer from the three possible answers provided.**

1.People who gain unauthorized access to someone else's computer are called
a. hackers
b. experts
c. spies

2.The increase of fraud through the computer is partly due to
a. crooked techniques
b. modern practices
c. internet purchases

3. Computer files can be damaged by mischief makers using
a. corrupted files
b. computer programs
c. computer viruses

4. According to the author, all computer users must
a. be up-to-date
b. be careful
c. be informed

Exercise 3.Underline the correct word or phrase in each sentence.

    a) I met Tina *a day*/ <u>*one day*</u> last week.
    b) *In these days/Nowadays* everyone seems to watch too much television.
    c) *This morning/The morning* I was busy in the garden.
    d) We have to finish this project *by/until* the end of the week.
e)   Bye. I'll see you the day after *tomorrow/the next day*
f)   *During/While* the film I remembered where I'd left my keys.
    g) John played tennis, and *after/afterwards* had a shower.
    h) Helen's birthday is *in/on* January 10th.

Exercise 4. **Complete the second sentence so that it has a similar meaning to the first sentence.**

a)We had lunch, and afterwards we went for a coffee.
After <u>*we had/had had lunch, we went for a coffee*</u>   .
b)Jill is never late for lessons.
Jill is always………………………………………………………………….
c)I won't leave before 8.00.
I'll be here   .
d)I've been living here for three months.
I started living here.
e)When we met for lunch it was 12.00.
We met for lunch .
f)What do you do in your country on January 1st?
What do you do in your country on the ?
g)I'll see you not tomorrow but the next day.
I'll see you the .
h)It's 10.00 and I've been waiting here since ~.00.
I've been waiting here hours.

Exercise 5.Complete each sentence with one suitable word.

    a) Would you like to go out<u>*on*</u> my birthday?
    b) Rita moved to this town ____four years .
    c) I won't phone Akbar now. I'll phone him____ .
    d) I woke up twice___ the night.
    e) _____ midnight the frog turned into a prince.
    f) People in cities used to take___ the bus, but most use their cars.
    g) Luckily Rachel arrived just time to catch the train.

h) We felt fine in the restaurant, but we both felt ill .

Exercise 6 .**Put one word in each space. Put a dash (-) if the space should be blank.**

a) My trousers need ironing. Have you got *an* iron?
b) Could you go to the baker's and buy… loaf, please?
c) I'd like information about trains to Paris.
d) Latif has very good health.
e) The war ended years ago.
f) Vasila bought paper and read it on the bus.
g) Could you give me advice, please?

*Exercise 7.***Choose the best alternative, 1 or 2, to complete each sentence.**

a) The fire is going to go out. Can you go and get   *some wood*
1. a wood   2. some wood
b) money all over the floor!
1 There was   2 There were
c) Lemonade? Sorry, no, we haven't got   ....
1 some   2 any
d) Peter keeps   at the bottom of his garden.
1 a chicken   2 some chicken
e) The information we were given   ....:
1 were very useful   2 was very useful
f) people were there on the bus?............................
1 How many   2 How much
g) Look at Rita's hair. ………………… !
1 It's green   2 They're green
h) I've called the police and   ....:
1 they're on their way   2 it's on its way
i)The assembly hall was full of ....:
1 a noise   2 noise

COMPUTER QUIZ.

1. In the 20th century its available to control the TV or other electronics with
   _____ on your hand.
   a. remote control
   b. button
   c. headphones
   d. screen
   e. The new system is more productive and _____.
   f. less expensive
   g. less dangerously
   h. cheap
   i. costing less
2. There is a place ____ 6 stamps ____ each page ____ Nick's stamp book.
   a. or/on/of
   b. to/in/in
   c. for/at/of
   d. at/on/for
3. Find out the synonym of underlined word.
   Raymond discovered several errors in his test.
   a. mistakes
   b. corrections
   c. answers
   d. numbers
4. . I forgot_____ off the lights again.
   a. to switch
   b. switching
   c. switched
   d. to have switched
5. Modern technology has brought about enormous improvements in
   communications and yet many people are still very worried _____ using the
   latest computer technology.
   a. about
   b. for
   c. at
   d. with as
6. Recycling ____ the process of collecting used materials and manufacturing
   them into new products.
   a. is
   b. which is
   c. which is done by
   d. which has
7. What do we call someone whose job is to repair taps and baths?
   a. plumber

b. tailor

c. carpenter

d. bricklayer

8. The transistor _____ in 1948. As a result of this, both the size and the cost of electronic equipment_____ greatly reduced.

    a. was invented / have been

    b. had been invented / has been

    c. was invented / have had

    d. had invented / will be

9. People _____ like the movie better if the dialogues were shorter.

    a. would

    b. can

    c. would be able

    d. had

10. The crops in this field have all been _____ with insecticide.

    a. disinfected

    b. sprayed

    c. washed

    d. rinsed

    e. cleaned

11. Find out the synonym of underlined word.

The alien spacecraft hovered over the corn field for a while, and then it <u>vanished</u>, never to be sighted again.

    a. disappeared

    b. landed

    c. attacked

    d. rose

    e. engulfed

12. We call such things as earthquakes and floods "natural disaster." If these were predictable, the damage they cause could be much reduced. As it is, some remote area is often hit. _____ And relief, when it comes, often comes too late.

    a. It then takes days to get adequate help out.

    b. Last year there was an earthquake in the East.

    c. Blood was urgently needed.

    d. People usually give very generously in such emergencies.

    e. Many foreign countries also send aid.

13. To go and register at a hotel is the same as to _____ into a hotel.

    a. check

    b. look

    c. tune

    d. back

14. How easy it is to use the telephone! Nowadays we usually don't need the _____ to connect us to friends in other countries.

    a. dialer

     b. directory
     c. engager
     d. operator

15. Find out the synonym of underlined word. Stock-market analysts <u>monitor</u> a great variety of financial indicators.
     a. keep track of
     b. come up with
     c. look into
     d. take charge of
     e. over-rate

16. George King ____ filter-tipped cigarettes, but now he smokes cigars.
     a. was accustomed to smoking
     b. is used to smoking
     c. was used to smoke
     d. is accustomed to smoking

17. We can advise you if you think someone is trying to ____ your phone or ____ your private conversations at home or in the office with hidden microphones.
     a. tap, bug
     b. pit, ask
     c. tip, stop
     d. pat, cut

18. Well, the machines themselves are called the ____ and the programs that you feed into them are called the ____.
     a. hardware, software
     b. software, hardware
     c. driver, adapter
     d. printer, scanner

19. _____ require years of hard work to develop a successful software.
     a. It will
     b. That will
     c. Will it
     d. The company

20. Find out the synonym of underlined word. The department chairmen refused to <u>authorize</u> the requisition.
     a. grant
     b. request
     c. transfer
     d. project

21. She _____ and fell from the top of the stairs to the bottom.
     a. slipped
     b. sloped
     c. spilt
     d. split

22. When _____ possible to get some more information?

a. Would it be
b. Had it
c. Has it
d. Would be it

23. Mobile phones, televisions, and radios are a means of _____.
    a. communication
    b. transport
    c. media
    d. civilization

24. There's a film _____ channel 4.
    a. on
    b. at
    c. in
    d. by

25. Tides are caused by the gravitational <u>influence</u> of the moon on ocean level.
    a. impact
    b. evolution
    c. coercion
    d. uninvolvement
    e. levitation

26. Find out the synonym of underlined word. Modern architecture seems <u>incompatible</u> in a city rich in history.
    a. Incongruous
    b. unlikely
    c. unwitting
    d. unkempt
    e. unsearchable

27. Nowadays media has a huge influence on the _____.
    a. society
    b. neighbors
    c. printing pressing
    d. Greeks

28. "If I were you, I'd open a bank account because interest is high now" I told her. I suggested that she _____ a saving account.
    a. open
    b. would open
    c. will open
    d. had opened

29. Water, _____ , is also one of the most abundant compounds on earth.
    a. one of the most critical elements for human survival
    b. is necessary for human survival
    c. it is necessary for human survival
    d. for human survival

30. _____ cafeteria is located to _____ left of _____ Faculty of Engineering.

a. The / the / the
b. A / the / _
c. A / _ / _
d. The / _ / the

31. The place where people go to vote in an election is called a _____ and the day of the election is often known as _____ day.
    a. polling station, polling
    b. campaign, vote
    c. ballot box, election
    d. polling, predict

32. I think, today the British television program "The Weakest Link" is ___ popular of all the TV programs.
    a. the most
    b. more
    c. much
    d. –
    e. most

33. What is jitter?
    a. slight irregular movement, variation, or unsteadiness, esp. in an electrical signal or electronic device
    b. A byte stores an 8-bit unsigned number, from 0 to 255.
    c. The techniques of detecting and corresponding errors (or bugs) which may occur in programs.
    d. An intersection of a column and a row in a spreadsheet.

34. A _____ is a cell in a mobile phone network served by a low power cellular base station (tower), covering a limited area such as a mall, a hotel, or a transportation hub.
    a. Microcell
    b. CU-SeeMe
    c. Cyberspace
    d. E-pal

35. An electronic circuit (or computer program in a software-defined radio) that is used to recover the information content from the modulated carrier wave.
    a. demodulation
    b. modulation
    c. normalization
    d. quantization

36. What is video decoder?
    a. converts base-band analog video to digital form
    b. converts analog audio to digital form
    c. digital circuits such as 1-of-N and seven-segment decoders
    d. an electronic circuit that converts computer instructions into CPU control signals

37. A _____ communication system is a point-to-point system composed of two connected parties or devices that can communicate with one another in both directions.
    a. duplex
    b. processor
    c. packet
    d. port
38. What is byte?
    a. a unit of digital information that most commonly consists of eight bits
    b. software running on your PC, used to connect and obtain data from a server
    c. the width of the screen divided by its height.
    d. a code made of just to numbers (0 and 1)
39. The difference in electric potential energy between two points per unit electric charge.
    a. voltage
    b. resistance
    c. phase
    d. regenerator
40. A weakness which allows an attacker to reduce a system's information assurance.
    a. vulnerability
    b. cyber culture
    c. command
    d. cyborg
41. What is electrical resistance?
    a. the measure of the degree to which a conductor opposes an electric current through that conductor
    b. software running on your PC, used to connect and obtain data from a server
    c. an electronic circuit that converts computer instructions into CPU control signals
    d. slight irregular movement, variation, or unsteadiness, esp. in an electrical signal or electronic device
42. The position of a point in time (an instant) on a waveform cycle.
    a. phase
    b. regenerator
    c. resistance
    d. voltage
43. What is printed circuit board?
    a. mechanically supports and electrically connects electronic components using conductive tracks, pads and other features etched from copper sheets laminated onto a non-conductive substrate
    b. describes discarded electrical or electronic devices

c. the technique of manufacturing a material in multiple layers, so that the composite material achieves improved strength, stability, sound insulation, appearance or other properties from the use of differing materials

d. slight irregular movement, variation, or unsteadiness, esp. in an electrical signal or electronic device

44. An electronic device that receives a signal and retransmits it.
    a. repeater
    b. diode
    c. portal
    d. switch

45. ___ Zener diode allows current ___ flow from its anode ___ its cathode like a normal semiconductor diode, but it also permits current to flow in the reverse direction when its "Zener voltage" ___ reached.
    a. A/to/to/is
    b. The/-/to/-
    c. A/to/-/are
    d. The/-/-/is

46. LEDs _____ new displays and sensors to be developed, while their high switching rates are also used in advanced communications technology.
    a. have allowed
    b. are allowing
    c. should allowed
    d. had allow

47. The level of access granted in computer security.
    a. privilege
    b. gateway
    c. transceiver
    d. shortcut

48. What is hypertext?
    a. text that contains links to other documents
    b. slight irregular movement, variation, or unsteadiness, esp. in an electrical signal or electronic device
    c. describes discarded electrical or electronic devices
    d. an electronic circuit that converts computer instructions into CPU control signals

49. A _____ is a device comprising both a transmitter and a receiver that are combined and share common circuitry or a single housing. When no circuitry is common between transmit and receive functions, the device is a transmitter-receiver.
    a. transceiver
    b. shortcut
    c. diode
    d. switch

50. Programs that let you do specific tasks, such as word processing, database management or financial planning.
    a. application software
    b. transceiver
    c. hardware
    d. gateway
51. A special program that converts a source program (written in a high level language) into object code (machine code) in one go.
    a. compiler
    b. gateway
    c. archiver
    d. browser
52. _____ makes it fun and easy to reduce file size, open RAR, Zip, 7Zip and other archive files and split large files.
    a. Archiver
    b. Browser
    c. Compiler
    d. Hardware
53. A program designed to fetch and display web pages on the Internet.
    a. browser
    b. archiver
    c. compiler
    d. transceiver
54. A device that stores optically transmitted data.
    a. optical buffer
    b. transceiver
    c. repeater
    d. diode
55. Cache memory is a buffer, smaller and faster than _____, used to hold a copy of instructions and data in main storage that are likely to be needed next by the _____ and that have been obtained automatically from main storage.
    a. main storage, processor
    b. processor, main storage
    c. main memory, RAM
    d. RAM, hardware
56. A computer server which controls the traffic between the Internet and a private network.
    a. proxy
    b. hardware
    c. peer-to-peer
    d. IBM
57. The process, or result of the process, of varying a characteristic of a carrier, in accordance with an information-bearing signal.
    a. modulation

     b. demodulation

     c. synchronization

     d. globalization

58. A state of simultaneous occurrences of significant instants among two or more signals.

     a. synchronization

     b. demodulation

     c. modulation

     d. globalization

59. A story in the Washington Post said "20 years ago globalization _____ as a strategy that would raise all boats in poor and rich countries alike.

     a. was pitched

     b. will pitch

     c. pitch

     d. had pitched

60. _____ is any of the electromagnetic wave frequencies that lie in the range extending from around 3 kHz to 300 GHz, which include those frequencies used for communications or radar signals.

     a. Radio frequency

     b. Synchronization

     c. Demodulation

     d. Transceiver

KEYS:

1. c	44.a
2. c	45.d
3. a	46.c
4. c	47.b
5. a	48.a
6. b	49.b
7. d	50.d
8. d	51.c
9. a	52.c
10.a	53.a
11.e	54.c
12.b	55.d
13.a	56.b
14.c	57.a
15.a	58.b
16.c	59.c
17.d	
18.d	
19.a	
20.a	
21.c	
22.a	
23.a	
24.a	
25.d	
26.e	
27.c	
28.b	
29.c	
30.b	
31.c	
32.d	
33.c	
34.a	
35.b	
36.d	
37.d	
38.c	
39.a	
40.b	
41.d	
42.b	
43.a	

GLOSSARY
of computing terms and abbreviations

A

Abandon to leave someone when you should stay with them and look after them.

ADSI modem a device used to connect one or more computers to an ADSL phone line.

Adware Software device to display advertisements.

Android a robot that resembles a human.

Animations images made up of a series of independent pictures put together in sequence to look like moving pictures.

Applet a small Java application, usually designed to run automatically within a web page.

Attachment a file that has been included as part of an email message.

Athion a processor manufactured by AMD.

Abridge to produce a shorter form of
a book, play etc by making cuts in
the original.

B

Binary/ˈbaɪnəri/based on the binary system.

Backupto copy files from one disk to another.

Backbone High-speed lines or connections that form the major access pathways within the Internet.

Back ground the type of family,
social position, or culture that someone
comes from.

Bar code reader a specialized scanner used to read price labels in shops.

Basic a high level programming language developed in the 1960's.

Binary code a code made of just two numbers (0-1).

Blog a user-generated website where people express their opinions.

Blogger a person who writes on a blog.

Bluetooth a wireless technology that allows handhelds, mobile phones and other peripheral devices to communicate over short distances.

Browser a program designed to fetch and display web pages on the Internet.

C

C++ an object-oriented version of C, widely used to develop enterprise and commercial applications.

Cable modem a modem designed to operate through a cable TV line.

Call center a large office in which a company's employees provide information to its customers, or sell or advertise its goods or services by telephone.

Cable connector /ˈkeɪb(ə)l/thick wire
covered with plastic that is used for
carrying electricity or electronic signals.

Cache /kæʃ/a quantity of things that have been hidden, especially weapons

call center a large office in which a company's employees provide information to its customers, or sell or advertise its goods by telephone.

CD-ROM a "read only" CD, meaning you cannot change data stored on it.

CD-RW CD that allows audio or data to be written, read, erased and rewritten.

Cell /sel/ an intersection of a column and a row in a spreadsheet.

Chat /tʃæt/ a real time interactive conversation on the Internet.

Chip /tʃɪp/ a tiny piece of silicon containing complex electronic circuits

Click /klɪk/ to press and release the left button on a mouse.

Client program Software running on your PC, used to connect and obtain data from a server.

CAL /kɔːl/ Conversational Algebraic Language

Calculate /ˈkælkjʊleɪt/ to discover a number or amount using mathematics or with a piece of equipment such as a calculator.

Cybercrime /ˈsaɪbə(r)ˌkraɪm/ crimes perpetrated over the Net.

D

Data /ˈdɑːtə/ information in an electronic form that can be stored by computer.

Data processing The performing of operations on data to obtain information or solution to a problem.

Database /ˈdɑːtəˌbeɪs/ a file of structured data.

Debugger /diːˈbʌgə(r)/ A program used to test and debug other programs.

Desktop PC /ˈdeskˌtɒp/ A computer designed to be placed on a desk used as a home computer.

Download /ˌdaʊnˈləʊd/ to move information to your computer from another computer system or the internet.

Digital Describes a system that performs operations by means of digits, represented as binary numbers (1s and 0s).

E

Email /ˈiːmeɪl/ a system for sending messages from one computer to another.

e-commerce the activity of buying and selling goods on the internet.

e-card A digital greeting card.

edit /ˈedɪt/ To make changes and corrections to the text and graphics.

e-learning Instruction via computers.

Eraser /ɪˈreɪzə(r)/ A tool used to delete the part of the picture you drag it over.

excel /ɪkˈsel/ A spreadsheet program from Microsoft.

execute /ˈeksɪˌkjuːt/ To perform an action, as in executing a program or a command.

Expansion card a printed circuit board.

F

Fax /fæks/ a piece of equipment a piece ofequipment for sending and receiving copiesof documents in electronic form.

Field /fiːld/ a unit of Information in a record, in a database, information is entered via fields.

File /faɪl/ a collection of records in database.

Filter /ˈfɪltə(r)/ a special effect that can be applied to pictures.

Flash /flæʃ/ the Adobe Flashy player.

Flash drive a USB storage device, small enough to fit on a key ring, used to store and transport computer data.

Flash memory a type of non volatile memory that can be erased and reprogrammed.

Floppy disc a disc made of flexible plastic material upon which data is stored on magnetic tracks.

Format the layout the document, including page numbers.

G

Gadget /ˈgædʒɪt/a small tool or piece of equipment that does something useful or impressive.

Gallery /ˈgæləri/ a public building where you can look at paintings and other works of art.

Galley /ˈgæli/ the kitchen on a boat or plane.

Game controller a device used to control video games.

Game platform an electronic device on which video games are played.

Gigabyte /ˈgɪgəˌbaɪt/ a unit for measuring computer information, equal to 1,024 megabytes.

gigahertz/ˈgɪgəˌhɜː(r)ts/ a unit of one thousand million hertz.

Google /ˈguːg(ə)l/ to search for something on the internet using the Google™ search engine.

Graphics tablet an input device which allows the user to enter drawings and sketches into a computer.

H

Habit /ˈhæbɪt/ something that you do often or regularly, often without thinking aboutit.

Hacker /ˈhækə(r)/someone who uses a computer to connect to other people's computers secretly and often illegally, so that they can find or change information.

Handled game a game played on portable gaming devices, as Sony PSP.

Hard disc see hard drive

Hard drive a magnetic storage device that reads and writes data on metal disc inside a sealed case.

Hardware /ˈhɑːd(r)ˌweə(r)/ computer equipment. Computer programs are called software.

Header / ˈhedə(r)/ Customized text printed in the top margin of a document.

Hertz /hɜː(r)ts/ a unit for measuring the frequency of sound waves and radio waves.

Home page the first page on a web site, that usually contains links to other pages.

Host /həʊst/ a computer containing data or programs that other computers can access via a network or modem.

HTML the language used to create hypertext document.

Hyperlink /ˈhaɪpə(r)ˌlɪŋk/ a text, image or button that, when clicked, takes you to other destinations on the web.

Hypertext /ˈhaɪpə(r)ˌtekst/ text that contains links to other documents.

I

Icon /ˈaɪkɒn/a picture representing an object, such as a document, program, folder or hard disc.

ICT system a system that uses information and communications technologies.

IM server a central system that provides presence information about online users.

iMAC a desktop computer from Apple, intended for home, school, small offices.

Image setter a professional printer that generates high-resolution output on paper.

Input the process of transferring information into the memory from a peripheral unit.

Intel the company that design and produces the processors used in most PCs.

Interface channels and control circuits which provide a connection between the CPU and the peripherals.

Internet /ˈɪntə(r)ˌnet/millions of computers linked together in a network that allows people all over the world to exchange information.

J

Java /ˈdʒɑːvə/ a computer programming language that allows computer software to be used on any kind of computer, and allows all computers to communicate with each other, for example through the internet.

Joystick /ˈdʒɔɪˌstɪk/an upright handle that you use to control objects on the screen in a computer game.

JPEG/ˈdʒeɪˌpeg/ a method of reducing the size of computer files that contain images so that they can be sent quickly by email or over the internet.

jagged (image) /ˈdʒægɪd/ a jagged surface or edge has a lot of rough pointed parts that make it look broken or torn.

K

Keep/kiːp/ to stay in a state, position, or place without changing or moving.

Kernel/ˈkɜː(r)n(ə)l/ the soft part inside a nut or a seed.

Kerning the process of adjusting the spaces between letters to achieve even, consistent letter spacing.

Keyboard /ˈkiːˌbɔː(r)d/ a piece of computer equipment with keys on it, used for putting information into a computer.

Key/kiː/ a small piece of metal used for opening or locking a door or a container, or for starting the engine of a vehicle.

Keystroke the process of pressing and releasing a key on a keyboard.

Keyword(n)a word used to categorize documents or records in a file. Keywords can be used by a search engine to find relevant links on the Internet.

kHz abbreviation for kilohertz. A unit of frequency equal to 1000 cycles every second.

knowledge base a collection of information that can be easily modified, revised and manipulated to enable the user to solve particular problems.

killer application an application program that is particularly useful and popular, making a computer system very successful.

L

LAN /læn/acronym for local area network.

Language processor /ˈlæŋgwɪdʒ/ /ˈprəʊˌsesə(r)/ software that performs computer language translation.

Laptop /ˈlæpˌtɒp/the largest type of portable computer.

Load /ləʊd/copy a program from a storage device into the computer's memory.

Local area network computers connected together over a small area such as a company department.

Log /lɒg/to record the time that an event happened.

Log on /lɒg/ /on/ to connect to a network system account normally using a password.

Logic circuit /ˈlɒdʒɪk/ /ˈsɜː(r)kɪt/ a digital electronic circuit that compares two or more inputs and gives an output according to a particular rule of logic.

LCD /ˌel siː ˈdiː/ abbreviation for liquid crystal display. An electronic display device that uses liquid crystal cells to control the reflection of light.

Link /lɪŋk/a common term used for a hyperlink, i. e. the connection of a webpage to another webpage or file

Lenux a clone of the Unix operating system created by Linus. Torvalds for use on personal computers.

Library /ˈlaɪbrəri/a set of programmed functions that are made available for use by any program.

Line driver

Laser printer /ˈleɪzə(r)//ˈprɪntə(r)/a printer that prints using toner powder and laser light on a photosensitive drum.

Loyalty card /ˈlɔɪəlti//kɑː(r)d/an electronic card that gives the owner discount on purchases at a particular store depending on how much they spend.

M

MAC /mæk/acronym for message-authentication code.

Machine code /məˈʃiːn/ /kəʊd/a computer language that consists entirely of a combination of 1s and Os.

Machine intelligence another name for artificial intelligence

Mac OSthe family of operating systems used on the Apple Macintosh range of Computers.

Macro virus /ˈmækrəʊ/ /ˈvaɪrəs/virus program in the form of a macro program

Mail client /meɪl//ˈklaɪənt/ an email program that connects to an email server to send and receive email.

Magnetic tape /mægˈnetɪk//teɪp/a magnetic storage medium in the form of a thin plastic ribbon wound on a reel or a cassette. It is commonly used for backing up data.

Mail /meɪl/letters, parcels etc that are delivered by the post office every day. The usual British word is post.

Mailbox /meɪl//bɒks/ a folder used by an email server to store a user's emails

Main memory the electronic memory that holds the programs and data being used.

Mainframe (computer)/ˈmeɪnˌfreɪm/the largest and most powerful type of computer. It is operated by a team of professionals.

Megabyte /ˈmegəˌbaɪt/a unit of storage capacity equal to 1 048 576 bytes.

Memory/ˈmem(ə)ri/the electronic part of a computer system that is used for temporarily storing the programs and data that are being used by the processor.

Microchip /ˈmaɪkrəʊˌtʃɪp/an electronic integrated circuit in a small package.

Microsoft the common name for the Microsoft Corporation. The company founded by Bill Gates that developed the MS-DOS and Windows operating systems and a variety of software commonly used on desktop computers.

Microwave /ˈmaɪkrəˌweɪv/ a high-frequency electromagnetic wave used in data communication systems.

Modem /ˈməʊdem/ short for modulator demodulator. An electronic device that converts signals to enable a computer to be connected to an ordinary telephone line.

Monitor /ˈmɒnɪtə(r)/ the main output device used to display the output from a computer on a screen. See VDU.

Motherboard /ˈmʌðə(r)ˌbɔː(r)d/ the main electronic circuit board inside a computer that holds and connects together all the main electronic components.

Mouse /maʊs/ 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 rolled on a flat surface.

Macro /ˈmækrəʊ/ a short computer program containing a series of actions that you can start by pressing a particular key or typing a particular command.

N

Natural- language programming
the process of writing programs using a computer language that is very similar to natural human language.

Network /ˈnetˌwɜː(r)k/ a combination of a number of computers and peripheral devices connected together.

Network layer /ˈnetˌwɜː(r)k//ˈleɪə(r)/the part of a network communications system that forms the data into packets and selects a route for the message.

Network operating system an operating system that is used to administer and control a network.

Net /net/the common name for the Internet.

Notebook /ˈnəʊtˌbʊk/ a portable computer that is about the same size as a piece of writing paper.

Numeric key board the section of a computer keyboard that includes keys for

entering numerical digits (0-9) and mathematical operators (+-,/)

Newsgroup /ˈnjuːzˌgruːp/ an Internet discussion group that uses a restricted area on a server computer to display messages about a common interest.

O

Object /ˈɒbdʒekt/ an object- oriented programming module that has its own properties created by bundling data and program instructions together.

OCR /ˌəʊ siː ˈɑː(r)/ abbreviation for optical character recognition.

(Microsoft) Office a widely-used application package developed by the Microsoft Corporation that includes programs used in a typical office.

Office application a computer program or set of programs that are used in a typical office, e.g. a word processor spreadsheet and database.

Offline /ˌɒfˈlaɪn/ disconnected from a computer system or the Internet.

Online /ˈɒnlaɪn/ connected to a computer system or the Internet.

OOP acronym for object-oriented programming

Open source part of a system of software development where any one is free to take a copy of the source code and extend develop or fix bugs in it.

Optical media data storage material that is written to or read from using laser light.

OS/ˌəʊ ˈes/ abbreviation for operating system.

Outlook Express a free graphical interface email program integrated into the Internet Explorer browser developed by the Microsoft Corporation.

Output/ˈaʊtˌpʊt/ the processed data or signals that come out of a computer system.

P

Software Package /ˈsɒf(t)ˌweə(r)/ /ˈpækɪdʒ/ an application program or collection of programs that can be used in different ways.

Packet /ˈpækɪt/ a fixed size unit of data prepared for transmission across a network.

Pager /ˈpeɪdʒə(r)/ a small radio receiver which be epstoaler the wearer of messages or telephone calls.

Password /ˈpɑːsˌwɜː(r)d/ a secret code used to control access to a net work system.

Paste /peɪst/ to insert a copy of data held in a computer's memory data chosen position

Patch /pætʃ/ to insert programming code into a computer program to fix or modify it in some way

Payload/ˈpeɪˌləʊd/ the part of a virus that carries out the threat such as displaying a slogan on the screen

PC abbreviation for an IBM type of personal computer

Photoshop an image-editing computer program produced by Adobe Systems Inc.

Physical layer the part of a network communications system that encodes the packets into the medium that will carry them and sends the packets along that medium.

PIN /pɪn/an acronym for personal identification number. A unique number used by electronic systems to indicate who a person is.

Platform /ˈplætˌfɔː(r)m/ specifically for it, e.g. PC, Apple Mac, etc

PlayStation an arrow-shaped cursor

Pentium a family of processors produced by the Intel Corporation.

Peripheral /pəˈrɪf(ə)rəl/ a piece of equipment that is connected to the central processing unit of a computer system

Port /pɔː(r)t/a device that connects to a portable computer to make it easier to

Portable /ˈpɔː(r)təb(ə)l/)something that is portable is easy to carry or move, so that you can use it

Printer /ˈprɪntə(r)/in different places a piece of equipment used for printing docu ments that you have created on a computer.

Programming /ˈprəʊˌɡræmɪŋ/ the processes of writing a computer program using a computer language

Programming language a computer language used for writing computer programs

Protocol /ˈprəʊtəkɒl/a set of agreed standards

Public domain a condition in which there is no copyright on a work such as a computer program allowing it to be freely copied and used.

Q

qualifier /ˈkwɒlɪˌfaɪə(r)/ a game that is played to decide which team or player may enter a competition quantitative.

R

Radar /ˈreɪdɑː(r)/ a system of using there flection of radio waves to detect an object and determine its location

Radio button one of a set of mutually exclusive options in a dialog box, i. e. the user can only select one, causing the others to be deselected.

Resident /ˈrezɪd(ə)nt/ is kept in the computer's memory.

Resistor /rɪˈzɪstə(r)/ an electronic component that reduces the flow of current in a circuit.

Ram /ræm/ acronym for random access memory.

Raw data /rɔː//ˈdeɪtə/ data that has not been processed.

RDRAM abbreviation for Rambus dynamic random access memory. A new RAM technology capable of very high-speed transfer of data.

Real-time the immediate processing of computer data enabling interactive applications.

Reboot /ˌriːˈbuːt/ to restart a computer operating system.

Record /ˈrekɔː(r)d/ a section of a data base made up of related data base fields.

Robot /ˈrəʊbɒt/ a mechanical device controlled by a computer.

Robotics /rəʊˈbɒtɪks/ the study of robot systems.

S

Save /seɪv/ to make it possible for someone or something to avoid danger, harm, injury

Scan /skæn/ to look at something very carefully, because you hope or expect to see a particular person or thing.

Scanner /ˈskænə(r)/ a piece of equipment That is used for copying a picture or document into a computer.

Scroll /skrəʊl/ to move through displayed information smoothly on the screen either horizontally or vertically.

Server /ˈsɜː(r)və(r)/ a computer that controls or performs a particular job forall the computers in a network.

Shareware /ˈʃeə(r)ˌweə(r)/ computer softwarethat you can get on the internet and use for a period of timebefore
paying for it.

Shell /ʃel/ a graphical user interface for an operating system.

Simulation /ˌsɪmjʊˈleɪʃ(ə)n/ a programmed virtual environment that imitates areal or planned system.

Site /saɪt/ an area of land where something is being built or could be built.

Smart device /smɑː(r)t/ /dɪˈvaɪs/ a device that contains an embedded processor and memory.

Smart phone /smɑː(r)t//fəʊn/ a telephone that contains an embedded processor and memory and can process data.

SMS /ˌes em ˈes/ short message service: a method of sending a text message to
a mobile phone.

Spam /spæm/ unsolicited email sent to large numbers of people indiscriminately usually advertising or trying to sell a product.

T

Tab /tæb/ a dialog box component that is used to switch between different sets of data

Tag /tæg/ a label used in a markup language such as HTML. It is attached to a piece of

text to mark the start or the end of a particular function.

Tape /teɪp/magnetic storage medium commonly used for storing backup files.

Taskbar /ˈtɑːskˌbɑː(r)/a Microsoft Windows desktop component that indicates what programs are currently being used and allows the user to switch between them.

TCP /ˌtiː siː ˌpiː aɪ ˈpiː/abbreviation for transfer control protocol.

telnet /ˈtelnet/ a piece of software that allows remote access to a computer system.

Terminal /ˈtɜː(r)mɪn(ə)l/a large building where train, boat, or bus services start and finish.

text editor a computer program for editing basic data or program text, i. e. like a basic word processor.

Traffic /ˈtræfɪk/ the vehicles that are travelling in an area at a particular time.

Transistor /trænˈzɪstə(r)/ an object that controls the flow of electricity inside a piec e of electronic equipment such as a radio or television.

Typesetting /ˈtaɪpˌsetɪŋ/ the job of arranging words and letters for printing.

U

Undo /ʌnˈduː/to restore a file to the condition it was in before the last change was made.

UDP abbreviation for user datagram protocol.

Uniform resource locator the unique address of a webpage.

Unix /ˈjuːnɪks/ a computer operating system that can be used by several people at the same time.

Update /ʌpˈdeɪt/ to add the most recent information to something such as a book, document, program or machine.

User/ˈjuːzə(r)/ someone who uses something such as a service or a piece of equipment.

V

VB abbreviation for video cassette Recorder.

VDU abbreviation for visual display unit. Another name for a computer monitor.

Varity to check for accuracy.

Video /ˈvɪdiəʊ/ the recording and broad casting of moving images and sound.

Video memory /ˈvɪdiəʊ//ˈmem(ə)ri/the memory used to store graphics data on a graphics card.

Voice /vɔɪs/ the sounds that someone makes when they speak.

Voice clip /vɔɪs//klɪp/a short sound recording of the human voice.

Voice recognition /vɔɪs/a system that can respond to words spoken by a human being

VR abbreviation for virtual reality.

W

Wallpaper /ˈwɔːlˌpeɪpə(r)/ the background colour or pattern that you can put on your computer screen.

Wap /wæp/ wireless application protocol.

Wipe /waɪp/ to delete all the files stored on a disk.

Wirelessly /ˈwaɪə(r)ləsli/ using electronic signals instead of wires.

WML abbreviation for wireless markup language. A language similar to HTML used for designing web pages suitable for mobile phones.

Word /wɜː(r)d/a single unit of written or spoken language.

Word processor /wɜː(r)d/ /ˈprəʊˌsesə(r)/

WWW the World Wide Web.

X

XML /ˌeks em ˈel/abbreviation for extensible markup language.
XGA abbreviation for extended graphics array.

Y

Yahoo /jɑːˈhuː/the name of a popular Internet search engine website.

Z

Zap /zæp/ to hit, harm, or destroy someone or   something, usually using a weapon or a piece of equipment developed by modern technology.
Zapping To destroy, or to be destroyed with an explosion.
Zero (zerodivide) /ˈzɪərəʊ/ the number 0.

TAPESCRIPTS

LESSON 1. Computer User

1. The English language is now the first language of about **a) 400 million people**, the native language of 12 nations and the official or semiofficial language of **b)33 more nations.** 2. There are many **c) reasons** for its popularity. 3. First, English is **d) easier** to learn than most other languages. Second, it borrows words and phrases from the very countries into which it **e) expands**. 4. Eighty percent of all English **f) vocabulary** comes from other languages. 5. English is so widespread nowadays because it has become the **g) standard language** for all kinds of international communication: 80% of all information in the world's computers is in English; nearly 50% of all the companies in Europe **h) communicate** with one another in English; 75% of all **i) international letters** and telexes are in English. 6. English is also the international language of business people, pilots, diplomats and **j) politicians**, sportsmen and scientists, doctors and students, musicians and singers. 7. Nowadays in Uzbekistan the English language has become the most **k) popular** among foreign languages. 8. There are many very good reasons to learn this language. 9. Learning English helps in talking to people, in reading and writing, in **l) understanding** TV and films from other countries, and opens up much a wider range of sources of information. 10. Then when you travel in different countries you can manage a lot better if you **m) understand** and people understand you.

LESSON 2 INFORMATION TECHNOLOGY

The internet is a great way to see more, learn more and have lots of fun.

When you're online, **always keep your personal stuff private** and think about what you say and do.

Remember that people online may not be who they say they are. **Online friends are still strangers** even if you have been talking to them for a long time.

Don't share personal information online. This includes:

☐ your full name

☐ photos

☐ addresses

☐ **school information**

☐ telephone numbers

☐ **places you like to spend time**

Make sure you have set your privacy settings to restrict access **to personal information.** When you use chat rooms or instant messenger, use a **nickname** instead of your real name. To stop people accessing your online accounts, always keep your **passwords secret** and change them regularly.

Think about **blocking** people who send you nasty messages and don't open unknown links and attachments.

Always delete emails from people you don't know, and don't open **attachments** from people you don't know. They might be nasty or contain a virus that can stop your computer working.

If someone is mean or sends nasty messages online, block them.

LESSON 3 ARTIFICIAL INTELLIGENCE

A study to be launched in2019 at the University of Helsinki will examine mechanisms utilising artificial intelligence used to interfere with online discussions and news. This year, an extensive study will be launched at the University of Helsinki focused on automated trolling and dissemination of disinformation. The name of the project to be carried out by a research group headed by AnttiUkkonen, an Academy of Finland research fellow, is "Automated trolling and fake news generation in future social media: computational and empirical investigations of the threat and its implications". The project will examine mechanisms through which online discussions and news can be interfered with utilising artificial intelligence. The study received €700,000 in funding from the Media and Society programme of the Academy of Finland, from the beginning of 2019 to the end of 2022. The study combines the qualitative analysis of trolling and disinformation with modern machine learning techniques. According to Ukkonen, who is working at the Department of Computer Science, University of Helsinki, the automated production of text and images through artificial intelligence technologies has taken vast strides in the last decade. "In the future, it may be possible that even more advanced versions of these technologies could be used, among other things, for the large-scale automation of trolling or to generate entire websites comprised of nothing but more or less artificial news articles, illustrations and reader discussions," Ukkonen explains. The group aims to study computational methods that can help individuals and communities better prepare for situations where deciphering the authenticity of websites and the motivations of discussion participants becomes increasingly difficult.

LESSON 4 PROFESSIONAL PROGRAMMER.

How to be a good programmer. The more the world develops, the more it becomes technologically. It is already difficult to imagine an organization without programming. Indeed, in a world more and more people are seeking knowledge about the computer world. There are many opportunities to become a programmer : go to university to study, learn on their own or take lessons with good and experienced programmer. Between the remaining programmers learning methods can argue long. Some argue that to learn everything easily, while others insist that the easiest way to become a programmer is studying at the university. Clearly, self-study will be based on their own experience, guesswork, and sometimes literature video courses. The university will be easier due to the fact that it is not necessary to search for the information you need, teachers give it you. But the learning process will take a long time, it's understandable.

Since programmers are needed not only in the technical field, but also in science, it is isolated programmers technicians and engineers. If you want to enter the university, then of course nobody will offer training on programming, you must do the following areas:

Software and administration of information systems

Computer Science and Engineering
Software Engineering Applied Mathematics and Informatics.

But if you have neither the time nor the desire to learn in high school 4 years, then try to be a programmer studying by yourself. You need to be zealous, patient and of course with good memory.

LESSON 6 COMPUTER NETWORKS

Sarvar: Nowadays people are relying on technology more and more. Computers can be programmed, so those people that say they have no feelings you can program them to know and have feelings. Teachers are dependent on computers too. It takes time for teachers to get the technology set up for a lesson, if it were a computer it can automatically do it itself.

Malika: I don't agree with you, Sarvar. I believe that teachers should not be replaced by computers because teachers can give you more of a personal one on one. Also because computers will give you the answer but will not show you how to get it, or explain it. That is why I think that we shouldn't replace teachers with computers

Sarvar: You know Malika, sometimes children are distracted by what the teacher is wearing, saying, or doing. The teachers get frustrated because while they are trying to teach, the children are distracted and cannot concentrate.

Malika: Actually no, teachers are more interactive than computers. They know much more than a computer in emotions and feelings, a computer may have the knowledge but computer would not be able to provide discipline, safety or care for a child. Computers cannot keep our children safe. Sitting our children in front of a computer many hours will take away critical human interaction which our children need.

Sarvar: Our modern world has a lot of technologies and who knows maybe in the future our world may not have any teachers because a super computer may have replaced them!

Malika: I'm not sure, computers shouldn't replace teachers, however, you can use the computers to do research and use it for help on homework and use it whenever you have free time and save stuff for projects. So computers should be used as a learning tool, not as a teacher. projects. So computers should be used as a learning tool, not as a teacher.

LESSON 7. PERIPHERALS
What Defines a Peripheral Device?

Usually, the word peripheral is used to refer to a device *external* to the computer, like a scanner, but the devices physically located *inside* the computer are technically peripherals, too. Peripheral devices add functionality to the computer but aren't part of the "main" group of components like the CPU, motherboard, and power supply. However, even though they're often not directly involved with a computer's main function, it doesn't mean that they aren't considered necessary components.

For example, a desktop-style computer monitor doesn't technically assist in computing and isn't required in order for the computer to power on and run programs, but it is required to actually *use* the computer.

Another way to think about peripheral devices is that they don't work as standalone devices. The only way they work is when they're connected to, and controlled by, the computer.

Types of Peripheral Devices

Peripheral devices are categorized as either an input device or an output device, and some function as both.

Among these types of hardware are both *internal peripheral devices* and *external peripheral devices*, either type of which might include input or output devices.

INTERNAL PERIPHERAL DEVICES

Common internal peripheral devices you'll find in a computer include an optical disc drive, a video card, and a hard drive.

In those examples, the disc drive is one instance of a device that's both an input and an output device. It can not only be used by the computer to read information stored on the disc (e.g., software, music, movies) but also to export data from the computer to the disc (like when burning DVDs).

LESSON 8.   SOFTWARE AND HARDWARE

Computer software is a program that enables a computer to perform a specific task, as opposed to the physical components of the system *(hardware)*. This includes application software such as a word processor, which enables a user to perform a task, and system software such as an operating system, which enables other software to run properly, by interfacing with hardware and with other software.

The term "software" was first used in this sense by John W. Tukey in 1957. In computer science and software engineering, **computer software** is all computer programs. The concept of reading different sequences of instructions into the memory of a device to control

computations was invented by Charles Babbage as part of his difference engine. The theory that is the basis for most modern software was first proposed by Alan Turing in his 1935 essay, *Computable Numbers with an Application to the Entscheidungsproblem*. Relationship to hardware

Computer software is so called in contrast to computer hardware, which encompasses the physical interconnections and devices required to store and execute (or run) the software. In computers, software is loaded into random access memory (RAM) and executed in the central processing unit. At the lowest level, software consists of a machine language specific to an individual processor. The machine language consists of groups of binary values signifying processor instructions (object code), which change the state of the computer from its preceding state.

Software is an ordered sequence of instructions for changing the state of the computer hardware in a particular sequence. It is usually written in high-level programming languages that are easier and more efficient for humans to use (closer to natural language) than machine language. High-level languages are compiled or interpreted into machine language object code. Software may also be written in an assembly language, essentially, a mnemonic representation of a machine language using a natural language alphabet. Assembly language must be assembled into object code via an assembler.

LESSON 9. THE MULTIMEDIA APPROACH IN LEARNING

Multimedia is vital in our life. This is because it is pack with various elements

such as text, graphic, sound, video and animation. All of this element can be seen in our surrounding. It is also used in various fields such as in education, training,

business, games and science and technology. This is a proof that multimedia is important. In fact, multimedia is changing the ways of learning itself. Instead of just limiting you with a linear presentation such as reading text from a book, multimedia makes many improvement in learning by bringing various elements in order to make it more dynamic.

Education courses, skills and knowledge are often taught in a context. To overcome this, the use of multimedia as education aids help to provide a real world example using a computer with high quality content. The various type of software available on the market can also help to provide a friendly interactive method of learning. Multimedia and tool such as the internet can provide teacher an instant excess to millions of resource available. These material can help the teacher to provide the students with cooperative learning, critical thinking, discussion, and problem solving. So, multimedia approach in education provide many advantage over the traditional method.

By using multimedia elements, they can present their project in a much more creative ways. Moreover, multimedia approach also provide flexibility of where and when can they learn. This is because by using multimedia approach such as audio and video, student can record or make connection with one another for discussion or listening to the previous topic that they have recorded. Multimedia approach also helps the students to develop a higher order thinking skills. By using the multimedia elements, students use their own idea and creativity to combine the elements of multimedia to produce something fresh and new. Furthermore, multimedia approach are also much more engaging compare to the traditional one. With multimedia, interactive learning can be done with live-action video, feedback, questions and answers to keep the students interested and help enhancing their skills.

LESSON 10. INTERNET

What electronic devices should these people buy? Listen and write.

1. Abdulla: 'My *laptop* is a bit old, and quite heavy. It is very hard for me to carry it every day to work notebook

2. Shahnoza: 'I like to listen to music while I'm walking in the park, while I doing housework and even cooking**.** *MP3 player*

3. Said: 'I want to make a film of my summer visit to China. I wish to record every event and keep it as a memory *camcorder*'

4. Komil: 'I like to read books, but they take up too much space. There are lots of book on the Bookworm website. *E book reader*

5. Ruslan: 'I like to take pictures, As you know I am going to be a professional cameraman. So I need to shot and I can store them on it. *digital photo frame*

6. Umar and Ali: Do you believe that we can record over 100 hours of television programs, films and talk shows on it." *hard disc recorder*

4. My favorite gadget.
  My favorite device
  M-Manzura G-Grandmother
  F-Father

  M: Today at school we have discussed about modern inventions and their inventors. For the question what is the best

invention after computer we all thought that...

G: Huh! I know what the best modern invention is for me. I know what's changed *my* life more than anything else ...

M: What's that, Granma?

G: The washing machine.

M: Uh? What do you mean - the washing machine?

G: I mean the Samsung washing machine. I think it's perfect! Every time I use it for dirty clothes I turn it on and 'bingo' - all clean, bright and sparkling and I start again. Helps keep my laundry clean. I'm not very good at tidying...

M: Well, anyway, *we* all said at school the very best thing was the mobile phone ...

F: I knew it!

G: Huh! I don't even know how to use one.

M: Oh, I can't imagine my life without it. I can call or text my friends all the time ...

F: Don't I know ...

M: It has so many advantages I can talk wherever I am and my friends can call or text me. Or if I need a lift from you or Mum ...

F: You mean like when you need picking up from a friend's house in the evening?

M: Yeah, that kind of thing ... or if I'm going to be home late, or like staying late at school or whatever - I can just let you and Mum know what's happening.

F: OK, OK that's good, but the problem is that people use them too much...But I dislike when people shout into them in public places and everyone has to listen to their conversations

G: Sometimes it's not just boring, it's really dangerous, you know, when people use them when they're driving - I've seen lots of...

F: Well, for me the best device is my laptop. It the most suitable for my job, it is portable, chargeable and easy to carry. I can access the internet and exchange e mails. It's changed the whole world and it's totally transformed *my* business. Everyone at work is always on the computer, checking emails, sending emails. It's where most of our business is done nowadays.

G: Yeah, but the bad part is that you're glued to your computer all day. I reckon people will forget how to communicate face to face soon, it'll all be through machines. Just because you've got all these different ways to communicate doesn't mean there's any more to say! I'm glad I didn't have emails and texting in my day.

M: Ah, but Granma, but it is impossible to communicate via your washing machine

LESSON 12. WABPAGE CREATOR
1. Why do you want to work in this industry?

"I've always loved programming, but my interest in computer programming really started when I have got a computer and spent hours working at it. I think that the profession of programmer can give many opportunities. Computers are the most rapidly changing sphere of modern technology. We are living in the age of information. And I think that the future is just filled with computers. It was great to be able to contribute positively to an industry I feel so passionate 100

about, and to help promote programs I really believed in."

2. Tell us about yourself.

"I'm really energetic, and a great communicator. Working in this sphere for five years helped me build confidence, and taught me the importance of my job. I've also got a track record of success. A week ago I have become one of administrators of our gymnasium website. I am supposed to add topics in forum, monitor censorship. Now the site participates in the competition of educational institutions, and I want to help it. Now I study language "C" and I firmly intend to become a programmer. I am sure, that's my vacation."

3. What do you think of your previous boss?

"My last boss taught me the importance of time management – he didn't pull any punches, and was extremely deadline-driven. His no-nonsense attitude pushed me to work harder, and to meet deadlines I never even thought were possible."

4. Why are you leaving your current role?

"I've learned a lot from my current role, but now I'm looking for a new challenge, to broaden my horizons and to gain a new skill-set – all of which, I see the potential for in this job."

5. Where do you see yourself in five years?

"In five years I'd like to have an even better understanding of this industry. Also, I really love working with bigger projects. Ultimately, I'd like to be in some type of main administrator programmer at this company, where I can use my skills and industry knowledge to improve the company."

6. What's your greatest weakness?

"I like to prototype a lot and would volunteer to prototype and experiment with new technologies when needed. However I need someone to help me stay focused on the high level design and not sweat the small stuff"

7. What salary are you looking for?

"I'm more interested in the role itself than the pay. That said, I'd expect to be paid the appropriate range for this role, based on my five years of experience. I also think a fair salary would bear in mind the high cost of living here in New York City."

8. Why should I hire you?

"As, I have just started my career, I don't have practical achievements, but I really want to practically explore and experience my potential by delivering the best services to the company. It will be my honor to work with you and this organization. I am the best fit for this job profile, due to my outstanding programming, analytical and problem solving skills. Also, I have practical experience in many operating systems."

9. What is your greatest failure, and what did you learn from it?

"One of the biggest mistake I made was I shared my new-created program which could lead me to success with my colleague. I was planning to sell my product to the company to which I was planning apply for a job. My colleague used my trust as a weapon and betrayed me. I started not to trusting everybody and choose a friend very carefully."

10. How do you explain your gap in employment?

"My work is important to me, so I won't be satisfied with any old job. Instead of rushing to accept the first

thing that comes my way, I'm taking my time and being selective to make sure my next role is the right one."

LESSON 14.   IT SECURITY AND SAFETY

The internet is a great way to see more, learn more and have lots of fun.

When you're online, **always keep your personal stuff private** and think about what you say and do.

Remember that people online may not be who they say they are. **Online friends are still strangers** even if you have been talking to them for a long time.

Don't share personal information online. This includes:
☐ your full name
☐ photos
☐ addresses
☐**school information**
☐ telephone numbers

places you like to spend time

Make sure you have set your privacy settings to restrict access **to personal information.** When you use chat rooms or instant messenger, use a **nickname** instead of your real name. To stop people accessing your online accounts, always keep your **passwords secret** and change them regularly.

Think about **blocking** people who send you nasty messages and don't open unknown links and attachments.

Always delete emails from people you don't know, and don't open **attachments** from people you don't know. They might be nasty or contain a virus that can stop your computer working.

If someone is mean or sends nasty messages online, block them.

Answers for the aforementioned exercises

Lesson 1: Computer User

Exercise 5. 1. T 2. F 3. T 4. F 5.NG

Exercise 7. 1-e , 2-d , 3-a, 4-b, 5-c

Exercise 8

1. how people interact within markets to get what they want or accomplish certain goals

2. factors that determine the production, distribution and consumption of goods and services

3. how people, industries, and countries can maximize their productivity, create wealth, and maintain financial stability

4. the behavior and interactions of economic agents and how economies work

5. to improve the living conditions of people in their everyday life

Lesson 2. Information Technology.
Exercise 4.

1) F   6) D
2) H   7) I
3) A   8) J
4) G   9) E
5) B   10) C

Listening Exercise 2.

1) True
2) Not given
3) True

4) **True**
5) **Not given**

Exercise 6

1) did ……. do   10) cooked
2) fixed   11) washed; looked
3) Watered   12) brushed; yawned; went
4) cleaned;played changed; brushed; talked
5) listened;   watched smoked; talked
6) cried; smiled   waited; arrived
7) shouted
8) worked
9) baked

Exercise 7.

A) 9
B) 10
C) 1
D) 7
E) 8
F) 5
G) 2
H) 6
I) 4
J) 3

Exercise 8.

1) went;   had   finished watched; had done
2) played;   had   come 10) went

3) had already seen
11) won
4) came; had already begun
12) was he like; had been young
5) sat; had seen
13) had ever seen
6) had not eaten
14) had gone; went
7) asked; had come
15) told; visited
8) had gone; sat; rested

Lesson 3: Artificial Intelligence.
Exercise 2.

Words: demand, capital, currency, inflation, trading, exchange, price, supply.

Exercise 4.

1) b
2) d
3) e
4) a
5) c

Exercise 6.

1) D
2) F
3) H
4) A
5) B
6) G
7) E
8) C

Exercise 5.

A) Compensation given to sellers in return for goods or services.
B) On huge number of factors: price policy, season, competition, income of consumers, their tastes and preferences and etc.
C) They produce goods and services, improve national economy, create new working places and vacancies.
D) It depends on the products and services. If they are for public consumption and vitally necessary, the prices are fixed. Otherwise, prices may be different.
E) Prices are determined on the basis of demand and supply.

Exercise 7.

1) c
2) c
3) a
4) a
5) a

Exercise 8.

1) in
2) at
3) on
4) on
5) in
6) on
7) in
8) in
9) on
10) at
11) at
12) on
13) in
14) on
15) at

Lesson 4. Professional development.
Exercise 2.

1. opposite of blame
2. unfairness or dearth of luck
3. the choices
4. the actions
5. being accountable
6. being accountable
7. not coercion
8. entirely down

Exercise 3.

Listening answers.

1-news, 2- Antti

3-*7000, 4-Ukonnen*

5-*methods*

Exercise 4.

1) False
2) True
3) True
4) False

Exercise 6.

1) stability
2) phenomenon
3) accumulation
4) capacity
5) mobilization
6) management

Exercise 7.

1) permanence   6) capital
2) competition   7) border
3) care   8) aspect
4) banking   9) free
5) allow for   10) embody

Exercise 8.

1) c
2) a
3) a
4) a
5) a

Lesson 5. Operating system.
Listening Exercise 2

1. a communications,
2. the application,
3. a network,
4. Data,
5. Transmitted,
6. the language

Exercise 3.

1) E   6) B
2) G   7) C
3) F   8) I
4) A   9) J
5) H   10) D

Exercise 5.

The answers for the questions may differ from student to student. The information generally should be taken from the text.

Exercise 6.

1 –D 2- A 3- E 4 –B 5 - C

Exercise 7.

1) c
2) b
3) c

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4) b

5) c

Exercise 8.

1) c

2) a

3) b

4) e

5) d

Lesson 6. Computer Networks.
Exercise 2.

1) D

2) A

3) B

4) C

Exercise 4.

A) 10

B) 9

C) 1

D) 11

E) 12

F) 2

G) 4

H) 5

I) 3

J) 6

K) 7

L) 8

Exercise 6.

1) No   4) No

2) Not Given   5) Yes

3) Yes   6) Not Given

Exercise 3.

1) C

2) A

Exercise 7.

1) B

2) D

3) F

4) G

Any order is possible

Exercise 8.

CONDITIONAL SENTENCES: type II

1-would you be able; 2- didn´t belong; 3-won; 4-would you do; 5-knew; 6-stopped

7-saw; 8-would be; 9-wouldn´t be; 10-had ; 11-would grow ;12-removed ; 13-banned;

14-got; 15-would you spend

Lesson 7. Peripherals.

Exercise 2. Listening task

9. opposite of blame
10. unfairness or dearth of luck
11. the choices
12. the actions
13. being accountable
14. being accountable
15. not coercion
16. entirely down

Exercise 4. Listening task

1-C   2-D   3-A

4- B   5-E

Exercise 5.

A) 5
B) 6
C) 2
D) 9
E) 11
F) 1
G) 12
H) 3
I) 13
J) 4
K) 8
L) 10
M) 7

Exercise 7.

- This means that you are in charge of someone or something.
- This helps our governments to regulate the relationship between people.
- From realization of the fact that your actions can lead to different results or consequences.
- "You must take personal responsibility. You cannot change the circumstances, the seasons or the wind, but you can change yourself".
- "Responsibility is not a burden. It is a blessing. No More Excuses! Times are tough, this we cannot deny".

Exercise 8.

Circumstance – case, occasion, condition, instance.
Acknowledge – admit, accept, confirm.
Coercion – restraint, curb.
Recession – fall, subsidence, downturn.
Colossal – titanic, huge, enormous, monumental.
Thrivers – prospers.

Lesson 8. Hardware and Software.

Exercise 2 Listening task

True-False Questions
1. True
2. False. External costs are external to the producer of a good or service so they don't diminish profit.
3. True
4. True
5. True
6. True
7. False. If negative and positive externalities exist, then the market has failed to create a socially optimum allocation of resources.

Exercise 3. Listening task

Fill in the Blanks
1. negative; positive
2. clearly defined
3. social costs
4. diminish; withheld
5. special-interest lobbies

Exercise 4.

1) F
2) G
3) A
4) H
5) B
6) C
7) D
8) E

Exercise 6. Reading task

1. True
2. True
3. True
4. False. If the tax is set equal to the marginal externality cost, then pollution is reduced to its socially optimum level.
5. True
6. False. In cases of public goods, the good cannot be withheld from consumption.
7. False. A special-interest lobby considers the particular interests of its members in its lobbying efforts.

Exercise 8.

1) National defense – civil production.
2) Externalities – outward consequences, results.
3) Less skilled – having less knowledge, experience, qualification.
4) Immigrants – incomers.
5) Producer – manufacturer, generator.

Lesson 9. Multimedia
Exercise 4.

1) D 5) C
2) F 6) G
3) A 7) E
4) H 8) B

Exercise 6.

1) No
2) Yes
3) No
4) Yes
5) Not Given
6) Yes

Exercise 7.

7) A
8) C
9) C
10) D

Exercise 8.

11) C
12) F
13) D
14) A

Lesson 10. The Internet
Task 1.

17. T
18. F
19. T
20. T
21. T
22. F

Listening task

1. cell phones , 2. comfortable , **3.** information , **4.** network , **5.** an important part

Exercise 4.

1) D   7) C
2) G   8) E
3) A   9) K
4) H   10) F
5) B   11) J
6) I

Exercise 6.

1) By analyzing and borrowing the best practices for manufacturing, design, and marketing from various countries.
2) Any factor can have a negative impact on business success, including wrong decisions and the butterfly's effect.
3) Technology; social, economical or political factors; development strategy of a company.
4) CI is a strategy which helps companies to uncover the truth stemming from issues related to quality, reliability, delivery, customer services, innovation, and other factors.

Exercise 7.

a) Phenomenon that occurs only now; what never happened in the past.

b) Local car market; the own market structure of a country.
c) Domestic market.
d) To commit failure.
e) Strategy which considers only few factors.

Exercise 8.

a) business-to-business
b) business-to-consumer
c) relationship between companies and firms with customers
d) Strengths, Weaknesses, Opportunities, Threats – special table

Exercise 9. Grammar

1. C. I usually get up late on Saturdays.

2. A. Jared is never late for work.

3. B. Do you often travel on weekends?

4. D. Susan is often early for class.

5. When do you usually go on vacation each year?

Lesson 11. Website.

Exercise 2. Listening task.

1. Get yourself a good planner.
2. Avoid to-do lists.
3. Learn how to time block.
4. Schedule time for leisure and breaks.

Exercise 3.

1) f   5) c
2) h   6) e
3) g   7) b
4) d   8) a

Exercise 5.

I.   True
II.   False
III.   False
IV.   True
V.   True

Exercise 4.

❖ To make up a well-designed plan.
❖ It is crucial if you want to save your time and if you want to create an effective plan.
❖ Break large tasks into smaller to help simplify your aims.
❖ Because time limits and deadlines are the engines of motivation and progress.
❖ The second option as it shows you the allocated time.
❖ Yes, it is. It helps you to get satisfaction and be more productive.

Exercise 5.

• Journal or text document – write about ideas.
• Family and friend – supporters.
• Motivation – progress.
• Time – schedule.
• Mood – positive thinking.

• Success – hard working.
1) will not get; does not pass
2) will buy; have
3) will cook; go
4) will go; have
5) will be; do
6) will take; rains
7) will not go; do not come

Lesson 12. Webpage Creator.
Exercise 3.

Words: Bill, Mark, Jeff, David, Warren, Richard, Steve, Jim, Carlos, Bernard.

Exercise 4.

1) D
2) F
3) E
4) A
5) G
6) H
7) B
8) C

Exercise 2. Listening task

1) True
2) False
3) False
4) True
5) False

Exercise 5.

1) Diverse – alternative; different
2) Famous – well-known
3) Intend – mean; plan; propose
4) Shareholder – stockholder
5) Giant – huge; enormous

Exercise 6.

1) Considerable – insignificant
2) Young – old; ancient
3) Open – closed; reserved
4) Prominent – unknown; fameless
5) Express – ambiguous

Exercise 7.

1) Derive from – extract or come out from something
2) Rapidly – fast; sharply
3) Magnate – a famous and influential businessman or businesswoman
4) Domain – having a property
5) Unique – existing as the single example; exclusive

Exercise 8.

1) A system that outlines how certain activities are directed in order to achieve goals of an organization. These activities can include rules, roles, and responsibilities.
2) Voted upon by the shareholders in general meeting or through a proxy statement; or by a nominating committee in some countries.
3) To look for and to recruit employees with large experience, knowledge and qualification.
4) Production, Research & Department, Purchasing, Marketing, Human Resource Management, Accounting and Finance, Operations, Technology and Equipment.
5) Research & Department.

Lesson 13. Software Engineering.

Exercise 3. Listening task

1) b
2) a
3) b
4) c
5) b

Exercise 4.

1) H	7) I
2) J	8) B
3) F	9) G
4) A	10) L
5) C	11) E
6) K	12) D

Exercise 6.

1) A
2) D
3) C
4) C

Exercise 7.

5) No
6) Not Given
7) No
8) Yes

Exercise 8.

1) A system that outlines how certain activities are directed in

order to achieve goals of an organization. These activities can include rules, roles, and responsibilities.

2) Voted upon by the shareholders in general meeting or through a proxy statement; or by a nominating committee in some countries.
3) To look for and to recruit employees with large experience, knowledge and qualification.
4) Production, Research & Department, Purchasing, Marketing, Human Resource Management, Accounting and Finance, Operations, Technology and Equipment.
5) Research & Department.

Lesson 14. It security and safety.
Exercise 2.

1) E   5) C
2) D   6) H
3) G   7) B
4) A   8) F

Exercise 4.

1) Candle wax
2) synthetic
3) chemistry

Exercise 5.

4) B/C
5) C/B

In either way or order

Exercise 7.

6) True
7) False
8) False

Exercise 8.

A) Plastic – пластик, пластмасса.

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