# ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОЛИЙ ВА ЎРТА МАХСУС ТАЪЛИМ ВАЗИРЛИГИ АНДИЖОН ДАВЛАТ УНИВЕРСИТЕТИ

# ФАКУЛЬТЕТЛАРАРО ЧЕТ ТИЛЛАР (аник ва табиий фанлар) кафедраси

### "АМАЛИЙ ИНГЛИЗ ТИЛИ" фанидан

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### ІІ. ЎҚУВ МАТЕРИАЛЛАРИ

### LESSON 1. HISTORY OF SPECIALTY STUDIED A HISTORY OF CHEMISTRY

#### 1. Answer the following questions?

- 1. How many periods can the history of chemistry be divided into?
- 2. What do we know about Alchemy?
- 3. What do we understand about Modern chemistry?

#### 2. Work in pair. Translate the following text into Uzbek

The history of chemistry can be divided into four periods:

#### Text - 1

It is possible to fix the second period, the birth of chemistry, as a science in the second half of the eighteenth century, with only one exception, the contribution of Robert Boyle (1627–1691), who lived much earlier. The third period, the foundation of chemical disciplines, started around the early nineteenth century with the development of chemistry along the different sectors or disciplines that are still characteristic of present day chemistry. The era of modern chemistry began at the close of the nineteenth century, when the history of chemistry coincides in great part with that of the contributions of Nobel laureates. This division based on centuries is not formal but is justified by the fact that at the end of the eighteenth and nineteenth centuries many new revolutionary ideas were developed, which changed the course of chemical thought completely. The short history of chemistry presented in this article particularly examines the evolution of concepts developed in the nineteenth century.

#### Text - 2

Many of these ideas started just at the beginning of the century and reached a certain maturity by its end. Therefore, an analysis of the developments over the period of just 100 years provides an almost complete picture of the course of the evolution of chemistry. In a few cases (the chemical bond, catalysis, and industrial applications), the fundamental concepts were not developed until the first part of the twentieth century. In these cases, in order to show the evolution of the ideas, we also have to take a step into the twentieth century. We have also introduced the experimental facts, developed in the previous centuries, that were the basis of later ideas that contributed towards the transformation of chemistry into a science during the second half of the eighteenth century, when only 17 elements where known and the phlogist theory had many followers. In studying the history of chemistry, it is possible to note some common paradigms through the anecdotes that accompany the description of the lives of several scientists: the fact that each new idea had to wait many years before being accepted, the key role played by the discovery of new instrumentation and by ideas developed outside chemistry (which had a cascade effect on innovation), the fact that many discoveries were made by

very young scientists (during work on their doctoral theses or earlier), and the roles of chance and mistakes that brilliant minds succeeded in interpreting. 2. The Birth of Chemistry as a Science.

#### 2. Phrases to Be Used in Discussion

- 1. It seems to me that ...
- 2. I am not sure about that.
- 3. As far as I know ...
- 4. Could you be a little more specific?
- 5. I am afraid, I don't agree with you here.
- 6. It's too time-consuming.
- 7. It's a good point.
- 8. You did a great job.
- 9. I see your point.
- 10. Basically I understand what you mean, but I think your conclusions are wrong.
- 11. I don't think it will work.
- 12. I'm sorry to interrupt you, but ...
- 13. Excuse me for interrupting you, but (I don't think this information is relevant to the subject of our discussion).
- 14. You misunderstood. Let me explain.

### Exercises: 3. Match the words and make up sentences using the following sentences.

1	liquid state	Lavoisier,
2	Mendeleev	suyuq holat,
3	modern chemistry	Mendeleev,
4	molecules	zamonaviy kimyo
5	nitroglycerine	molekulalar,
6	oxygen	nitrogliserin,
7	organic chemistry	kislorod,
8	periodic table	organik kimyo,
9	phlogiston	davriy jadval,
10	plastics pneumatic chemistry polymers	flogiston,
11	solid state	plastmassa pnevmatik
12	sulfur oxide spectroscopic analysis	kimyo, polimerlar,
13	stereochemistry	qattiq holat,
14	thermodynamics	oltingugurt oksidi
		spektroskopik tahlil,
		stereokimyo

### LESSON 2. HISTORY OF SPECIALTY STUDIED A HISTORY OF CHEMISTRY

#### 1. Answer the following questions?

- 1. What do we understand about Modern chemistry?
- 2. What do we know about Alchemy?
- 3. How many periods can the history of chemistry be divided into?

#### 2. Work in pair. Translate the following text into Uzbek

The history of chemistry can be divided into four periods:

#### Text - 1

In this section we trace the origins of chemistry as a modern science. Without any intention of resuscitating the debate on the defining criteria of science, the term "modern science"—or just "science"—is intended here in its general meaning understood today. Our concept of the meaning of the word "science" was shaped during that crucial period of our history extending over the seventeenth century that is commonly designated with the expression "scientific revolution." This expression conveys the sense of a radical rupture between scientific and prescientific investigations, and this is in part the case. Indeed, the birth of modern science required that our investigations of nature enter a qualitatively different dimension from their prescientific antecedents. Even so, the transition was not so sharp as the idea of a "revolution" suggests.

#### Text - 2

There are, in fact, elements of continuity between the scientific investigations of one century and those of the preceding and following centuries. This is particularly true in the case of the development of chemistry, which had to wait until the end of the eighteenth century (after a long process of accumulation of data, technical equipment, and critiques of the old essentialist theories of matter) before acquiring scientific status. The aim here is to follow in some detail the most significant moments along this process, which is generally considered to culminate in the discovery of the component elements of air and water by the French chemist Antoine-Laurent Lavoisier (1743–1794). Indeed, it is common to use the term "chemical revolution" to refer to his work in recognition of his fundamental contribution in bringing the scientific revolution to chemistry.

#### Exercises: 2. Translate the following sentences from English into Uzbek

1. We like to read scientific articles. 2. I don't like to read newspapers in the morning. 3. Komil does not always watch films on TV. 4. In spring students of our faculty usually spend much time in the field s of our region. 5. We often meet in the library of our University and discuss various problems. 6. Ozoda translates a lot of foreign texts every day. 7. Yesterday we finished our lesson at 5 o'clock.

#### Exercises: 3. Match and make up sentences using the following sentences.

№	English active words	Uzbek active words
1	Alchemy,	kimyoviy,

2	Ammonia	ammiak,
3	atoms	atomlar,
4	Boyle	Boyl,
5	catalysis	kataliz,
6	chemical affinity	kimyoviy yaqinlik,
7	chemical revolution	kimyoviy inqilob,
8	Dalton,	Dalton,
9	electrochemistry	elektrokimyo,
10	elements	elementlar,
11	gaseous state	gazsimon holat,
12	history of chemistry inorganic	kimyo tarixi,
13	chemistry	noorganik kimyo,
14	laws of gas	gaz qonunlari,

#### LESSON 3. AREAS OF SPECIALIZATION STUDIED

#### 1. Answer the following questions.

- 1. How many type branches are there in chemistry?
- 2. What do we know about Physical chemistry Organic chemistry?

Inorganic chemistry?

Analytical chemistry?

Biochemistry?

#### 2. Work in pair. Translate into Uzbek.

The study of modern chemistry has many branches, but can generally be broken down into five main disciplines, or areas of study:

- 1. Physical chemistry
- 2. Organic chemistry
- 3. Inorganic chemistry
- 4. Analytical chemistry
- 5. Biochemistry

#### Text - 1 Physical Chemistry

Physical chemistry is the study of macroscopic properties, atomic properties, and phenomena in chemical systems. A physical chemist may study such things as the rates of chemical reactions, the energy transfers that occur in reactions, or the physical structure of materials at the molecular level.

#### Text - 2

#### **Organic Chemistry**

Organic chemistry is the study of chemicals containing carbon. Carbon is one of the most abundant elements on Earth and is capable of forming a tremendously vast number of chemicals (over twenty million so far). Most of the chemicals found in all living organisms are based on carbon.

#### Text - 3

#### **Inorganic Chemistry**

Inorganic chemistry is the study of chemicals that do not, in general, contain carbon. Inorganic chemicals are commonly found in rocks and minerals. One current important area of inorganic chemistry deals with the design and properties of materials involved in energy and information technology.

#### VI. Find Russian equivalents for the following word combinations

No	English term	Russian equivalent				
1.	Such observations may be obtained directly or					
	indirectly.					
2.	To carry out a controlled experiment aimed at					
	producing data.					
<b>3.</b>	Culturing cells outside organisms.					
4.	To refute a hypothesis.					
5.	Dysfunctional organs.					
6.	In addition.					
<b>7.</b>	An essential aspect of a scientific experiment.					
8.	Factors that can vary or may be varied.					
9.	To draw conclusions that accept or reject the					
	hypothesis.					

#### VII. Read and translate the short text without any dictionary.

#### Fact of life:

No matter how dramatic it is, any discovery must be shared before it can make a contribution to our scientific knowledge. Biologists communicate with each other mainly by means of concise reports called papers.

Typically, a paper contains the aims of investigation, a description of the method used, the results obtained, and a discussion of the significance of the results. The method is described in enough detail to allow someone else to repeat the investigation. Well over one million original papers are published in the biological sciences each year, in subjects ranging from the behavioural interactions of different animal populations to the analysis of chemical reactions taking place in cells.

#### VIII. Food for thought.

The life sciences have made an enormous contribution to human welfare, especially through their applied branches of medicine, agriculture, and biotechnology. However, an important part of understanding biology and the other sciences is realising their limitations. Science does not, for example, deal with hypotheses that are not testable. Suggest questions that might not be possible to answer using a scientific method.

# IX. Write a letter to your tutor telling him or her which areas of Biology you would like to specialize in and why. Use these notes to help you.

Dear Mr / Mrs (tutor's surname),

Writing to tell you choices I have made

Specialize in (one or two of the main areas)

Reasons for choosing: interested in (plants / animals / latest ideas /

laboratory work / your own ideas)

Possible career choices: what I hope to do when I graduate (medicine / ecology / agriculture / your own idea)
Offer to meet and discuss choices: I would like your advice and hope we can ......
Yours sincerely,
(your full name: first name + surname)
Write 100 – 140 words.

#### LESSON 4. AREAS OF SPECIALIZATION STUDIED

#### 1. Answer the following questions.

- 1. How many type branches are there in chemistry?
- 2. What do we know about Physical chemistry Analytical chemistry? Biochemistry?

#### 2. Work in pair. Translate into Uzbek.

The study of modern chemistry has many branches, but can generally be broken down into five main disciplines, or areas of study:

- 2. Physical chemistry
- 3. Organic chemistry

#### Text - 1

#### **Analytical Chemistry**

Analytical chemistry is the study of the composition of matter. It focuses on separating, identifying, and quantifying chemicals in samples of matter. An analytical chemist may use complex instruments to analyze an unknown material in order to determine its various components.

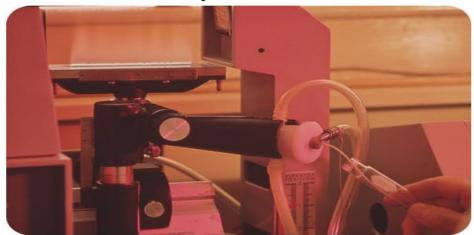


Figure 1.3.11.3.1: Measurement of trace metals using atomic spectroscopy.

#### Text - 2

#### **Biochemistry**

Biochemistry is the study of chemical processes that occur in living things. Research may cover basic cellular processes up to understanding disease states so better treatments can be developed.



Figure 1.3.11.3.1: *Measuring hormone concentrations*.

In practice, chemical research is often not limited to just one of the five major disciplines. A particular chemist may use biochemistry to isolate a particular chemical found in the human body such as hemoglobin, the oxygen carrying component of red blood cells. He or she may then proceed to analyze the hemoglobin using methods that would pertain to the areas of physical or analytical chemistry. Many chemists specialize in areas that are combinations of the main disciplines, such as bioinorganic chemistry or physical organic chemistry.

#### III. Fill in the missing words:

No	Term (verb)	Noun
1.	employ	
2.	inherit	
3.	modify	
4.	observe	
5.	measure	
6.	predict	
7.	understand	
8.	discover	
9.	know	
10.	contradict	

## IV. Use monolingual English dictionary and write down what could the words given below mean:

inheritance, interpretation, species, hypothesis, to refute.

#### V. Match the words with their definitions:

	No	Word	Definition	
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1.	Individual	A.	very strict and difficult to change	
2.	Horticulture	В.	the protection of natural environment	
3.	Rigid	C.	the natural world in which people, animals and plants live	
4.	Predict	D.	to say that sth a person has said or written is wrong or untruthful	
5.	conservation	E.	a single person or thing, considered separately from the class or group to which he, she, or it belongs	
6.	Contradict	F.	to say that sth will happen in the future	
7.	Variable	G.	the art, practice or science of growing fruit, flowers and vegetables	
8.	environment	H.	a thing or quantity that can change and be changed	

#### LESSON 5. GREAT REPRESENTATIVES OF THE STUDIED AREA

#### 1. Work in pair. Translate into Uzbek.

#### Text-1

The Birth of Chemistry as a Science In this section we trace the origins of chemistry as a modern science. Without any intention of resuscitating the debate on the defining criteria of science, the term "modern science"—or just "science" is intended here in its general meaning understood today. Our concept of the meaning of the word "science" was shaped during that crucial period of our history extending over the seventeenth century that is commonly designated with the expression "scientific revolution." This expression conveys the sense of a radical rupture between scientific and pre-scientific investigations, and this is in part the case. Indeed, the birth of modern science required that our investigations of nature enter a qualitatively different dimension from their pre-scientific antecedents. Even so, the transition was not so sharp as the idea of a "revolution" suggests. There are, in fact, elements of continuity between the scientific investigations of one century and those of the preceding and following centuries. This is particularly true in the case of the development of chemistry, which had to wait until the end of the eighteenth century (after a long process of accumulation of data, technical equipment, and critiques of the old essentialist theories of matter) before acquiring scientific status. The aim here is to follow in some detail the most significant moments along this process, which is generally considered to culminate in the discovery of the component elements of air and water by the French chemist Antoine-Laurent Lavoisier (1743-1794). Indeed, it is common to use the term "chemical revolution" to refer to his work in recognition of his fundamental contribution in bringing the scientific revolution to chemistry.

#### Text-2

What chemistry acquired with the contribution of Lavoisier was the strict interrelationship between observed facts (experimental data) and theory, which was achieved by astronomy and mechanics a century before with the works of Johannes Kepler (1571–1620), Galileo Galilei (1564–1642), and Isaac Newton (1642–1727). This is the necessary step to close the qualitative gap that divides the pre-scientific from the scientific approach to the investigation of nature. The strict cooperation between observation and theoretical elaboration meant, in fact, that our reflections on the events of nature abandoned the speculative and qualitative dimension to which they had always been relegated by the various mythological, religious, Aristotelian, and magical explanations of those events, to enter the empirical and quantitative dimension of their prediction and control. From that moment, in order to be considered as valid candidates for knowledge, our theories had to refer back to the actual working of nature, as understood from our observations and experimentation, and empty explanations (such as the idea that opium puts us to sleep because of its virtus, dormitiva) were no longer acceptable. This is the conception of science that the scientific revolution brought about.

#### Text-3

A major role in the promulgation and formation of this conception was played by what is known as "mechanical philosophy." This is an idea about the working of the universe according to which the universe and all things in it work like a clock. It is all a matter of mechanical pushes and pulls, interactions between the parts they are composed of. The explanation of all kinds of events, as the explanation of the working of a clock, is exhausted in terms of the shape, size, and weight of their components. Mechanical explanations, therefore, are not answers to questions of "why," but rather they are interested in telling us how things work. This means that they make it possible to get rid of all the obscure forces and final cause to which Aristotelian and magical conceptions of the universe typically turned to in their attempts to explain natural phenomena.

#### Text-4

The origins of the Aristotelian and magical traditions, as well as the mechanical philosophy, date back to the beginning of western culture, in its Greek and Hellenic periods. These origins lie in the atomist conception of the world depicted first by Leucippus and his pupil Democritus (around 420 BC) and then made famous by the work of Epicurus (341-270 BC). According to this conception, all the materials of the world are composed of indivisible atoms, and their shape, size, and position account for all the properties of materials. But while by the twelfth century the whole of the Aristotelian and alchemical works had been for the most part recovered from the Arabic world after the period of decadence that darkened Europe from the sixth to the tenth century, the mechanical tradition was not recovered until the first translation of the De Rerum Natura by Lucretius in 1473, and of the work of Archimedes and Hero of Alexandria in the mid-sixteenth century. Until this time, and the first mechanical reinterpretations of the corpuscular theory by Galileo Galilei (1564–1642), Pierre Gassendi (1592–1655), and René Descartes (1596-1650), the two dominant accounts of the phenomena of nature remained the Aristotelian and magical ones.

#### 2. Match these words with their definitions:

1.	Cell	A.	a scientific instrument that makes extremely small things look larger		
2.	to observe	В.	the amount of a substance that is contained in something		
3.	microscope	C.	the contents consist of a central ball-shaped nucleus surrounded by material		
4.	metabolism	D.	parts of plants that can you eat but cannot digest, which help food to move quickly through your body		
5.	independent	Е.	the central part of an atom, made up of neutrons, protons, and other elementary particles		
6.	contents	F.	to watch something or someone carefully		
7.	nucleus	G.	in something		

8.	cytoplasm	H.	the act of keeping or putting something in a special		
			place while is not being used		
9.	Fibre	I.	the chemical reactions of life		
10.	inside	J.	existing separately and not connecting with or		
			influenced by any others		
11.	storage	K.	the green-coloured substance in plants		
12.	chlorophyll	L.	the smallest part of a living thing that can exist		
			independently		

### 3. Give Russian equivalents to the following English terms:

No	English term	Uzbek equivalent
1	a compound light microscope	
2	to serve structures	
3	to have certain features in common	
4	the basic units of life	
5	the cell theory	
6	the functioning unit of life	
7	it takes place in cells	
8	independent existence	
9	a typical animal cell	
10	a cell surface membrane	
11	a ball-shaped nucleus	
12	a fibrous material	
13	inside the cell	
14	small rod-like structures	
15	a food storage	
16	a sap-filled cavity	
17	starch grains	
18	exposed to light	

#### LESSON 6. GREAT REPRESENTATIVES OF THE STUDIED AREA

#### 1. Work in work. Translate into Uzbek.

#### Text-1

The Aristotelians accounted for all the properties of all the substances in the world in terms of a primary matter impressed with a form. The form of a substance was the hidden cause of its properties. They also accepted the theory of the four elements—earth, fire, air, and water—first stated by Empedocles (490–ca.435 BC), according to which any substance could be explained on the basis of the proportions in which it contained the four elements. Since these elements could be varied in any degree, it was possible to transform any substance into any other. In particular, they thought that in combining different substances a new substance was formed in which the individuality of the former ones was lost. The theory of the four elements, together with Aristotle's theory of the formation of metals—he thought that metals were formed from the imprisonment in the earth of two kinds of exhalations, a moist vaporous and a dry smoky one, which Arabic alchemists identified later with vapors of mercury and sulfur—exerted a great influence on early chemical investigations. These developed around the search for the philosopher's stone, the substance that allowed the transformation of metals into gold, and this was to set the main goal of alchemy for centuries. Another important source of influence on the alchemical approach to nature was represented by the hermetic tradition dating from about the third century, and based on neo-Platonist writings. The hermetic writing formed the basis of the magical tradition in the investigation of nature, according to which the world was populated by mysterious, occult, personalized forces. Control of these forces required special knowledge and methods far removed from our standards of rationality.

#### Text-2

The anti-scientific nature of magical disciplines like alchemy and astrology, though, should not make us underestimate the important role they played in the laborious process that prepared the way for the scientific revolution. Indeed, their attempts to exercise control over the events of the world, even if carried out in ways that sound bizarre today, had as a consequence an increased attention to the concrete workings of nature. This, in turn, resulted in the growth of the amount of observable facts known and in the development of technical equipment and devices that were later to form the necessary empirical and technological basis for the growth of modern science

#### 2. Find synonyms among the pool of words:

Pool of words	Synonyms
1) 1.occur /2.scatter /3. take place /4. Spread	
2) 1.cavity /2.sap /3.juice /4.contents /5.hole /6.ingredients	

3) 1.nucleus/2.division/3.core/4.naked/5.separation/6. bare	
4) 1.unit /2.part /3.fluid /4.grain /5.solution /6.com	

#### 3. Answer the following questions. Use all information given before:

- 1. When were cells discovered?
- 2. How did Robert Hooke discover cells?
- 3. What is called the cell theory?
- 4. What are the main ideas of the cell theory?
- 5. What is the structure of a typical animal cell?
- 6. How do plant cells differ from animal cells?

#### 4. Match the sentence halves. Make complete sentences:

1.	Hooke designed his own compound light microscope	<b>A.</b>	a membrane is called the tonoplast.
2.	The concept that cells are the basic units of life	В.	of living organisms.
3.	Cells form the building blocks	C.	which controls their activities.
4.	Cells arise only by	D.	to observe structures too small to be seen with the naked eye.
5.	Cells contain inherited information	Е.	called chromatin.
6.	The contents consist of a central ball-shaped nucleus	F.	the division of existing cells.
7.	The nucleus contains a fibrous material	G.	called the vacuole.
8.	Chromatin contains DNA, the material which controls	Н.	became embodied in a theory called the cell theory.
9.	Most plant cells have a large sap-filled cavity	I.	surrounded by material called cytoplasm.
10.	The vacuole surrounded by	J.	in the cytoplasm.
11.	Many plant cells have chloroplasts	K.	the various activities inside the cell.
12.	Chloroplasts occur only in the parts of plants	L.	exposed to light – the green parts.

#### LESSON 7. ACTUAL PROBLEMS OF THE STUDIED AREA

#### 1. Answer the following questions?

- 1. How many actual problems do we know about?
- 2. What do we know about Alchemy?

#### 2. Work in pair. Translate into Uzbek.

#### Text-1

#### CONTEMPORARY ISSUES RELATED TO CHEMISTRY

Some areas of great technical interest to chemists are in the public spotlight today. The conference organizers arranged for speakers in many such areas. There were several contributed presentations in these areas as well. The formal publicity of the conference focussed upon the invited energy speakers, but all invited papers were well received, and no one paper in particular received special enthusiasm from the participants.

#### Text-2

#### **ENERGY**

A great emphasis was placed upon nuclear energy sources by the three invited speakers in the energy area. Some speakers used talks in inorganic chemistry to bring the relation of innovative chemistry and energy conservation into focus. Little attention was paid to fossil fuels, solar energy, geothermal energy, or other alternatives. The program commenced Sunday evening with M. J. Lubin's presentation (1, JLS) on fusion. Beginning with a summary of the concepts of fusion, he quickly reviewed progress and came to the current status of fusion as a potential commercial power source. The "pellet" technology wherein a tiny, carefully engineered pellet of fuel is heated rapidly using lasers was described. The special requirements to be met before this approach becomes viable were set forth. Early decisions frequently lock development into unique channels, and Lubin cautioned that it was too soon to limit developmental options at this time. In response to one question, he indicated that a burst of additional funding in this area likely would not be especially fruitful.

#### Text-3

G. T. Seaborg (2, JLS) reviewed systematically the magnitude of the energy problem, and he enumerated specific mechanisms for dealing with the problem. Conservation alone will not suffice. Fossil reserves in coal and shale must be exploited. Solar energy can be expected to play an Important if limited role, especially in areas such as space heating. Seaborg reviewed the nuclear options, both fission and fusion, and indicated a need to pursue conventional nuclear reactors. Finally, he speculated that hydrogen produced from solar energy may one day make an important contribution to our energy needs.

#### Text-4

H. A. Bethe (93, JLS) reiterated many thoughts expressed by Seaborg but spent much time on the nuclear energy area. He reviewed issues regarding reactor

safety and the need for special training programs. He argued that nuclear wastes could be disposed of safely. His analysis included a discussion of relative risks of nuclear versus conventional fuels, especially health and environmental risks. During the question and answer period after Dr. Bethe's presentation, Dr. B. Sen of Louisiana State University rose and requested the opportunity to make a statement of several minutes length. Dr. Lubin, the session chair, denied this request, whereupon significant amounts of applause arose from the audience and Dr. Sen left the auditorium in protest. A compromise between Sen and conference organizers was worked out that night (Tuesday), and Sen addressed a group of participants during a special session on Wednesday afternoon. Chemical educators are a conservative group, and our organized meetings have avoided intense debate over current issues. The procedural issue raised here concerned achieving a balance between the respect we feel to be due to an eminent scientist against the opportunity for a simultaneous public airing of points of view contrary to those s/he expresses. In this case, both the Bethe and Sen presentations were standard fare meriting only the courtesy which chemists normally extend to speakers. The incident raised a great deal of excitement and discussion regarding rights of speech at a conference; the "pro/anti nuke" content-based issues were simply not very intensely discussed by participants in spite of the incident.

#### 3. Find synonyms among the pool of words:

Pool of words	Synonyms
1) 1.occur /2.scatter /3. take place /4. Spread	
2) 1.cavity /2.sap /3.juice /4.contents /5.hole /6.ingredients	
3) 1.nucleus/2.division/3.core/4.naked/5.separation/6. bare	
4) 1.unit /2.part /3.fluid /4.grain /5.solution /6.com	

#### 4. Answer the following questions. Use all information given before:

- 1. When were cells discovered?
- 2. How did Robert Hooke discover cells?
- 3. What is called the cell theory?
- 4. What are the main ideas of the cell theory?
- 5. What is the structure of a typical animal cell?
- 6. How do plant cells differ from animal cells?

#### LESSON 8. ACTUAL PROBLEMS OF THE STUDIED AREA

#### 1. Answer the following questions?

- 1. What do we understand about Modern chemistry?
- 2. How many actual problems do we know about?

#### 2. Work in pair. Translate into Uzbek.

#### Text-1

R. C, Anderson (29, LSF) dealt with practical issues related to the teaching of energy issues to the broadest conceivable audience including average citizens as well as scientists and engineers. The need for clarification of energy concepts versus those of economics, ecology, and ethics was highlighted. Problems with an overabundance of often misleading units were noted. Specification of the initial and final states of all starting materials and products is important. The expression of these notions in terms readily understood by laymen is a key problem. A. Breyer (100, TET) described the use of thermodynamic data and AH diagrams for reactions and for thermodynamically definable "steps." Although presentations in terms of AG and AS were included, the author feels that AH diagrams are more instructive for our relatively low temperature world.

#### Text-2

#### **RECOMBINANT DNA**

Genetic engineering is reported in the contemporary current events sources from Newsweek to the local newspaper. Reading The Wall Street Journal gives us ideas about which stocks offer a "play" in recombinant DNA application; reading the scientific literature gives us complex technical descriptions of procedures. A basic technical description of recombinant DNA techniques, one oriented toward chemists, was in order. G. Wilson (108, CEO) proclaimed that we are at the "doorstep of the genetic age" as he began to describe recombinant DNA technology in his amusipgly illustrated presentation. A series of discoveries including: plasmids carrying foreign DNA into a bacterial cell; restriction enzymes which recognize certain nucleotide sequences on DNA and cut at these places; techniques for preparing DNA fragments; and insertion enzymes which can help insert new DNA into plasmids. His audience remained skeptical when Wilson suggested that these techniques could soon be used in high school experiments. He summarized the potential benefits of this work. These include: insights into gene function; synthesis of important natural products such as insulin and interferon; and possibly gene therapy. Wilson minimized the risks in this work, one of which is the development of lethal bacterial strains. In addition to physical containment, biological containment involves the use of bacteria which are unable to survive outside of very specialized growth media.

#### Text-3

#### PUBLIC UNDERSTANDING OF SCIENCE

W. E. Burrows (127, DWB) gave a delightful talk on press reporting of science. When reporters convey at face value that which is provided to them by

corporations, government agencies, testing laboratories, "supposedly disinterested academicians," etc., their stories are often contradictory and confusing. Interpreting science news leaves reporters open to a range of charges. The problems were amusingly set forth in a satirical description of the fictitious MESSUP controversy. Burrows advocated improved science training for those who would become journalists. In particular, he described a creative and unusual program for science training of reporters which is being considered at NYU.

#### Text-4

#### **HEALTH AND SAFETY**

In spite of the hue and cry of the public and the often talked about threat of OSHA involvement in academic laboratories, Conference participants did not appear to be preoccupied with health and safety issues. Nevertheless, the Conference organizers provided an excellent presentation on toxicology. F. L. Scott (95, DWB) reviewed basic notions of toxicology, and talked about proposed mechanisms of carcinogenesis. Two mechanisms for carcinogenesis are a "single deleterious event which remains veiled" and a threshold mechanism in which repairs are possible until a threshold is exceeded. Scott observed that some enzyme systems detoxify materials but occasionally produce reactive intermediates which may damage genetic material. His presentation was very smoothly delivered and was an excellent scientific updating. In response to a question about thresholds, Scott cited the example of Tylenol®: there is complete safety below a threshold, but once the glutathione pool of an individual is depleted, serious toxic effects may result to that individual. A. M. Tometsko (96, DWB) compared and contrasted the definitions of mutagenicity and carcinogenicity. He described the Ames test for mutagenicity and reported some interesting results. Some chemicals are found to be antimutagenic: they lower the mutagenicity of other chemicals in the Ames test. He speculated that, for workers that are routinely exposed to mutagenic chemicals, it may be possible to raise the threshold for neoplasm formation by treatment with appropriate antimutagens.

#### 3. Match the sentence halves. Make complete sentences:

1.	Hooke designed his own compound light microscope	<b>A.</b>	a membrane is called the tonoplast.
2.	The concept that cells are the basic units of life	В.	of living organisms.
3.	Cells form the building blocks	C.	which controls their activities.
4.	Cells arise only by	D.	to observe structures too small to be seen with the naked eye.
5.	Cells contain inherited information	Е.	called chromatin.
6.	The contents consist of a central ball-shaped nucleus	F.	the division of existing cells.

7.	The nucleus contains a fibrous material	G.	called the vacuole.
8.	Chromatin contains DNA, the material which controls	Н.	became embodied in a theory called the cell theory.
9.	Most plant cells have a large sap-filled cavity	I.	surrounded by material called cytoplasm.
10.	The vacuole surrounded by	J.	in the cytoplasm.
11.	Many plant cells have chloroplasts	К.	the various activities inside the cell.
12.	Chloroplasts occur only in the parts of plants	L.	exposed to light – the green parts.

#### 4. Read and translate the short text without any dictionary:

#### **Fact of life:**

Robert Hooke described his observations of the cork cells: "I counted several lines of these pores, and found that there were usually about three-score of these small Cells placed end-ways in the eighteenth part of an inch in length, whence I concluded that there must be near eleven hundred of them, or somewhat more than a thousand in length of an inch and therefore in a square inch above a Million, or 1 166 400, and in a Cubick Inch, above twelve hundred million, or 1 259 712 000, a thing almost incredible, did not our Microscope assure us of it by ocular demonstration.

#### LESSON 9. PROFESSIONAL ETHICS

#### 1. Work in group. Read the text and translate into Uzbek.

#### Text-1

Code of Ethics of the Human Biology Association (HBA) to be circulated to membership prior to a vote by the HBA Membership at the annual business meeting April 13, 2016 Preamble Human biologists are part of many academic and professional communities—including anthropology, public health, medicine, and other disciplines—each with its own moral rules or codes of ethics. Human biologists have obligations to their scholarly disciplines, their colleagues and students, the wider society, and the environment.

#### Text-2

Furthermore, many human biologists work with living human study participants, whose rights in such roles place obligations upon researchers and with whom researchers may develop close relationships that generate additional ethical considerations. In a field of such complex involvement and obligations, it is inevitable that misunderstandings, conflicts, and the need to make choices among apparently incompatible values will arise. Human biologists are responsible for grappling with such difficulties and struggling to resolve them in ways compatible with the principles stated here.

#### Text-3

The purpose of this Code is to foster discussion and education. The Human Biology Association (HBA) does not adjudicate claims of unethical behavior. The principles and guidelines in this Code provide human biologists with discipline-relevant tools with which to develop and maintain an ethical framework as they engage in their work. This Code is intended to complement those in place at academic and other institutions, and those formulated by other associations to which a human biologist may belong. Ethical codes and guidelines have and will continue to change, and there are few rules that fit all situations. The sources for this Code are noted in the Acknowledgments, and additional resources to help inform human biologists are listed at the end of this document.

#### a. Phrases to Be Used in Discussion

- 1. Could you explain what you mean by ...
- 2. I'm not quite sure I follow you.
- 3. Well, the point is ...
- 4. It is obvious that ...
- 5. In my opinion ...
- 6. As I see it ...
- 7. Won't (Would) you agree that ...?
- 8. There is no doubt about that.
- 9. I couldn't agree more.
- 10. I completely agree with you.

- 11. That's just what I was thinking.
- 12. You haven't convinced me that ...
- 13. I agree with you on the whole but ...
- 14. Perhaps, but ...
- 15. Possibly, but ...
- 16. Oh, but don't you think that ...
- 17. Look at it in another way ...
- 18. On the contrary.
- 19. On the one hand ...
- 20. On the other hand ...

#### LESSON 10. PROFESSIONAL ETHICS

### 1. Work in group. Read the text and translate into Uzbek. Text-1

Human biologists may choose to move beyond disseminating research results to a position of advocacy. This is an individual decision but not an ethical responsibility. Adopting a position of advocacy, however, can come with additional ethical responsibilities that must be considered. V. Teaching and Mentoring In addition to adhering to ethical and legal codes governing relations between teachers/mentors and students/trainees and junior colleagues at their educational institutions or as members of wider organizations, teachers of human biology should be particularly sensitive to the ways in which such codes apply in their discipline (for example, when teaching involves close contact with students/trainees in field or laboratory situations).

#### Text-2

Among the widely recognized precepts which human biology teachers, like other teachers and mentors, should follow are: a. Teachers and mentors should conduct their programs in ways that preclude discrimination on the basis of sex, gender, sexual orientation, marital status, reproductive or parental status, "race," social or economic class, political convictions, disability, religion, ethnic background, national origin, age, physical appearance, military/veteran status or other attributes irrelevant to academic performance. b. Teachers' and mentors' duties include continually striving to improve their teaching and training techniques; being available and responsive to student and trainee interests; counseling students and trainees realistically regarding career opportunities; 6 conscientiously supervising, encouraging, and supporting students' and trainees' studies; being fair, prompt, and reliable in communicating evaluations; assisting students and trainees in securing research support; and helping students and trainees when they seek professional placement. c. Teachers and mentors should impress upon students and trainees the ethical challenges involved in every phase of human biological work; encourage them to reflect upon this and other codes; encourage dialogue with colleagues on ethical issues; and discourage participation in ethically questionable projects or behaviors. d. Teachers and mentors should publicly acknowledge student and trainee assistance in research and preparation of their work; give appropriate credit for co-authorship to students and trainees just as one would to peer colleagues who have participated in the generation, analysis, and/or writing of research findings; encourage publication of worthy student/trainee papers; and compensate students and trainees justly for their participation in all professional activities. e. Teachers and mentors must, at a minimum, adhere to the regulations at their institutions regarding sexual relations with, and sexual harassment of, any student, trainee, or junior colleague.

Moreover, teachers and mentors should be aware of the exploitation and serious conflicts of interest which may result if they engage in sexual relations with students, trainees, or junior colleagues. They must avoid sexual liaisons with those whose education and professional training they are in any way directly responsible. These guidelines on sexual relations extend to all contexts (including but not limited to the classroom, laboratory, fieldwork, and professional meetings or events) in which human biologists interact with students/trainees they directly supervise. Among all persons and in all circumstances, sexual harassment is unacceptable. f. Non-sexual forms of harassment (e.g., bullying, intimidation, coercion, demeaning remarks) teachers/mentors threats, by towards students/trainees or junior colleagues are unacceptable.

#### Text-4

V. Collegiality All human biologists and members of the HBA are expected to treat colleagues with respect and courtesy, based on principles of equality and mutual respect. Respect and courtesy include a number of different elements: a. Sexual and other forms of harassment (including bullying, intimidation, coercion, and threats) in any and all professional contexts (including but not limited to classrooms, laboratories, fieldwork, and professional meetings or events) are prohibited. The term harassment includes but is not limited to verbal conduct such as epithets, derogatory comments, slurs, or jokes; visual conduct, such as deliberately derogatory posters, photography, cartoons, drawings, or gestures; physical conduct such as an assault, unwanted touching, blocking normal movement; interfering with professional activities because of the person's sex, race, physical appearance or any other attributes irrelevant to 7 scholarly performance; retaliation for having reported or threatened to report prohibited harassment or discrimination; and any other verbal, visual, or physical conduct that unreasonably interferes with a person's work or other professional effort or creates an intimidating and/or hostile environment. Harassment also encompasses threats, demands or subtle pressure for sexual favors as a condition of favorable treatment or offers of benefits in return. Differences of opinion and disagreements that arise in the course of professional life do not in and of themselves necessarily constitute harassment; involved individuals should nonetheless endeavor to be respectful and refrain from ad hominem remarks and, depending on the specific circumstances, perhaps seek conflict resolution assistance from their workplace(s). Neither the professional status nor the personal attributes of individuals (including but not limited to sexual orientation, religion, dress, physical appearance, ancestry) excuse harassment. The risk of experiencing harassment is not necessarily limited to those persons with less stature - an individual may be subjected to harassment from someone of higher, comparable or lower professional standing. In particular, seniority does not confer a prerogative to be disrespectful but rather an obligation to avoid exploiting the vulnerability of junior colleagues.

#### 2. Phrases to Be Used in Discussion

- 1. It seems to me that ...
- 2. I am not sure about that.
- 3. As far as I know ...
- 4. Could you be a little more specific?
- 5. I am afraid, I don't agree with you here.
- 6. It's too time-consuming.
- 7. It's a good point.
- 8. You did a great job.
- 9. I see your point.
- 10. Basically I understand what you mean, but I think your conclusions are wrong.
- 11. I don't think it will work.
- 12. I'm sorry to interrupt you, but ...
- 13. Excuse me for interrupting you, but (I don't think this information is relevant to the subject of our discussion).
- 14. You misunderstood. Let me explain.

.

#### LESSON 11. RELATIVE DISCIPLINES TO CHEMISTRY

#### 1. Work in group. Read the text and translate into Uzbek.

By the end of this text you should be able to:

- describe the main stages of The Scope Of Chemistry
- distinguish between mitosis and meiosis.

Pre-reading

### The Scope Of Chemistry Text-1.

The days are long past when one person could hope to have a detailed knowledge of all areas of chemistry. Those pursuing their interests into specific areas of chemistry communicate with others who share the same interests. Over time a group of chemists with specialized research interests become the founding members of an area of specialization. The areas of specialization that emerged early in the history of chemistry, such as organic, inorganic, physical, analytical, and industrial chemistry, along with biochemistry, remain of greatest general interest. There has been, however, much growth in the areas of polymer, environmental, and medicinal chemistry during the 20th century. Moreover, new specialities continue to appear, as, for example, pesticide, forensic, and computer chemistry.

**Crime-scene investigation: forensic chemistry** A simulated crime scene is a teaching tool in a university forensic chemistry program. *University College Cork*,

## Text-2. Analytical chemistry

Most of the materials that occur on Earth, such as wood, coal, minerals, or air, are mixtures of many different and distinct chemical substances. Each pure chemical substance (e.g., oxygen, iron, or water) has a characteristic set of properties that gives it its chemical identity. Iron, for example, is a common silverwhite metal that melts at 1,535° C, is very malleable, and readily combines with oxygen to form the common substances hematite and magnetite. The detection of iron in a mixture of metals, or in a compound such as magnetite, is a branch of analytical chemistry called qualitative analysis. Measurement of the actual amount of a certain substance in a compound or mixture is termed quantitative analysis. Quantitative analytic measurement has determined, for instance, that iron makes up 72.3 percent, by mass, of magnetite, the mineral commonly seen as black sand along beaches and stream banks. Over the years, chemists have discovered chemical reactions that indicate the presence of such elemental substances by the production of easily visible and identifiable products. Iron can be detected by chemical means if it is present in a sample to an amount of 1 part per million or greater. Some very simple qualitative tests reveal the presence of specific chemical elements in even smaller amounts. The yellow colour imparted to a flame by sodium is visible if the sample being ignited has as little as one-billionth of a gram of sodium. Such analytic tests have allowed chemists to identify the types and amounts of impurities in various substances and to determine the properties of very pure materials. Substances used in common laboratory experiments generally have impurity levels of less than 0.1 percent. For special applications, one can purchase chemicals that have impurities totaling less than 0.001 percent. The identification of pure substances and the analysis of chemical mixtures enable all other chemical disciplines to flourish.

### Text-3. Inorganic chemistry

Modern chemistry, which dates more or less from the acceptance of the law of conservation of mass in the late 18th century, focused initially on those substances that were not associated with living organisms. Study of such substances, which normally have little or no carbon, constitutes the discipline of inorganic chemistry. Early work sought to identify the simple substances—namely, the elements—that are the constituents of all more complex substances. Some elements, such as gold and carbon, have been known since antiquity, and many others were discovered and studied throughout the 19th and early 20th centuries. than are known. The study more 100 of such inorganic compounds as sodium chloride (common salt) has led to some of the fundamental concepts modern chemistry, the law of definite of proportions providing one notable example. This law states that for most pure chemical substances the constituent elements are always present in fixed proportions by mass (e.g., every 100 grams of salt contains 39.3 grams of sodium and 60.7 grams of chlorine). The crystalline form of salt, known as halite, consists of intermingled sodium and chlorine atoms, one sodium atom for each one of chlorine. Such a compound, formed solely by the combination of two elements, is known as a binary compound. Binary compounds are very common in inorganic chemistry, and they exhibit little structural variety. For this reason, the number of inorganic compounds is limited in spite of the large number of elements that may react with each other. If three or more elements are combined in a substance, the structural possibilities become greater.

# Text-4. Organic chemistry

Organic compounds are based on the chemistry of carbon. Carbon is unique in the variety and extent of structures that can result from the three-dimensional connections of its atoms. The process of photosynthesis converts carbon dioxide and water to oxygen and compounds known as carbohydrates. Both cellulose, the substance that gives structural rigidity to plants, and starch, the energy storage product of plants, are polymeric carbohydrates. Simple carbohydrates produced by photosynthesis form the raw material for the myriad organic compounds found in the plant and animal kingdoms. When combined with variable amounts of hydrogen, oxygen, nitrogen, sulfur,

phosphorus, and other elements, the structural possibilities of carbon compounds become limitless, and their number far exceeds the total of all nonorganic compounds. A major focus of organic chemistry is the isolation, purification, and structural study of these naturally occurring substances. Many natural products are simple molecules. Examples include formic acid ( $HCO_2H$ ) in ants, ethyl alcohol ( $C_2H_5OH$ ) in fermenting fruit, and oxalic acid ( $C_2H_2O_4$ ) in rhubarb leaves. Other natural products, such as penicillin, vitamin  $B_{12}$ , proteins, and nucleic acids, are exceedingly complex.

#### Text-5.

The isolation of pure natural products from their host organism is made difficult by the low concentrations in which they may be present. Once they are isolated in pure form, however, modern instrumental techniques can reveal structural details for amounts weighing as little as one-millionth of a gram. The correlation of the physical and chemical properties of compounds with their structural features is the domain of physical organic chemistry. Once the properties endowed upon a substance by specific structural units termed functional groups are known, it becomes possible to design novel molecules that may exhibit desired properties. The preparation, under controlled laboratory conditions, of specific compounds is known as synthetic chemistry. Some products are easier to synthesize than to collect and purify from their natural sources. Tons of vitamin C, for example, are synthesized annually. Many synthetic substances have novel properties that make them especially useful. Plastics are a prime example, as are many drugs and agricultural chemicals. A continuing challenge for synthetic chemists is the structural complexity of most organic substances. To synthesize a desired substance, the atoms must be pieced together in the correct order and with the proper three-dimensional relationships. Just as a given pile of lumber and bricks can be assembled in many ways to build houses of several different designs, so too can a fixed number of atoms be connected together in various ways to give different molecules. Only one structural arrangement out of the many possibilities will be identical with a naturally occurring molecule. The antibiotic erythromycin, for example, contains 37 carbon, 67 hydrogen, and 13 oxygen atoms, along with one nitrogen atom. Even when joined together in the proper order, these 118 atoms can give rise to 262,144 different structures, only one of which has the characteristics of natural erythromycin. The great abundance of organic compounds, their fundamental role in the chemistry of life, and their structural diversity have made their study especially challenging and exciting. Organic chemistry is the largest area of specialization among the various fields of chemistry.

#### 2. Match these words with their definitions:

1.	Cell	A.	not having sexual organs or having sex	
2.	multicellular	<b>B.</b>	to make sperm join an egg so that a young baby or	

			animal develops	
3.	Reproduction	C.	a change in the genetic structure of an animal or plant,	
	_		that makes it different from others of the same type	
4.	Gamete	D.	the sequence of events that occurs between one cell	
			division and the next cycle	
<b>5.</b>	Fertilization	<b>E.</b>	the central part of an atom, made up of neutrons,	
			protons, and other elementary particles	
6.	chromosome	F.	a group of animals or plants which are all similar and	
			can breed together to produce young animals or plants	
			of the same kind as them	
7.	Nucleus	G.	to become twice	
8.	Asexual	H.	the act or process of producing young animals or	
			plants	
9.	Mutation	I.	a part of every living cell that is shaped like a thread	
			which controls the character, shape etc. that a plant or	
			animal has	
10.	Species	J.	a type of cell which joins with another cell, starting the	
			development of a baby or other young creature	
11.	to double	K.	more than one cell	
12.	cell cycle	L.	the smallest part of a living thing that can exist	
			independently	

### 3.Give Uzbek equivalents to the following English terms:

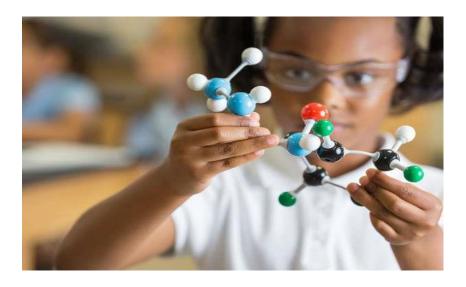
N₂	English term	Uzbek equivalent		
1	to consist of DNA	_		
2	wrapped in protein			
3	matching pairs			
4	two sets of chromosomes			
5	identical nuclei			
6	to be identical to sth.			
7	without changing the genetic information			
8	for growth of a multicellular organism			
9	nuclear division			
10	human nerve cells			
11	sexual reproduction			
12	fertilized cell			
13	the light microscope			
14	to contain the same genes			
15	can exchange genetic material			
16	genetically different from			

### 4. Find synonyms among the pool of words:

Pool of words	Synonyms
1) 1.concept /2.damaged /3. injured /4. idea	
2) 1.arise /2.appear /3.vary /4. occur /5.change	
3) 1.sex /2.mutation /3.gender /4.change /5.alteration	
4) 1.essential/2.reproduce/3.important/4.breed/5.necessary	

#### LESSON 12. ISSUES OF TEACHING AND INTERPRETING TEXT, TERMS AND DEFINITIONS OF SPECIALIZATION

#### 1. Describe the picture



molecular structureA ball-and-stick model of molecular structure, showing atoms bonded together. © asiseeit/iStock.com

#### 2. Work in group. Read the text and translate into Uzbek.

# Text-1. The Methodology Of Chemistry

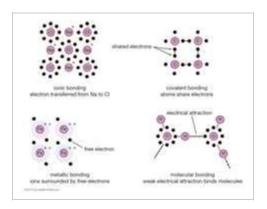
Chemistry is to a large extent a cumulative science. Over time the number and extent of observations and phenomena studied increase. Not all hypotheses and discoveries endure unchallenged, however. Some of them are discarded as new observations or more satisfying explanations appear. Nonetheless, chemistry has a broad spectrum of explanatory models for chemical phenomena that have endured and been extended over time. These now have the status of theories, interconnected sets of explanatory devices that correlate well with observed phenomena. As new discoveries are made, they are incorporated into existing theory whenever possible. However, as the discovery of high-temperature superconductors in 1986 illustrates, accepted theory is never sufficient to predict the course of future discovery. Serendipity, or chance discovery, will continue to play as much a role in the future as will theoretical sophistication.

### Text-2. Studies of molecular structure

The chemical properties of a substance are a function of its structure, and the techniques of X-ray crystallography now enable chemists to determine the precise atomic arrangement of complex molecules. A molecule is an ordered assembly of atoms. Each atom in a molecule is connected to one or more neighbouring atoms by a chemical bond. The length of bonds and the angles between adjacent bonds

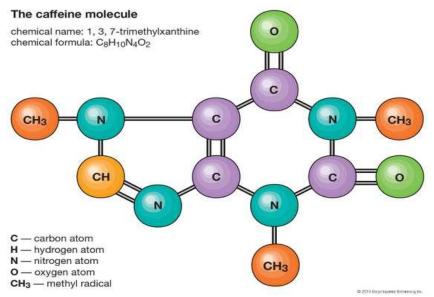
are all important in describing molecular structure, and a comprehensive theory of chemical bonding is one of the major achievements of modern chemistry. Fundamental to bonding theory is the atomic—molecular concept.

**Molecule**, a group of two or more atoms that form the smallest identifiable unit into which a pure substance can be divided and still retain the composition and chemical properties of that substance.



Text-3.

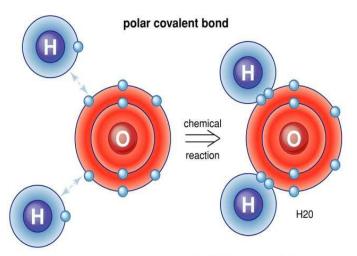
The division of a sample of a substance into progressively smaller parts produces no change in either its composition or its chemical properties until parts consisting of single molecules are reached. Further subdivision of the substance leads to still smaller parts that usually differ from the original substance in composition and always differ from it in chemical properties. In this latter stage of fragmentation the chemical bonds that hold the atoms together in the molecule are broken.



caffeine molecule Caffeine molecule. Encyclopædia Britannica, Inc.

#### Text-4.

Atoms consist of a single nucleus with a positive charge surrounded by a cloud of negatively charged electrons. When atoms approach one another closely, the electron clouds interact with each other and with the nuclei. If this interaction is such that the total energy of the system is lowered, then the atoms bond together to form a molecule. Thus, from a structural point of view, a molecule consists of an aggregation of atoms held together by valence forces. Diatomic molecules contain two atoms that are chemically bonded. If the two atoms are identical, as in, for example, the oxygen molecule (O<sub>2</sub>), they compose a homonuclear diatomic molecule, while if the atoms are different, as in the carbon monoxide molecule (CO), they make up a heteronuclear diatomic molecule. Molecules containing more than two atoms are termed polyatomic molecules, e.g., carbon dioxide (CO<sub>2</sub>) and water (H<sub>2</sub>O). Polymer molecules may contain many thousands of component atoms.



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#### 2. <u>Match the sentence halves. Make complete sentences:</u>

1	Cell division starts	A.	the individual's mother and the other
			from the father.
2	Chromosomes are the structures	<b>B.</b>	and produces two identical nuclei.
	that provide		•
3	Chromosomes consist of	C.	occurring at some point in the life
			cycle of organisms that reproduce
			sexually.
4	One chromosome in each pair	D.	DNA, the genetic material of the cell,
	comes from		wrapped in protein.
5	In mitosis, the nucleus divides	E.	according to conditions such as
	once		temperature and the type of cell.
6	The cell cycle is the sequence of	F.	with the division of the nucleus.
	events		
1		1	

7.	The duration of the cell cycle	G.	that occurs between one cell division
	varies		and the next.
8.	Meiosis is the basis of sexual	H.	would be doubled in each generation.
	reproduction,		
9.	Without meiosis in the life cycle,	I.	continuity between one generation of
	the number of chromosomes of a		cells and the next.
	sexually reproducing species		

# LESSON 13. ISSUES OF TEACHING AND INTERPRETING TEXT, TERMS AND DEFINITIONS OF SPECIALIZATION

## 1. A. Match the words with their definitions:

1	to join	A	only one or considered to its own	
2	Base	В	serious study of a subject that is intended to discover new	
			facts or test new ideas	
3	Ring	C	to connect or fasten things together	
4	support	D	the most important part of something from which new	
			ideas develop	
5	Bond	E	a circular line or mark	
6	Single	F	sympathetic encouragement and help that you give to	
			someone	
7	research	G	the chemical force that holds atoms together	
8	to discover	H	a single thin piece of thread, wire, hair etc.	
9	double	I	something that is twice the size, quantity, value, or	
			strength of something else	
10	strand	J	to find something that was hidden or that people did not	
			know about before	

# 2. Work in group. Read the text and translate into Uzbek.

#### Text-1.

Chemistry, the science that deals with the properties, composition, and structure of substances (defined as elements and compounds), the transformations they undergo, and the energy that is released or absorbed during these processes. Every substance, whether naturally occurring or artificially produced, consists of one or more of the hundred-odd species of atoms that have been identified as elements. Although these atoms, in turn, are composed of more elementary particles, they are the basic building blocks of chemical substances; there is no quantity of oxygen, mercury, or gold, for example, smaller than an atom of that substance. Chemistry, therefore, is concerned not with the subatomic domain but with the properties of atoms and the laws governing their combinations and how the knowledge of these properties can be used to achieve specific purposes.

## Text-2.

The great challenge in chemistry is the development of a coherent explanation of the complex behaviour of materials, why they appear as they do, what gives them their enduring properties, and how interactions among different substances can bring about the formation of new substances and the destruction of old ones. From the earliest attempts to understand the material world in rational terms, chemists have struggled to develop theories of matter that satisfactorily explain both permanence and change. The ordered assembly of

indestructible atoms into small and large molecules, or extended networks of intermingled atoms, is generally accepted as the basis of permanence, while the reorganization of atoms or molecules into different arrangements lies behind theories of change. Thus chemistry involves the study of the atomic composition and structural architecture of substances, as well as the varied interactions among substances that can lead to sudden, often violent reactions.

### Text-3.

Chemistry also is concerned with the utilization of natural substances and ones. Cooking, fermentation, the creation artificial glass making, and metallurgy are all chemical processes that date from the beginnings of Teflon, liquid crystals, semiconductors, vinyl, civilization. Today, superconductors represent the fruits of chemical technology. The 20th century saw dramatic advances in the comprehension of the marvelous and complex chemistry of living organisms, and a molecular interpretation of health and disease holds great promise. Modern chemistry, aided by increasingly sophisticated instruments, studies materials as small as single atoms and as large and complex as DNA (deoxyribonucleic acid), which contains millions of atoms. New substances can even be designed to bear desired characteristics and then synthesized. The rate at which chemical knowledge continues to accumulate is remarkable. Over time more than 8,000,000 different chemical substances, both natural and artificial, have been characterized and produced. The number was less than 500,000 as recently as 1965.

# 3. Term and definitions of Chemistry.

**Science**, any system of knowledge that is concerned with the physical world and its phenomena and that entails unbiased observations and systematic experimentation. In general, a science involves a pursuit of knowledge covering general truths or the operations of fundamental laws.

**Energy**, in physics, the capacity for doing work. It may exist in potential, kinetic, thermal, electrical, chemical, nuclear, or other various forms. There are, moreover, heat and work—i.e., energy in the process of transfer from one body to another. After it has been transferred, energy is always designated according to its nature. Hence, heat transferred may become thermal energy, while work done may manifest itself in the form of mechanical energy.

**Atom**, smallest unit into which matter can be divided without the release of electrically charged particles. It also is the smallest unit of matter that has the characteristic properties of a <u>chemical element</u>. As such, the atom is the basic building block of <u>chemistry</u>.

Most of the atom is empty space. The rest consists of a positively charged nucleus of <u>protons</u> and <u>neutrons</u> surrounded by a cloud of negatively charged <u>electrons</u>. The nucleus is small and dense compared with the electrons, which are the lightest charged particles in nature. Electrons are attracted to any

positive <u>charge</u> by their electric force; in an atom, electric forces bind the electrons to the nucleus.

**Oxygen** (O), nonmetallic <u>chemical element</u> of Group 16 (VIa, or the <u>oxygen</u> group) of the <u>periodic table</u>. Oxygen is a colourless, odourless, tasteless <u>gas</u> essential to living organisms, being taken up by animals, which convert it to <u>carbon</u> dioxide; plants, in turn, utilize <u>carbon dioxide</u> as a source of carbon and return the oxygen to the atmosphere. Oxygen forms <u>compounds</u> by reaction with practically any other element, as well as by reactions that displace elements from their combinations with each other; in many cases, these processes are accompanied by the evolution of heat and light and in such cases are called combustions. Its most important <u>compound</u> is <u>water</u>.

# LESSON 14. ISSUES OF TEACHING AND INTERPRETING TEXT, TERMS AND DEFINITIONS OF SPECIALIZATION

# 1. Work in group. Read the text and translate into Uzbek. Text-1.

Intimately interconnected with the intellectual challenges of chemistry are those associated with industry. In the mid-19th century the German chemist Justus von Liebig commented that the wealth of a nation could be gauged by the amount of sulfuric acid it produced. This acid, essential to many manufacturing processes, remains today the leading chemical product of industrialized countries. As Liebig recognized, a country that produces large amounts of sulfuric acid is one with a strong chemical industry and a strong economy as a whole. The production, distribution, and utilization of a wide range of chemical products is common to all highly developed nations. In fact, one can say that the "iron age" of civilization is being replaced by a "polymer age," for in some countries the total volume of polymers now produced exceeds that of iron.

# Text-2. Biochemistry

As understanding of inanimate chemistry grew during the 19th century, attempts to interpret the physiological processes of living organisms in terms of molecular structure and reactivity gave rise to the discipline of biochemistry. Biochemists employ the techniques and theories of chemistry to probe the molecular basis of life. An organism is investigated on the premise that its physiological processes are the consequence of many thousands of chemical reactions occurring in a highly integrated manner. Biochemists have established, among other things, the principles that underlie energy transfer in cells, the chemical structure of cell membranes, the coding and transmission of hereditary information, muscular and nerve function, and biosynthetic pathways. In fact, related biomolecules have been found to fulfill similar roles in organisms as different as bacteria and human beings. The study of biomolecules, however, presents many difficulties. Such molecules are often very large and exhibit great structural complexity; moreover, the chemical reactions they undergo are usually exceedingly fast. The separation of the two strands of DNA, for instance, occurs in one-millionth of a second. Such rapid rates of reaction are possible only through the intermediary action of biomolecules called enzymes. Enzymes are proteins that owe their remarkable rate-accelerating abilities to their three-dimensional chemical structure. Not surprisingly, biochemical discoveries have had a great impact on the understanding and treatment of disease. Many ailments due to inborn errors of metabolism have been traced to specific genetic defects. Other diseases result from disruptions in normal biochemical pathways.

### 2. Chemical element:

**Mercury** (**Hg**), also called **quicksilver**, chemical element, liquid metal of Group 12 (IIb, or zinc group) of the periodic table.

atomic number 80

atomic weight 200.59

**melting point** −38.87 °C (−37.97 °F)

**boiling point** 356.9 °C (674 °F)

specific gravity 13.5 at 20 °C (68 °F)

valence 1, 2

**electron configuration** 2-8-18-32-18-2 or (Xe) $4f^{14}5d^{10}6s^2$ 

# **Element Properties**

# 3. Properties, Uses, And Occurrence

Mercury was known in Egypt and also probably in the East as early as 1500 BCE. The name *mercury* originated in 6th-century alchemy, in which the symbol of the planet was used to represent the metal; the chemical symbol Hg derives from the Latin *hydrargyrum*, "liquid silver." Although its toxicity was recognized at an early date, its main application was for medical purposes.

Mercury is the only elemental metal that is liquid at room temperature. (Cesium melts at about 28.5 °C [83 °F], gallium at about 30 °C [86 °F], and rubidium at about 39 °C [102 °F].) Mercury is silvery white, slowly tarnishes in moist air, and freezes into a soft solid like tin or lead at -38.87 °C (-37.97 °F). It boils at 356.9 °C (674 °F).

Gold (Au), chemical element, a dense lustrous yellow precious metal of Group 11 (Ib), Period 6, of the periodic table. Gold has several qualities that have made it exceptionally valuable throughout history. It is attractive in colour and brightness, durable to the point of virtual indestructibility, highly malleable, and usually found in nature in a comparatively pure form. The history of gold is unequaled by that of any other metal because of its perceived value from earliest times.

•



panningSorted gold in a pan, Alaska, U.S.Dennis Garrett

atomic number 79

atomic weight 196.967

**melting point** 1,063 °C (1,945 °F)

**boiling point** 2,966 °C (5,371 °F)

specific gravity 19.3 at 20 °C (68 °F)

**oxidation states** +1, +3

**electron configuration** [Xe] $4f^{14}5d^{10}6s^1$ 

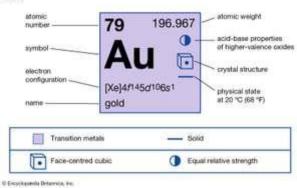
# **Element Properties**



Gold

QUICK FACTS

Gold



View Media Page

## LESSON 15. CURRENTLY BEING TAUGHT OF SPECIAL SUBJECT

Halogens

# 1. What can we see on the picture?

Alkali metals

#### Periodic table of the elements

group 1*	1		Transit	ion met	als	Rare-earth elements (21, 39, 57–71) and lanthanoid elements (57–71 only)							18				
н	2		Other		545							13	14	15	16	17	He
3 Li	4 Be		Other	nonmet	als	LI A	Actinoid elements				5 B	6 C	7 N	8	9 F	10 Ne	
11	12											13	14	15	16	17	18
Na	Mg	3	4	5	6	7	8	9	10	11	12	Al	Si	P	S	CI	A
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kı
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
55 Cs	56 Ba	57 La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 TI	82 Pb	83 Bi	84 Po	85 At	86 Rr
87 Fr	88 Ra	89 Ac	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Nh	114 FI	115 Mc	116 Lv	117 Ts	118 Og
lantha	noid se	ries 6	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu	
actinoid series 7 Pa U				93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr			

<sup>\*</sup>Numbering system adopted by the International Union of Pure and Applied Chemistry (IUPAC). © Encyclopædia Britannica, Inc.

## 2. Work in group. Read the text and translate into Uzbek.

## Text-1.

Kekule's innovations were closely connected with a reform movement that gathered steam in the 1850s, seeking to replace the multiplicity of atomic weight systems with Gerhardt's and Laurent's proposal. Indeed, Kekule could not have succeeded with structure theory if he had not started with the reformed atomic weights. Kekule, Wurtz, and German chemist Carl Weltzien were organizers of the first international chemical conference, held at Karlsruhe in southwestern Germany in September 1860, which was intended to gain unity and understanding across the European chemical community. The Italian chemist Stanislao Cannizzaro played perhaps the most critical role at the conference. The reformers' success was incomplete, but the Karlsruhe Congress can stand as an appropriate symbol of the era when chemistry attained a recognizably modern appearance.



Russian chemist Dmitry Ivanovich Mendeleyev arranged the 63 known elements into a periodic table based on atomic mass, which he published in Principles of Chemistry (1869). Photos.com/Thinkstock

#### Text-2.

The widespread adoption of a single reformed set of atomic weights for the 60-odd known elements appears to have prompted renewed speculation on the relationships of the elements to each other, and various proposals for systems of classification were developed in the 1860s. By far the most successful of these systems was that of the Russian chemist Dmitry Mendeleyev. In 1869 he announced that when the elements were arranged horizontally according to increasing atomic weight, and a new horizontal row was begun below the first whenever similar properties in the elements reappear, then the resulting semi-rectangular table revealed consistent periodicities. The vertical columns of similar elements were called groups or families, and the entire array was called the periodic table of the elements. Mendeleyev demonstrated that this manner of looking at the elements was more than mere chance when he was able to use his periodic law to predict the existence of three new elements, later named gallium, scandium, and germanium, which were discovered in the 1870s and '80s.

## Text-3

To be sure, there were still many anomalies. For example, 15 chemically similar rare earth elements had been discovered by the end of the century. These elements were resistant to any periodic system; eventually they were grouped lanthanides together in separate category, the (later lanthanoids; see transition element). Then in the 1890s British scientists William Ramsay and Lord Rayleigh discovered inert. the gases argon, helium, neon, krypton, and xenon. These were all clearly members of a single chemical family, but there were no vacant spaces in the table for them. Soon after the turn of the 20th century, chemists decided simply to create an extra group for them.

# 4. Suggest Russian equivalents for the following word combinations

No	English term	Russian equivalent
1.	X-ray data	
2.	crucial support to the idea	
3.	double helical structure	
4.	to receive a Nobel Prize for a discovery	
5.	far-reaching consequences	
6.	the nucleotides join together to form long	
	unbranched polynucleotide chains	
7.	removal of a water molecule	
8.	chains coiled around each other	
9.	the double helix is held together	
10.	messenger RNA during protein synthesis	
11	their discovery sparked off a new era	

## LESSON 16. CURRENTLY BEING TAUGHT OF SPECIAL SUBJECT

## 1. A. Match the words with their definitions:

1.	Artificial	A.	the act of separating something into different parts	
2.	Gene	В.	physical harm caused to something or someone	
3.	Visible	C.	not made of natural materials or substances	
4.	Division	D.	a series of related events, actions etc. which have a	
			fixed order	
5.	Damage	<b>E.</b>	something that can be seen	
6.	sequence	F.	the measurement of something from one end to the	
			other	
7.	to attach	G.	to be able to recognize and understand the difference	
			between two similar things or people	
8.	to distinguish	H.	when a battery takes in and stores electricity	
9.	to fold	I.	to connect one thing to another	
10.	to charge	J.	to wind or fold cloth, paper around something	
11.	length	K.	to make something smaller, to bend a piece of paper by	
			laying or pressing one part over another	
12.	to wrap	L.	a small part of the material inside the nucleus of a cell,	
			that controls the development of the qualities that have	
			been passed on to a living thing from its parents	

# b. Work in group. Read the text and translate into Uzbek.

#### Text-1.

**Justus, baron von Liebig**, (born May 12, 1803, Darmstadt, Hesse-Darmstadt [Germany]—died April 18, 1873, Munich, Bavaria), German chemist who made significant contributions to the analysis of organic compounds, the organization of laboratory-based chemistry education, and the application of chemistry to biology (biochemistry) and agriculture.

# Text-2. Training And Early Career

Liebig was the son of a pigment and chemical manufacturer whose shop contained a small laboratory. As a youth, Liebig borrowed chemistry books from the royal library in Darmstadt and followed their "recipes" in experiments he conducted in his father's laboratory. At the age of 16, after studying pharmacy for six months under the tutelage of an apothecary at Heppenheim, he persuaded his father that he wanted to pursue chemistry, not the apothecary trade. In 1820 he began his study of chemistry with Karl Kastner at the Prussian University of Bonn, following Kastner to the University of Erlangen in Bavaria, where Liebig ultimately received his doctorate in 1822. His diligence and brilliance was noticed by the Grand Duke of Hesse-Darmstadt and his ministers, who funded his further

chemistry studies under Joseph-Louis Gay-Lussac in Paris between 1822 and 1824. While in Paris, Liebig investigated the dangerous explosive silver fulminate, a salt of fulminic acid. Concurrently, the German chemist Friedrich Wöhler was analyzing cyanic acid. Liebig and Wöhler jointly realized that cyanic acid and fulminic acid represented two different compounds that had the same composition—that is, the same number and kind of atoms—but different chemical properties. This unexpected conclusion, which was later codified under the concept of isomerism by the Swedish chemist Jöns Jacob Berzelius, led to a lifelong friendship between Liebig and Wöhler and to a remarkable collaborative research partnership, frequently conducted via correspondence.

# Text-3

Liebig's scientific work with fulminates, together with his fortunate meeting with the influential German naturalist and diplomat Alexander von Humboldt, who was always keen to patronize younger talent, led to Liebig's appointment at the small University of Giessen in May 1824. As Liebig later observed in his fragmentary autobiography, "at a larger university, or in a larger place, my energies would have been divided and dissipated, and it would have been much more difficult, perhaps impossible, to reach the goal at which I aimed."

# Text-4 Foundations Of Organic Chemistry

Liebig succeeded in institutionalizing the independent teaching of chemistry, which hitherto in German universities had been taught as an adjunct to pharmacy for apothecaries and physicians. Furthermore, he expanded the realm of chemistry teaching by formalizing a standard of training based upon practical laboratory experience and by focusing attention upon the uncultivated field of organic chemistry. The key to his success proved to be an improvement in the method of organic analysis. Liebig burned an organic compound with copper oxide and identified the oxidation products (water vapour and carbon dioxide) by weighing them, directly after absorption, in a tube of calcium chloride and in a specially designed five-bulb apparatus containing caustic potash. This procedure, perfected in 1831, allowed the carbon content of organic compounds to be determined to a greater precision than previously known. Moreover, his technique was simple and quick, allowing chemists to run six or seven analyses per day as opposed to that number per week with older methods. The rapid progress of organic chemistry witnessed in the early 1830s suggests that Liebig's technical breakthrough, rather than the abandonment of the belief that organic compounds might be under the control of "vital forces," was the key factor in the emergence of biochemistry and clinical chemistry. The five-bulb potash apparatus he designed for carbon dioxide absorption rapidly became, and remains to this day, emblematic of organic chemistry.

## c. Phrases to Be Used in Discussion

- 1. Could you explain what you mean by ...
- 2. Γm not quite sure I follow you.
- 3. Well, the point is ...
- 4. It is obvious that ...
- 5. In my opinion ...
- 6. As I see it ...
- 7. Won't (Would) you agree that ...?
- 8. There is no doubt about that.
- 9. I couldn't agree more.
- 10. I completely agree with you.
- 11. That's just what I was thinking.
- 12. You haven't convinced me that ...
- 13. I agree with you on the whole but ...
- 14. Perhaps, but ...
- 15. Possibly, but ...
- 16. Oh, but don't you think that ...
- 17. Look at it in another way ...
- 18. On the contrary.
- 19. On the one hand ...
- 20. On the other hand ...

# LESSON 17. CURRENTLY BEING TAUGHT OF SPECIAL SUBJECT

# 1. Work in group. Read the text and translate into Uzbek.

## Text-1

**Emil Fischer**, in full **Emil Hermann Fischer**, (born Oct. 9, 1852, Euskirchen, Prussia [Ger.]—died July 15, 1919, Berlin, Ger.), German chemist who was awarded the 1902 Nobel Prize for Chemistry in recognition of his investigations of the sugar and purine groups of substances.

# **Education And Early Career**

Fischer was the eighth child and only surviving son of Laurenz Fischer and Julie Fischer. Laurenz Fischer was a local businessman and entrepreneur. Emil Fischer studied chemistry at the University of Bonn, where he attended the lectures of August Kekule, but he was disappointed with the practical instruction of analytical chemistry at the school. With his cousin Otto Fischer, he transferred in 1872 to the University of Strasbourg, where Adolph von Baeyer had recently been appointed as director of the chemical institute. Fischer earned a doctorate under Baeyer in 1874, and Baeyer chose Fischer to be a private assistant in his research laboratory. Baeyer retained Fischer as an assistant when he moved to the University of Munich in 1875 and soon recommended Fischer for the position of associate professor in charge of the analytical division. While at Strasbourg and Munich, Fischer quickly earned a reputation as an excellent organic chemist. He discovered the compound phenylhydrazine in 1875, and with his cousin Otto he established the structure of the rosaniline dyes discovered earlier by the German chemist August Wilhelm von Hofmann. On the basis of his work in organic chemistry, Fischer was appointed director of the chemical institutes at the provincial Bayarian universities of Erlangen (1882) and Würzburg (1885).

# Text-2 Purine And Sugar Research

After leaving Baeyer's laboratory, Fischer applied the classical chemical methods of organic chemistry to establish the structure of biological compounds such as sugars, purines, and proteins. Fischer began research on the purines in 1882, and during the next 17 years he showed that uric acid, xanthine, caffeine, and other natural compounds were all related to a nitrogencontaining base with a bicyclic structure that he named purine.

In 1884 Fischer began a long study to establish the chemical structure and configuration of the known isomeric sugars—glucose, galactose, fructose, and sorbose—with the goal of ascertaining the source of their isomerism. The key to this study was the reaction of the sugars with phenylhydrazine. The sugars themselves had been difficult to purify and characterize, but they reacted with

phenylhydrazine (an organic compound commonly used in the synthesis of indole) to give osazones that were highly crystalline, easily purified compounds. Fischer soon realized that these sugars were spatial isomers and could be differentiated by applying the theory of the tetrahedral carbon atom, first proposed in 1874 by the Dutch chemist Jacobus Henricus van 't Hoff. Fischer recognized that the known isomers of glucose represented only 4 out of the 16 possible spatial isomers 't Hoff's predicted by van theory. Using the osazone derivatives and synthetic techniques for the sugars developed by the German chemists Tollens and Heinrich Kiliani, Fischer was able to differentiate the known isomers but to synthesize nine of the predicted isomers. Facts Matter. Support the truth and unlock all of Britannica's content.

# Text-3 Enzyme And Protein Research

In 1892, largely on the basis of his extensive study of sugars and purines, Fischer was chosen to succeed Hofmann as professor of chemistry at the University of Berlin, at the time the largest and most prestigious chemical institute in Germany. Under his direction, the chemical institute in Berlin became one of the most flourishing sites for all areas of chemistry in the world. He directed the research of hundreds of pupils and associates from Europe, North America, and Japan.

In Berlin, Fischer's research moved to the study of enzymes and proteins. Fischer's extensive study of the sugars included an investigation of their digestion by yeast, and he found that of the known stereoisomers of glucose, only a few were capable of being digested by the enzymes in yeast. Because these isomers differed only in their spatial properties, Fischer concluded that the enzyme in yeast must also have a specific spatial orientation to receive the sugar molecule and react with it.

Thus, Fischer also became involved in establishing the chemical structure of enzymes and proteins. Proteins were known to be composed of amino acids, but Fischer specifically proposed that the amino acids in proteins were linked together by amide bonds, called peptide bonds by Fischer, who established the presence of this class of molecules in proteins by developing synthetic methods for creating long chains of amino acids held together by peptide bonds to make proteinlike substances. In 1907 he created a polypeptide with 18 amino acids and showed that it could be broken down by enzymes in the same way as a natural protein.

# LESSON 18. CURRENTLY BEING TAUGHT OF SPECIAL SUBJECT

# 1. Work in group. Read the text and translate into Uzbek.

#### Text-1

**Richard E. Smalley**, in full **Richard Errett Smalley**, (born June 6, 1943, Akron, Ohio, U.S.—died October 28, 2005, Houston, Texas), American chemist and physicist, who shared the 1996 Nobel Prize for Chemistry with Robert F. Curl, Jr., and Sir Harold W. Kroto for their joint discovery of carbon-60 ( $C_{60}$ , or buckminsterfullerene) and the fullerenes.

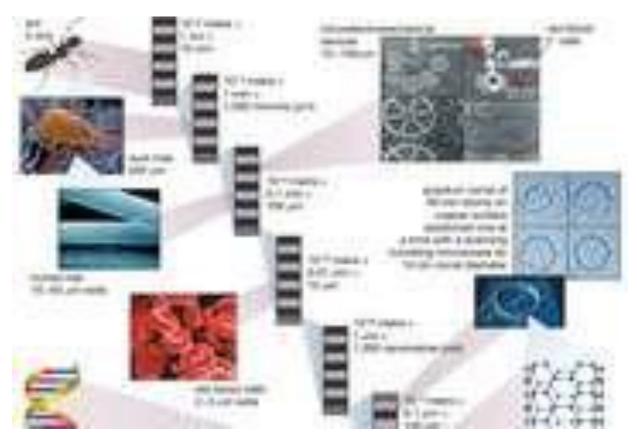
Smalley received a Ph.D. from Princeton University in 1973. After postdoctoral work at the University of Chicago, he began his teaching career at Rice University (Houston, Texas) in 1976. He was named Gene and Norman Hackerman Professor of Chemistry there in 1982 and became a professor of physics in 1990.

It was at Rice University that Smalley and his colleagues discovered fullerenes. the third known form of pure carbon (diamond and graphite are the other two known forms). Smalley had designed a laser supersonic cluster beam apparatus that could vaporize any material into a plasma of atoms and then be used to study the resulting clusters (aggregates of tens to many tens of atoms). On a visit to Smalley's lab, Kroto realized that the technique might be used to simulate the chemical conditions in the atmosphere of carbon stars and so provide compelling evidence for his conjecture that the carbon chains originated in stars.

#### Text-2

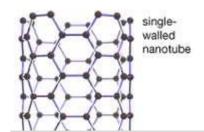
In a now-famous 11-day series of experiments conducted in September 1985 at Rice University by Kroto, Smalley, and Curl and their student coworkers James Heath, Yuan Liu, and Sean O'Brien, Smalley's apparatus was used to simulate the chemistry in the atmosphere of giant stars by turning the vaporization laser onto graphite. The study not only confirmed that carbon chains could be produced but also showed, serendipitously, that a hitherto unknown carbon species containing 60 atoms formed spontaneously in relatively high abundance. The atoms of fullerenes are arranged in a closed shell. C<sub>60</sub>, the smallest stable fullerene molecule, consists of 60 carbon atoms that fit together to form a cage, with the bonds resembling the pattern of seams on a soccer ball. The molecule was given the name *buckminsterfullerene*, or *buckyball*, because its shape is similar to the geodesic domes designed by the American architect and theorist R. Buckminster Fuller.

A leading supporter of nanotechnology, Smalley played a key role in the establishment in 2000 of the National Nanotechnology Initiative, a federal research and development program.



# nanotechnology: Pioneers

Kroto, and **Richard E. Smalley** discovered the first fullerene, the third known form of pure carbon (after diamond and graphite). They named their discovery buckminsterfullerene ("buckyball") for its resemblance to the geodesic domes promoted by the American architect R. Buckminster Fuller. Technically called  $C_{60}$  for the 60...



# fullerene

...the United Kingdom and by **Richard E. Smalley** and Robert F. Curl, Jr., of the United States. Using a laser to vaporize graphite rods in an atmosphere of helium

gas, these chemists and their assistants obtained cagelike molecules composed of 60 carbon atoms ( $C_{60}$ ) joined together by single and double...

# Sir Harold W. Kroto

...2016), English chemist who, with **Richard E. Smalley** and Robert F. Curl, Jr., was awarded the 1996 Nobel Prize for Chemistry for their joint discovery of the carbon compounds called fullerenes....

# LESSON 19.

# PREPARATION OF THE PRESENTATIONS ON SPECIALIZATION AND FORMATION OF SKILLS OF PRESENTATIONS.

# I. PREPARATION AND PLANNING

# I.1 ESSENTIAL PREPARATION AND PLANNING CHECKLIST

This is a checklist of the essential elements to consider in preparing and planning an oral presentation. Use it yourself by filling in the boxes on the right under "My Ideas".



QUESTIONS TO ASK YOURSELF	EXAMPLES	MY IDEAS
1. What is the aim?	✓ to buy my product ✓ to adopt my recommendations ✓ to join the club ✓ to give me a job	
2. What is my title?	<ul> <li>✓ The new Mokia 2001</li> <li>✓ How to reduce production costs</li> <li>✓ The INT Chess Club</li> </ul>	
3. Who am I speaking to?	<ul> <li>✓ What are the benefits to the audience of my product/report/speech?</li> <li>✓ Are these people the decision makers?</li> <li>✓ What do they know of the subject?</li> <li>✓ How does this change my approach?</li> <li>✓ What sort of questions will they ask me? What are the answers?</li> <li>✓ What aspects will they be interested in?</li> </ul>	
4. What are the main points I want to make?	1, 2, 3; first, second, third; point a, point b, point c	
5. What do I want the audience to do after listening to my presentation?	We must invite them:  ✓ to buy my product  ✓ to accept my findings  ✓ to join the club  ✓ to give me a job	

### I.2 Other questions concerning physical aspects.

Who is the audience?

How many people will there be in the audience?

Check beforehand, if you can, the place where you are going to make your presentation.

Where will it take place?

How big is the room?

What equipment is there in the room? What equipment do I need?

Does the equipment work?

Are you going to need a black or whiteboard?

Have you got chalk and / or a felt tip pen?

Do you need an overhead projector or a screen?

Are they in place? Is there a podium? Where are you going to put your notes /papers /transparencies?

Do you need an adapter or extension lead?

Can the information be seen?

Can you present the information and not get in the way?

Do you need a pointer?

Will you need to dim the lights or draw the curtains?

Are you going to need handouts or any other documents? How many? Do they present a good image of you and your company?

#### When?

What time of day is it? What day is it? Will the audience be more or less receptive when listening?

#### How long?

In relation to what the audience knows or time constraints, what can I eliminate if necessary?

#### Other

Am I dressed appropriately? Shoes polished? Are my hands and fingernails clean?



#### LESSON 20.

# PREPARATION OF THE PRESENTATIONS ON SPECIALIZATION AND FORMATION OF SKILLS OF PRESENTATIONS.

# II. STRUCTURE OF AN ORAL PRESENTATION

A good oral presentation is well structured; this makes it easier for the listener to follow.

Basically there are three parts to a typical presentation: the beginning, the middle and the end (or introduction, body and conclusion). We are going to look at each part in turn and present the language needed to express both the structure and the content.



#### II.1 THE BEGINNING OR THE INTRODUCTION

The beginning of a presentation is the most important part. It is when you establish a rapport with the audience and when you have its attention. More detailed techniques can be found in part IV.

#### II.1.A Get the audience's attention and signal the beginning.

Right. Well. OK. Erm. Let's begin. Good. Fine. Great. Can we start?

Shall we start? Let's get the ball rolling. Let's get down to business.



In English-speaking countries it is not uncommon for the speaker to begin with a joke, an anecdote, a statement made to surprise or provoke in order to gain the audience's attention, to make people want to listen, to feel relaxed and even to introduce the subject. This may or may not be appropriate in your country; you are probably the best judge. Certainly humour is difficult to convey and would not be appropriate in all contexts.

A good technique is to try to get your audience involved in your talk either by asking direct or rhetorical questions. Ask for a show of hands for example, in response to a question or, present information in such a way that the audience can identify with it. You can give an anecdote, unusual or surprising facts, or an illustration from real life could be employed here.

### II.1.B Greet audience.

It is important to greet the audience by saying something like:

Hello ladies and gentlemen.

Good morning members of the jury.

Good afternoon esteemed guests

Good evening members of the board

Fellow colleagues Mr. Chairman/Chairwoman

Thank you for your kind introduction

### II.1.C Introduce oneself, (name, position, and company)

Do this not only to give important information so people can identify you but also to establish your authority on the subject and to allow the audience to see your point of view on the subject (you are a student, researcher, responsible for, director of, neophyte, layman).<sup>2</sup>

Good afternoon ladies and gentlemen, let me introduce myself.

Good morning everyone, I'd like to start by introducing myself. My name is...

I am a student at the INT
I am a doctoral candidate,
I am X. Y. from 3 Com. I'm the manager of...
I am a researcher from ... I've been working on the subject now for X years...
I've had wide experience in the field of ...

Good morning, my name is Lawrence Couderc. I am a student at the INT and I would like to talk to you today about some of my findings in a study I did on...

Sometimes, especially when invited to speak, the host introduces the guest, gives the same information as above and then gives the floor to the guest speaker.

I am very pleased and proud to introduce ...who is.... He/she is known for...

Now I'll turn the floor over to today's speaker. (to take the floor, to have the floor, to give the floor to someone.)

# II.1.D Give title and introduce subject

What exactly are you going to speak about? Situate the subject in time and place, in relation to the audience and/or its importance. Give a rough idea or a working definition of the subject.

I plan to speak about...
Today I'm going to talk about...
The subject of my presentation is...
The theme of my talk is...
I've been asked to give you an overview of...

Cultural aspects may be important here; scientists want to demonstrate their work and findings while managers and humanities people want to share ideas and reflections with their audience. It may be the result of a desire to persuade and convince. It may be comparison of two or more products, plans or proposals.

Why are you going to speak about it? I have chosen to speak about this because... I was asked to speak about X because...

Have you set any limits on the scope of your talk? What won't you speak about? It may be very useful to eliminate certain areas before you start so as to avoid confusion or deviation from your main task. It also protects you from criticism later for not covering certain aspects or issues.

Have you estimated the time it will take? 3 It is useful to give the listeners some idea of how long you will speak so as to maintain their attention better. I will not speak about...

I have limited my speech to My talk will last about 15 minutes I will speak for 15 minutes.

You may want to give acknowledgements here too. If you have been sponsored, supported or encouraged by a particular firm, organization, professor, etc. you may want to recognise their contribution. Your research and paper may have been the work of a collaborative effort and you should acknowledge this too giving the names of all the participants.

At some point you should ask a question or somehow try to determine the attitude and knowledge of the audience. How do they feel about the subject? You will then have to modify the contents, as you never know exactly what to expect.

Have you ever heard of...?

You may already know...

I feel sure that some of you...

Every day you encounter...

To get the audience's attention and perhaps to find out where they are you could introduce the subject by saying:

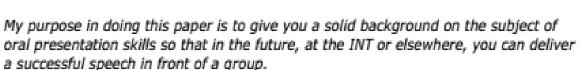
Have you ever heard of/seen X?

You've probably seen countless times...

You may have wondered ...

## II.1.E Give your objectives (purpose, aim, goals)

The main purpose of an informative speech is to have the audience understand and remember a certain amount of information. You should therefore have two purposes: a general purpose and a specific one. The former is to inform: to give an overview, to present, to summarize, to outline; to discuss the current situation or to explain how to do something or how something is done. The latter is what you want the audience to take away with them after listening to you, what you want them to do, what they should remember.



What I would like to do today is to explain

to illustrate...

to give you the essential background information on...

to outline...

to have a look at ...

What I want my listeners to get out of my speech is...

If there is one thing I'd like to get across to you today it is that...

Once you have established your specific objectives you may go on to formulate your content.<sup>4</sup>

### II.1.F Announce your outline.

You want to keep the outline simple so 2 or 3 main points are usually enough. Concerning grammar the headings of the outline should be of the same grammatical form.

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In the first part <u>I qive</u> a few basic definitions.

In the next section <u>I will explain</u>

In part three, <u>I am qoing to</u> show...

In the last part <u>I would like/want to give a practical example...</u>5

#### II.1. G Questions and comments from the audience.

You should also let the audience know at some point in the introduction when and whether they may ask questions.

I'd ask you to save your questions for the end.

There will be plenty of time at the end of my speech for a discussion.

You may interrupt me at any moment to ask questions or make comments.

Please stop me if you don't understand any thing I say but could you keep any specific questions until after I've finished.

### II.1.H Make a transition between the introduction and the body.

You should refer to your transparency or outline.

Now let us turn to point one.

Let us now move on to the second part, which is, as I said earlier....

If you are giving a technical presentation a glossary might be useful and avoid unecessary interuptions. Always explain abbreviations and say acronyms giving their full name when you first mention them and be especially careful with the pronunciation.

# LESSON 21. PREPARATION OF AN ARTICLE AND ANNOTATION FOR THE SPECIALTY.

# 2.1. ANNOTATION LAYOUT

# I. General information about the article

Headline	The article is headlined/entitled
	OR
	The headline/title of the article is
Author	The author of the article is
	OR
	The article was written by
	OR
	The author of the article is unknown
	OR
	The name of the author of the article is missing
Date and	The article was published/printed in
place of	OR
publicatio n	The article is taken from
	OR
	The date and place of publication are unknown/missing

# II. The main idea of the article (1 - 2 sentences)

The	Gives	a brief survey/outline of
article/a	presents	an in-depth examination of
uthor	offers	his views on

surveys	
outlines	
studies	the
investigates	important/topical/controversial/thorny
examines	problem/topic of
analyzes	such
tackles	important/topical/controversial/thorny
describes	problems/topics/aspects as
discusses	
focuses on	
deals with	
touches upon	
has the aim of	of shedding light on the nature of the relationship between
embarks on	a detailed discussion of
	the basic/profound issues of
	the origin of
	different approaches to
shows	
reveals	the main advantages and disadvantages
explains	(pluses and minuses, pros and cons) of
	the major similarities and differences between
	correlations between
	the influence/impact of on
raises	the profound issues of
provides	possible solutions to the problem of

# III The body of the article

How to	First the author says that/ reports that/ states				
start?	that/focuses our attention on				
	OR				
	The author starts by telling the reader/us that/about				
How to	The author goes on to say that				
continue	After that/further/ next the author points out/				
?	emphasizes/highlights/explains/details				
How to	Finally/ in conclusion it is stated/ stressed that				
conclud	OR				
e?	The author draws/reaches the conclusion that				

# IV Your opinion of the article

	+	_
What do you	It is greatly to the author's credit that he/she	It must be noted that the problem raised by the
think of the problem raised by the	raised such a controversial/topical/pressing problemas	author seems to be farfetched/ no longer relevant today
author? Is it relevant today?	provides the reader with useful information about	the article does not give any new information on
Is the article	provides the reader with some insights into	
informat ive	takes a global view of makes an important	
enough? Does the author	contribution to the debate on	
substanti ate	offers a critical appraisal of	
his/her view?	unveils some of the myths exposes the drawbacks of	the article lacks true information about
		the article contradicts the main

	presents an unusual approach to	ideas of
	substantiates his point with examples/figures/statistical data	the author failed to substantiate his point of view with any examples, figures or statistical data
	presents a truly comprehensive/well-grounded analysis of	the analysis ofgiven/presented/provided in this article is far from comprehensive
Is the article clear enough? Is it logically develope d?	It deserves to be mentioned that the article is clearly and logically developed.	It can also be mentioned that the article is confusing and lacks logical structure.
What is your general impressi on of the article? What kind of readersh ip can it	On the whole, the article is an excellent presentation of/gives a foundation for understanding / provides a framework for thinking about and may be of (practical) use to students and all those interested in	For all its drawbacks, the article may be of some use to
attract?	The article provides invaluable guidance to practitioners in this field.	
	The article is intended for the general reader wanting to understand the impact of upon	
	The article is an ideal	

scholarly text for academics and students, policy makers and practitioners.
The article is ideal as a teaching text for courses on

# LESSON 22. PREPARATION OF AN ARTICLE AND ANNOTATION FOR THE SPECIALTY.

### ANNOTATION SAMPLE

## (Text 1)

The headline of the article is *The 100-Year Forecast: Very Hot, and Stormy*. It was written by Kendall Hamilton and Kimberly Martineau and published in the *Newsweek* on 18 August 1997.

The article has the aim of shedding light on what the weather might be like in one hundred years.

First, **Kendall Hamilton and Kimberly Martineau** focus our attention on the fact that, according to scientists, the weather in the next millennium will be quite nasty. The authors go on to highlight the weather changes which are expected to take place due to global warming. These include warming of the average global temperature, which will go along with decreasing temperatures in some parts of the world such as Scandinavia and England and an increase in the number of hurricanes, storms, floods and droughts all over the world. The interrelations between warmer temperatures and the mentioned weather phenomena are explained.

This clearly and logically developed article is intended for the general reader wanting to understand the impact global warming is likely to have upon weather in the world and is remarkable for its clear popular scientific explanations, which are accessible even to a non-specialist.

### ARTICLES FOR ANNOTATING

#### Text 1

The 100-Year Forecast: Very Hot, and Stormy

by Kendall Hamilton and Kimberly Martineau

If you want to know what the weather's going to be like this weekend, ask a weatherman. If you want to know what it'll be like in 100 years, ask a scientist. Forecasts are always iffy, but current thinking suggests that as we sail into the next millennium, we may want to batten down the hatches. It looks like we're in for nasty weather.

The most significant influence on the weather of the future is likely to be global warming. The prevailing view among climatologists is that emissions of so-called "greenhouse gases", which trap heat in the earth's atmosphere - are at least partly responsible for warming the average global temperature by about one degree over

the past 100 years. The next hundred years, most scientists agree, will see the earth heat up further.

Precisely what such temperature changes will mean to weather patterns is tricky to predict with certainty, because weather is the product of so many interrelated variables. But at its simplest level, global warming will, for many, mean just that. Has this summer been hot enough for you? Just wait. In time, the number of days that the mercury hits 90 degrees in New York could double, to 30 a year. In Atlanta, the entire summer might be northward of 90. Projected global temperature changes are only averages, though. Some areas could actually get colder. Mark Meier, a glaciologist at the University of Colorado, says that Norway and other parts of Scandinavia seem to be building up glacier mass, even as the world's glaciers on average are thinning. And certainly, temperature changes can affect weather in roundabout ways. An influx of extra water from melting glaciers, for example, might disrupt the Gulf Stream, an Atlantic Ocean current that brings warmth from the tropics to Western Europe. Without the current, England could get as cold as Greenland in winter. Stiff upper lip, indeed.

Between bouts of sweating or shivering, our descendants may while away the time in their basements. Warmer temperatures increase the rate at which water evaporates, priming the atmosphere for all manner of hurricanes and heavy storms. Between 1970 and 1994, the United States and the Caribbean saw a 10 percent increase in the atmospheric-moisture level, which meant a 10 percent boost in precipitation, says Kevin Trenberth of the National Center for Atmospheric Research. Expect more of the same if temperatures climb. Rain-swollen rivers, storm-eroded beaches and sea levels pumped up by melting glaciers could mean more flooding. Paradoxically, drought stands to be a problem as well. Hot weather causes short, heavy bursts of rain, but the water "doesn't soak in nicely," says Adam Markham, a climate expert at the World Wildlife Fund. "You'll get more rain, but also more drying of the soil."

Newsweek, 08/18/97, Issue 7

## Text 2

# Study Debunks 'Global Cooling' Concern of '70s

by Peter Johnson

The supposed "global cooling" consensus among scientists in the 1970s -- frequently offered by global-warming skeptics as proof that climatologists can't make up their minds -- is a myth, according to a survey of the scientific literature of the era.

The '70s was an unusually cold decade. *Newsweek*, *Time*, *The New York Times* and *National Geographic* published articles at the time speculating on the causes of the unusual cold and about the possibility of a new ice age. But Thomas Peterson of the National Climatic Data Center surveyed dozens of scientific articles from 1965 to 1979 and found that only seven supported global cooling, while 44 predicted warming. Peterson says 20 others were neutral in their assessments of climate trends.

The study reports, "There was no scientific consensus in the 1970s that the Earth was headed into an imminent ice age. "A review of the literature suggests that, to the contrary, greenhouse warming even then dominated scientists' thinking about the most important forces shaping Earth's climate on human time scales." Peterson was also a contributor to the United Nations' Intergovernmental Panel on Climate Change 2007 report.

Scientific reports in the past decade, most notably the U.N. panel's Nobel Prize-winning efforts, have warned that human activities are warming the planet by increasing the release of heat-trapping "greenhouse" gases into the atmosphere. Skeptics have argued that climate change is cyclical, not fueled by the burning of fossil fuels -- coal, oil and natural gas. Peterson notes in the study that concerns over the frigid 1970s subsequently became representative of scientific division over global warming.

That was an unusually cold decade, especially the later years, across the Northern Hemisphere. In the USA, the winters of 1977-79 were three of the 11 coldest since the recording of temperatures began in the 1890s, according to climate center data. The winter of 1978-79 remains the coldest on record in the USA.

Some have doubts about the new survey. "The paper does not place the late '70s in its climatic context," says Pat Michaels, a senior fellow in environmental studies at the Cato Institute in Washington, D.C. "The temperature records we had at the time showed a very sharp cooling from the mid-'40s to the mid-'70s," Michaels says. "And scientists attempted to explain that as a consequence of the pollution that was preventing solar radiation from reaching the surface. "At the time, scientists thought the cooling effect of pollution was greater than the warming effect of carbon dioxide," Michaels adds. "They were attempting to explain the dramatic cooling of the '70s."

USA Today, February 21, 2008

### Text 3

# Atmosphere

by Gaston Bachelard

The atmosphere is a mixture of several gases. There are about ten chemical elements which remain permanently in gaseous form in the atmosphere under all

natural conditions. Of these permanent gases, oxygen makes up about 21 percent and nitrogen about 78 percent. Several other gases, such as argon, carbon dioxide, hydrogen, neon, krypton, and xenon, comprise the remaining 1 percent of the volume of dry air. The amount of water vapor, and its variations in amount and distribution, are of extraordinary importance in weather changes. Atmospheric gases hold in suspension great quantities of dust, pollen, smoke and other impurities which are always present in considerable, but variable amounts.

The atmosphere has no definite upper limits but gradually thins until it becomes imperceptible. Unit recently it was assumed that the air above the first few miles gradually grew thinner and colder at a constant rate. It was also assumed that upper air had little influence on weather changes. Recent studies of the upper atmosphere, currently being conducted by earth satellites and missile probings, have shown these assumptions to be incorrect. The atmosphere has three well-defined strata.

The layer of the air next to the earth, which extends upward for about 10 miles, is known as the *troposphere*. It is the warmest part of the atmosphere because most of the solar radiation is absorbed by the earth's surface, which warms the air immediately surrounding it. A steady decrease of temperature with increasing elevation is a most striking characteristic. The upper layers are colder because of their greater distance from the earth's surface and rapid radiation of heat into space. The temperatures within the troposphere decrease about 3.5 degrees per 1,000-foot increase in altitude.

Above the troposphere to a height of about 50 miles is a zone called the *stratosphere*. The stratosphere is separated from the troposphere by a zone of uniform temperatures called the tropopause. Within the lower portions of the stratosphere is a layer of ozone gases which filters out most of the ultraviolet rays from the sun. The ozone layer varies with air pressure. If this zone were not there, the full blast of the sun's ultraviolet light would burn our skins, blind our eyes, and eventually result in our destruction. Within the stratosphere, the temperature and atmospheric composition are relatively uniform.

The layer upward of about 50 miles is the most fascinating but the least known of these three strata. It is called the *ionosphere* because it consists of electrically charged particles called ions, thrown from the sun. The northern lights originate within this highly charged portion of the atmosphere. Its effect upon weather conditions, if any, is as yet unknown.

# МУСТАКИЛ ТАЪЛИМ МАШҒУЛОТЛАРИ

# Мустакил таълимни ташкил этишнинг шакли ва мазмуни

Чет тили фанидан мустақил ишларининг мақсади - талабаларнинг касбий коммуникатив фаолиятини шакллантириш ва ривожлантириш, уларнинг ижодий фаолиятини ўстириш, ва чет тили устида мустакил ишлай олиш малака ва кўникмаларини хосил килиш ва ривожлантиришдан иборат. Ушбу умумий мақсадга эришиш учун қуйидаги бир неча вазифаларни бажариш назарда тутилади:

- талабаларнинг тил тайёргарлик сифатини ошириб бориш, тил ва мутахассислик бўйича адабиётлар устида ишлай олиш кўникмаларини шакллантириш ва ривожлантириш;
- ўз касбий билим ва малакаларини кейинчалик мустақил тўлдириб ва янгилаб туриш эхтиёжларини яратиш ва сақлаб қолиш, чет тили бўйича яратилган малака ва куникмаларни устириб, ривожлантириб бориш;
- талаба бажариши керак бўлган ишларни тўғри ташкил қилиш, келиб чиқадиган қийинчиликларни олдиндан била олиш, ҳис этиш ва уларни бартараф қилиш йўлларини топа олиш.

VII-семестр 16 соат

№	Theme	Hours
1.	Profession skills.	4
2.	Life and creativity of famous people in the studied scince.	6
3.	News of the iearning scince.	6

VIII-семестр 18 соат

No	Theme	Hours
1.	Working on the text "Professionality and speciality".	10
2.	Actual problems on speciality.	8

**Тавсия этилаётган мустақил ишларнинг мазмуни** Талабаларнинг мустақил ишлари нутқ фаолиятининг қуйидаги турлари бўйича ташкил қилинади.

**Ўкиш**: (танишиб чикиш, синчиклаб, караб чикиш), ёзув, тинглаб тушуниш ва гапириш;

Тинглаб тушуниш: ҳажми турлича бўлган аудио- ва видео матнларни тинглаб тушуниш, саволларга жавоб бериш, гапириб бериш, аннотация ёза

Гапириш: талабаларнинг диалогик ва монологик нутклари бўйича мустакил ишлари аудиторияда ўргатилган матнлар, ўкув материаллари асосида ташкил қилинади. Гапириш бўйича мустақил иш сифатида мавзу асосида маълумот тайёрлаш, матн мазмунини гапириб бериш, ўрганилган лексик материаллар асосида ҳикоялар тузиш, берилган муаммоли масала ва вазиятларни муҳокама қилиш каби топшириқлар бериш мумкин. Гапириш кўникмаларини ривожлантириб бориш учун мультимедиа дастурларини ва он-лайн технологияларини қўллашга асосий эътибор қаратилади;

**Ўқиш**: талаба ўрганаётган соҳасига оид адабиётлар билан танишиб чиқиши ва ўзи учун қизиқарли ва керакли бўлган ахборотни тушуниши, публицистик, илмий-оммабоп ижтимоий-сиёсий адабиётларни ўқиши ва керакли ахборотни олиши лозим. Машғулотларда юқорида айтилган малака ва кўникмаларни шакллантириш ва ўстириш жуда мураккаб бўлганлиги учун уларни мустақил иш жараёнида синчиклаб, кўз югуртириб, қараб чиқиб ўқиш турлари орқали ташкил қилинади. Ушбу ўқиш турларини назорат қилишматнни бутунлай таржима қилиш ёки унинг танлаб олинган қисмларини таржима қилиш билан амалга оширилади.

Танишиб чиқиб ўқиш мустақил иш тури сифатида уйда ўқиш шаклида олиб борилади. Ўқишнинг бу тури учун аутентик ёки адаптация қилинган адабий, илмий-оммабоп адабиёт танлаб олинади. Текшириш шакллари: ўқиганини мазмунини тушунганлиги бўйича савол-жавоб ишлари, ажратиб олинган масалалар бўйича ахборот олиш, бахс-мунозаралар ўтказиш, ахборотга режа тузиш ва ҳ.к.

Қараб чиқиб, қидириб топиш учун ўқиш. Ўқишнинг бу турида оммавий-сиёсий, публицистик матнлар, газета ва журнал материаллари берилади ва ҳар бир дарсда қисқача ахборот олинади. Талаба битта газета мақолалари асосида ахборот беради ёки мавзу бўйича бир қанча газета ва журналлардан ахборот тайёрлайди.

Ёзув. Ёзув бўйича мустақил иш ўз ичига ўрганилаётган тилда фикрни баён қила олиш ишларини олади. Бунда мустақил иш мазмунига қуйидагилар киради:

- аннотация, реферат, резюмелар туза олиш;
- оғзаки равишда нутқ ҳосил қилиш учун режа ёки тезис тузиш;
- турли хатлар, табрикнома, таклифлар, иш юзасидан хатлар туза олиш;
- ўқишга ва ишга қабул юзасидан аризалар ёза олиш;
- соҳага оид турли ҳужжатларни тўлдириш;
- баён, иншо, эсселар ёза олиш; касби бўйича иш юритиш ишларини (ёзувларини) олиб бориш.

Ўқиб таржима қилинган материаллар курс ишлари ва рефератларда қулланилади.

# ГЛОССАРИЙ

English	Ўзбек	Русский
semipolary	ярим қутбли	семиполяр
covolent bond	ковалент боғ	ковалентная связь
hydrogen bond	водород боғ	водородная связь
		координационная
coordination bond	координацион боғ,	СВЯЗЬ
electron tendency	электронга мойиллик	сродство к электрону
ionization energy	ионланиш энергияси	энергия ионизации
polysaccharides	полисахаридлар	полисахариды
	кимёвий боғнинг	длина химической
length chemical bond	узунлиги	СВЯЗИ
	Бренстенд-Лоури	Кислота Бренстенд-
bronsted-Lowry acid	кислотаси	Лоури
	Бренстенд-Лоури	Основание
bronsted-Lowry base	асоси	Бренстенд-Лоура
		индукционное
Inductive effect	индукцион таъсир	влияние
mezomer effect	мезомер таъсири	мезомерные влияние
Bromohydrin	бромгидрин	бромогидрин
Carboxylation	карбоксиллаш	карбоксилирование
Carboxylic acid	карбон кислота	карбоновые кислоты
Conformer	конформер	конформер
		сопряженного
Conjugate addition	туташ бирикиш	присоединения
Claisen condensation	Кляйзен конденсация	Реакции конденсации
reaction	реакцияси	Кляйзена
Decarboxylation	Декарбоксиллаш	Декарбоксилирование
	органик	механизми
Mechanisms of	реакцияларнинг	органических
organic reactions	механизмлари	реакций
Meisenheimer	Мейзенгеймер	Комплекса
complex	комплекс	Мейзенгеймера
Molozonide	молозонид	молозонид
configuration	конфигурация	конфигурация
isomerism,		
metamerism	изомерия, метамерия	изомерия, метамерия
tautomerism	таутомерия	таутомерия
stereochemistry	Стереохимия	стереохимия

conformation	конформация	конформация
Vinyl group	винил гурух	винилная группа
Triple bond	учбоғ	тройная связь
Tipio cono	Циглер Натта	Катализатор Циглера-
Ziegler–Natta catalyst	катализатори	Натта
Williamson ether	Вильямсон эфир	110110
synthesis	синтези	Реакции Вильямсона
nucleophilic	нуклеофиль	нуклеофилная
substitution	алмашиниш	замешения
isomers	Изомерлар.	изомеры
homologues	Гомологлар	ГОМОЛОГИ
heyminal	Геминал	геминал
carbocation	Карбокатион	карбокатион
carbanion	Карбанион	Карбанион
homolysis	Гомолиз	гомолиз
heterolis	Гетеролиз	гетеролиз
Hydroboration	Гидроборлаш	Гидроборирование
Hydration	гидратланиш	гидратация
enantiomer	Энантиомер	энантиомер
Diastereomer	Диастереомер	Диастереомер
	Дильс-Альдер	
Diels-Alder	циклобирикиш	Реакции Дильс-
cycloaddition reaction	реакциялари	Алдерса
nucleophile	нуклеофиль	нуклеофиль
nucleophility	Нуклеофиллик	нуклеофилность
hydrogenation	Гидрогенлаш	гидрогенизация
hydration	Гидратлаш.	гидратация
dien	Диен	Диен
dienophile	Диенофил	Диенофиль
Sulfonation	сульфолаш	сульфирирование
chromatography	Хроматография	Хроматография
		реакционная
reactivity	Реакцион қобилият	способность
regioselectivity	Региоселективлик	Региоселективность
stereoselectivity	Стереоселективлик	Стереоселективность
Grignard reagent	Гриньяр реагенти	Реагент Гриньяра
Epoxide	Эпоксид	Эпоксид
The rules of Popov	Попов қоидаси	Правила Попова
Aldona-crotonic	Альдол-кротон	Альдона-Кротоновая
condensation	конденсацияси.	конденсация
etherification	Этерификация	Этерификация
Transesterification	Переэтерификация	Переэтерификация
Acid halide	Галогенангидрид.	Галогенангидрид

Acid anhydride.	Кислота ангидриди.	Ангидрид кислоты
Acetylide anion.	Ацетилид анион.	Ацетилид анион
Adams catalyst	Адамс катализотари.	Катализатор Адамса.
1,2-Addition	1,2-бирикиш.	1,2-присоединения
Allyl group	Аллил гурух.	Аллильная группа
Aldehyde	Альдегид.	Альдегид.
Amide.	Амид.	Амид.
Amine	Амино бирикмалар.	Амин соединение
	Фишер-Шпейер	Реакция Фишера-
Fisher-Speyer reaction	реакцияси	Шпийера
Mukoyama reaction	Мукояма реакцияси	Реакция Мукояма
Yamaguchi reaction	Ямагучи реакцияси	реакция Ямагучи
Prins reaction	Принс реакцияси	Реакцяия Принса
Prev reaction	Прев реакцияси	Реакция Прева
Woodward reaction	Вудворт реакцияси	Реакция Вудворта
Wacker-process	Вакер жараён	Вакер процесс
Reaktion cross-	Кросс бирикиш	Реакция Кросс
connection	реакцияси	присоеденения
Reaction metatezisa	Метатезис реакцияси	Реакция Метатезиса
Reaction Curry House	Кори-Хаус реакцияси	Реакция Кори- Хауса

# ИЛОВАЛАР

5.1. ФАН ДАСТУРИ

# ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОЛИЙ ВА ЎРТА МАХСУС ТАЪЛИМ ВАЗИРЛИГИ АНДИЖОН ДАВЛАТ УНИВЕРСИТЕТИ

	O RTA MAXSUO
Рўйхатга олинди.	Андижон данды обиверститети ректори:
No.	проф.А.С.Юлдашев
2019 й. ""	2019 йил
	АМАЛИЙ ИНГЛИЗ ТИЛИ ФАНИНИНГ
	<b>Ў</b> ҚУВ ДАСТУРИ

(барча таълим йўналишлари учун)

Билим сохаси:

100000 - Гуманитар соха

300000 - Ишлаб чикариш-техник соха

Таълим сохаси:

110000 - Педагогика 130000 - Математика

140000 - Табиий фанлар

320000 - Ишлаб чикариш технологиялари

Таълим йўналишлари: 5140200 - Касб таълим (ИАТ)

5130100 -Математика

5140200 -Физика

5140100 - Биология (турлари бўйича)

5140500 -Кимё

5140600 - География 5140900 - Экология 5140300- Механика

5321000 - Озик-овкат технология (ёг-мой

махсулотлари)

5110700 - Информатика ўкитиш мтодикаси 5110200- Физика ва астраномия ўкитиш

методикаси

Андижон - 2019

Фаннинг ўкув дастури Андижон давлат университети Кенгаши карорига мувофик, 2019 йил августдаги -сонли буйруги билан тасдикланган.

Фаннинг ўкув дастури Андижон давлат университети Кенгашининг 2019 йилі 31 августдаги 1 сонли баёни билан маъкулланган.

Фан дастури Андижон давлат университетида ишлаб чикилди.

# Тузувчилар:

Д.Рустамов – АндДУ, Чет тиллари факультети, Факультетлараро чет тиллар (аник ва табий фанлар) кафедраси мудири, ф.ф.ф.д.
 Э.Курбанов – АндДУ, Чет тиллари факультети, Факультетлараро чет тиллар (аник ва табий фанлар) кафедраси ўкитувчиси

# Такризчилар:

С.Солижонов – АндДУ, Чет тиллар факультети, Инглиз тили фонетикаси кафедраси мудири, ф.ф.н. доцент
М. Абдувалиев - АндДУ, Чет тиллар факультети Инглизи тили ва адабиёти кафедраси доценти, ф.ф.н., доцент

Фаннинг ўкув дастури Андижон давлат университети Чет тиллар факультети кенгашининг 2019 йил августдаги 1-сон мажлисида кўриб чикилган ва тавсия килинган.

#### кириш

Мазкур дастур Ўзбекистон Республикаси Президентининг 2012 йил 10 декабрдагц 
"Чет тилларни ўрганиш тизимини янада такомиллаштириш чора-тадбирлари тўгрисида"ги 
ПҚ-1875-сонли, Ўзбекистон Республикаси Вазифлар Махкамасининг 2013 йил 8 майдаги 
"Чет тиллар буйича таьлимнинг барча боскичлари битирувчиларининг тайёргарлик 
даражасига куйиладиган талаблар" тўгрисидаги 124-сонли карорлари хамда Европа 
Кенгашининг "Чет тилини эгаллаш умумевропа компетенциялари: ўрганиш, ўкитиш ва 
бахолаш" тўгрисидаги умумэътироф этилган халкаро меъёрлари (CEFR — Common 
Еигореап Framework of Reference) га мувофик қайта ишлаб чикилди.

Вазирлар Махкамасининг "Чет тиллар буйича таълимнинг барча боскичлари битирувчиларининг тайёргарлик даражасига куйиладиган талаблар" га кура олий таълим муассасаларининг ихтисослиги чет тили булмаган факультетлари бакалавриат боскичи битирувчилари турт йиллик тахсиллари нихоясила урганган чет тили буйича В2 даражани эгаллашлари лозим.

"Амалий инглиз тили" фанидан тузилган ушбу дастур асосида чет тили ўкигувчилари ихтисослик хусусиятларини хисобга олган холда ишчи дастур, ўкувметодик мажмуалар ва ўкув кўлланмаларни ишлаб чикишлари мумкин. Ушбу дастур "Амалий инглиз тили" фанини бир боскичга булинган холла ўкитишни назарда тутади, яъни касбга йўналтирилган боскич (чет тили махсус максадларда ўргатилади).

Курс учун ажратилган ўкув соатлари инглиз тилини ўргатиш ихтисослик хусусиятларидан келиб чикиб, "Инглиз тили махсус максадлар учун" тамойилларига ва коммуникатив, интегратив компетентлик ёндашувларига асосланади.

Коммуникатив фаолиятта йўналтирилган ёндашув - таълимнинг ривожлантирувчи, функционал ва коммуникатив хусусиятларига эга булиб, таълим жараёнида билиш фаоллигини оширишга кўмаклашади. Таълим жараёнида мазкур ёндашув талабаларда рефлексия, ўз-ўзини ривожлантириш, намоён этишга кўмаклашади; чет тили таълимнии маданиятлараро мулокот сифатида ташкил этишга; дарс жараёнида ўкитувчи талабаларнинг ўзаро тенг хукукли иштирокчи сифатида ўзини намоён этишларини таъминлайди; таълимнинг интерактив шаклларини кўллаш; талабаларда янги тил малакалари, социо-маданий билимлар, амалий малакавий кўникмаларни мустакил эгаллашни ривожлантириш.

Шахсга йўналтирилган ёндашув - чет тилини ўкитишда нафакат илмий билимлар бериш, балки таълим жараёнининг иштирокчилари (талабалар, ўкитувчилар, ота-оналар) муносабатларининг фаол шаклларига асосланиш; талаба характери ва унинг ўзини ривожлантириш усулларини ўрганиш; индивидуалликни шакллантириш учун талабага кулай шарт-шароитлар яратиш; маданиятимизда шаклланган шахснинг психик ривожлантириш меъёрлари хакидаги тасаввурларни ўзгартириш (горизантал эмас, балки вертикал, яъни талаба ривожланиш динамикасини унинг олдинги холати билан таккослаш оркали амалга оширишни, бошкалар билан эмас, балки уни ўзи билан таккослаш).

Интегратив ёндашув — турли фанлардан олинган билимлар, кўникма, малака ва тажрибани хисобга олиш, таяниш, интеграция килиш, чет тилида коммуникатив, касбий коммуникатив, ижгимоий компетентликни баравар ривожлантиришни назарда тутади.

Таълимда компетентлик ёндашув - муайян натижаларга эришиш ва мухим компетенцияларни эгаллашга каратилади. Компетенция булажак касбий фаолиятта караб шаклланиб боради. Бундай шароитда таълим жараёни янги мазмунга эга булади, у урганиш ва ўргатиш жараёнига айланади, яъни касбий ва ижтимонй ахамиятта эга компентентликни мустакил ўкиб ўрганиш, ижтимонй-мехнат, маданий, маиший хамда маданий хордик сохаларда чет тилини куллашга эришилади.

### Фаннинг максад ва вазифалари

Чет тили фанининг максади талабаларнинг куп маданиятли дунёда касбий, илмий ва маиший сохаларда фаолият юритишларида коммуникатив компетенция (унинг таркибий кисмлари хисобланувчи лингвистик, социо-лингвистик, прагматиква бошка компетенциялари)ни шакллантиришдан иборат.

Компетенция – коммуникация (мулокот) иштирокчиларитомонидан таълимнинг аник максадларига каратилганнутк фаолиятини ривожлантиришга имкон берадиган билим, куникма,малака ва шахсий фазилатлар йнгиндисини ифодалайди.

Чет тили коммуникати компетенцияси — ўрганилаётган чет тилида сўзлашувчилар билан мулокот килишни амалга ошириш кобилияти ва тайергарлиги, шунингдек, талабаларнинг тили ўрганилаётган мамлакат маданияти билан танишнш, ўз мамлакати маданиятини янада яхширок англаш, уни мулокот жараёнида такдим эта олишини назарда тутади. Мазкур ўкув фанини ўрганишнинг асосий вазифаларига талабаларда куйидаги компетенцияларни ривожлантириш киради:

Лингвистик компетенция ўрганилаёттан тил сохиблари билан мулокот килиш учун тил матсриаллари (фонетика, лексика, грамматика)ни етарли даражада билиш ва нутк фаолияти турлари (тинглаб-тушуниш, гапириш, ўкиш ва ёзув)дакўллай билишни назарда тутади.

Ижепимоий-лингвистик компетенция сузловчининг бирон бир нуткий вазият, коммуникатив максад ва хохиш-истагидан келиб чиккан холда керакли лингвистик шакл, ифода усулини танлаш куникма ва малакаларни уз ичига олади.

Ижетимоий-маданий компетенция аутентик нуткнинг миллий хусусиятларини: ўзи яшаётган мамлакатнинг урф-одатлари, кадриятлари, маросимларива бошка миллиймаданий хусусиятларини тили ўрганилаётган мамлакат билан таккослаган холда такдим эта олиш компетенциясидир.

Ижтимовій компетенция - ижтимовій-лингвистик ва социо-маданий компетенцияларни ўз ичига олади. У хозирги кўп маданиятли дунёдатаълим олувчиларда чет тилини ўрганиш мухимлиги тушунчаси, чет тилида мулокот килиш, ўз устида мустакил ишлаш ва ижтимовій мослашув воситаси сифатида фойдаланиш эхтиёжини шакллантириш ва ривожлантириш, фукаролик, ватанпарварлик фазилатларини тарбиялашда, чет тили оркали маданиятлараро мулокотни амалга ошириш истаги ва хохишида намоён бўлади.

Прагматик компетенция куйидагилардан иборат:

Дискурсивкомнетенция (дискурс — огзаки ёки ёзма нутк матни) матнии тўгри талкин килиш ва тузиш, шунингдек, шунга мос нуткий мулокот турини танлаш учун огзаки ва ёзма (стилистик хамда таркибий кисмларини билиб олишни назарда тутган) матнлар тузиш кўникма ва малакаларидан иборат.

Стратегик (компенсатор) компетенция чет тили мухитида нуткий хамда ижтимоий мулокот тажрибасидаги камчилик ва нуксонларни айрим вербал/новербал воситалар ёрдамида тўлдириш, коммуникатив вазиятдатушунмовчиликлар пайдо бўлганда такроран сўраш, узр сўраш ва хоказолар оркали мураккаб вазиятлардан уддабуронлик билан чикиб кета олиш кобилиятини назарда тутади.

Укув - билиш компетенцияси таълим олувчининг мустакил билим олиш фаолиятида чет тиллар ва маданиятларни ўрганишнинг компетенциялар йигиндиси булиб, замонавий таълим технологияларидан фойдаланиш билан боглик булган мантикий, методологик ва умумтаълимвазифаларни ўз ичига олади.

Чет тилини ўкитиш дидактик, методик, лингвистик тамойилларни хамда замонавий таълим технологияларини кўллаш асосида амалга оширилади.

#### Фан буйнча талабаларнинг билим, куникма ва малакаларига куйиладиган талаблар

Чет тиллар буйича таълимнинг барча боскичлари битирувчиларининг тайёргарлим даражасига куйиладиган талаблар"да олий таълим муассасаларининг ихтисослиги чет тили булмаган факультетлари бакалавриат боскичи битирувчилари турт йиллик тахсиллари нихоясида урганган чет тили буйича В2 даражани эгаллашлари шарт. Унга кура битирувчи талабалар В2 даражани таъминловчи куйидаги коммуникатив компетенцияларни эгаллашлари лозим.

#### Лингвистик компетенция:

#### Тинглаб тушуниш

- ✓ узок давом этган сухбат ва мураккаб далиллар келтирилган матнии тушуниш ва идрок этиш;
- маъруза, сухбат, мукаммал йўрикномалар, академик ва касбий презентациялар, савол-жавоблар асосий мазмунини тушуна олиш;
- реклама, эьлон ва маьлумотномаларии тушуниш;
- мураккаб аутентик нуткни таниш ва нотаниш контекстда тушуна олиш;
- ✓ тил сохиблари сухбатлари ва бахс- мунозараларини тушуна олиш;
- ✓ радио ва интернет материаллари, интервьюларни (сухбат) тўлик даражада тушуна олиш.

### Гапириш

#### Диалог

- ✓ бизнесдаги ҳамкори билан музокара олиб бориш;
- ✓ аник масалалар буйича ахборот олиш;
- узок муддатли музокараларда тил сохиби билан катнашиш, уларни куллабкувватлаш, керак булса музокараларии бошкариш;
- кундалик мавзуларда бахс-мунозара, музокараларда фаол катнашиш;
- ✓ ихтисослик (касб) буйича интервью, сухбатларда қатнашиш;
- фикрни аниклаштириш, кайтадан тузиш ва бахс- мунозара ривожига ўз хиссасини кушиш;
- ✓ музокаралар олиб бориш жараёнида муаммоларни ечимини усталик билан ҳал
- вазиятга караб саволлар бериш ва жавоб кайтариш.

#### Монолог

- алохида мавзу буйича килинган презентациялар утказиш;
- ихтисослиги буйича асбоб-ускуналарни аник ва равшан тасвирлаш;
- ✓ алохида мавзу бўйича огзаки маьруза тузиш;
- ✓ мақола, маъруза, баҳс-мунозараларни аниқ ва равшан қилиб умумлаштириш;
- аник тизимга асосланган холда кушимча, етарли булган холда ва таниш мавзу буйича уз фикрини ифода кила олиш.

#### Укиш

- ✓ таниш ва нотаниш мавзу буйнча тузилган матнлардан асосий / керакли булган ахборотни, шахсий ва мутахассислик буйнча корреспонденцияларни (хатхабарларни) тушуниш;
- диаграмма, схема, чизмаларни кискача таърифини тушуниш;
- ✓ мураккаб бўлган маьлумотларни идрок этиш;
- махсус, мураккаб бўлган ёзма йўрикнома ва кўлланмаларни тушуниш;
- касбга онд макола ва маърузалардан керакли ахборотни ажратиб олиш;
- керак ёки нокераклигини аниклаш максадида матнии у ёки бу кисмини синчиклаб ўкиш, конференция дастурларини ўкиб тушуниш.

#### Fren.

 ✓ махсус маьлумотларни (тил юзасидан бўлган хатларни, маьлумотларни, электрон хатларни) ёза олиш;

- ✓ эссе ва маърузаларни ёза олиш;
- аник мантикка эга бўлган илмий маколалар ва илмий тадкикот ишларни ёза олиш;
- ёзма таклифлар, хисобот ва резюмелар туза олиш;
- ✓ битирув малакавий ишларни зарур бўлганда ёза олиш.
- ✓ Тил компетенцияси

#### Лексик компетенция

- ✓ касбий лексика ва терминларни ишлата олиш;
- ✓ коммуникатив вазиятларда мавзуга оид булган лексикани ишлата олиш;
- интернационал сўзларни тушуниш ва кўллай олиш.

#### Грамматик компетенция

- мураккаб грамматик ва синтактик курилмаларни коммуникатив вазиятларда куллай олиш:
- богловчи сўзларни тўгри кўллаш;
- мутахассисликка оид матиларии унинг мазмунини тушуниш максадида матини тахлил килиши талаб этилади...

#### Фаннинг Укув режадаги бошка фанлар билан Узаро богликлиги ва услубий жихатдан узвийлиги

Хорижий тил фанининг мантикий давоми сифатида амалий инглиз тили фани ижтимоий-иктисодий фанлар ва ихтисослик фанлари билан ўзаро боєлик. Ушбу фан бошка фанлар билан интеграллаштан холда ўргатилади.

### Фаннинг фан, таълим ва ишлаб чикарищдаги ўрни

Амалий инглиз тили фани ишлаб чикариш жараёни билан бевосита боглаимаган. Талабалар мазкур фандан ўрганган билимларидан бошка ихтисослик фанларини ўзлаштиришда (сохага оид маълумотларни чет тилида излаб топиш, тахлил килиш ва билим олиш жараёнида фойдаланиш), келгусидаги касбий фаолиятларида фойдаланишлари мумкин.

#### Фанни ўкитишда замонавий ахборот ва педагогик технологиялар

"Амалий инглиз тили" фанини ўкитишда таълимнинг куйидаги илгор ва замонавий технология ва методларидан фойдаланилади:

- ✓ педагогик махорат технологияси (Ю.Н.Кулюткин, Е.Б.Спасская);
- ✓ билимдонлар баҳси;
- ✓ мавкеингизни эгалланг шиорлар асосидаги бахс;
- ✓ таълимнинг фаол услублари: "Кейс-услуби" (Гарвард университети бизнес мактаби), ишбоп ўйинлар.

#### Ижодий топширикларии гурух билан хал килиш услубларидан:

- ✓ дельфи услуби таклиф килинган ечимдан статистик услуб асосида беш камчиликни аниклаш ва улардан энг яхшисини танлаб, бахолаш, камчиликлар сабабини аниклаш;
- ✓ кора кути уелуби масалани тахлил килиш, ижодий баҳс орқали камчиликлар сабабини аниклаш;
- кундаликлар услуби гурух аъзоларининг ён дафтарчаларидаги ёзувларни тахлили ва уларда берилган таклиф-мулохазаларни мухокама килиш, умумий фикр ишлаб чикиш;
- ~ "Тўгридан-тўгри жамоавий аклий хужум" (Дж.Дональд Филлипс) 20-60 кишилик катта аудиторияда янги фикрларни, самарадорликни ошириш иш ёки машк мини-гурухларда олиб борилади ва фикрлар жамоада мухокама килинади;

- ~ "Аклий хужум" − (Е.А.Александров и Г.Я.Буш) − гурух катнашчилари ижодий гояларини жамоа, гоялари билан карши гоялар ёрдамида фаоллаштириш, уларни кўллашни баҳолаш;
- сенектика услуби (У.Гордон) муаммони ифодалашта ўргатиш, унинг кисмларини аниклаш, муаммони ечишдаги ўхшашликларни топиш. Креативликни ўстириш, оддий ходисаларнинг гайри-табиий томонларини топиш, ижодий кобилиятларини аниклаш;
- ✓ «АРИЗ ТРИЗ» (Г.С.Альтшуллер ва унинг мактаби, ТРИЗ кашфиёт топшириклари технологияларини ривожлантириш) ўрганилаёттан тизим ривожланиши конуниятларига буйсундирилган мантикий операциялар тизими 40 усулдан иборат: "кушилиш", "матрёшка", "карама-карши", "зарарни фойдага айлантириш" ва бошкалар.

# АСОСИЙ КИСМ

### Нутқ мавзулари:

- ✓ Таълим мавзуен (ўкув муассасаси, ўкув куроллари ва унга муносабат, ихтисослик фанларининг хозирда ўкитилиши ва хоказо)
- Ижтимонй маданий (Ўзбекистон Республикаси ва тили ўрганилаёттан мамлакатнинг тарихий, географик, иклимий, маданий, манший хусусиятлари).
- ✓ Касбга йўналтирилган мавзу (ўрганилаётган ихтисослик тарихи, йўналишлари, соханинг буюк намоёндалари, долзарб муаммолари, касбий этика ва хоказо).

### Амалий машгулот буйнча курсатма ва тавсиялар

Амалий машгулот учун куйидаги мавзулар тавсия этилади:

- Урганилаётган ихтисослик тарихи;
- 2. Урганилаёттан ихтисослик йўналишлари;
- 3. Урганилаёттан соханинг буюк намоёндалари;
- Урганилаеттан соханинг долзарб муаммолари;
- Касбий этика;
- Ихтисослик фанларининг хозирда ўкитилиши;
- Ихтисосликка онд матнлар, атамалар тушунчаларни ўкитилиши ва таржима килиш масалалари;
- Ихтисослик буйича чет эл тажрибасини ўрганиш, илмий адабиётларни шархлай олиш малакасини шакллантириш;
- Ихтисосликка оид мавзуда такдимот тайёрлаш ва уни такдим килиш малакасини шакллантириш;
- 10. Ихтисослик бўйича илмий макола ва унга аннотация тайёрлаш,

# Умумий боскич Нутк компетенцияси

#### Боскичнинг асосий максади:

- ✓ узлуксиз таълим тизимининг аввалги боскичлари (академик лицей ва касб-хунар коллежлари)да талабалар хорижий тилда эгаллаган малака ва кўникмаларини коррекция килиш ва тенглаштириш;
- ✓ талабаларни нутқ фаолияти турлари бўйича касбий мулокотта тайёрлашдан иборат;
   Тинглаб тушуниш:
  - ✓ маъруза, такдимот ва мунозаралар, радио ва телевидение эшиттиришлари, янгиликлар, интервыолар, хужжатли фильм ва шу каби огзаки матилар;
  - ✓ реклама ва эълонлар;
  - ✓ тил сохиблари нутқ ёзувлари (бадиий, хужжатли фильмлар, оммавий чикиш ва хоказо);
  - ✓ тил сохибларининг ижтимоий мавзулардаги ўзаро сухбати;

 ✓ тингланган ахборотнинг асосий максади, тўлик мазмунини тинглаб тушуниш малака ва куникмаларини ривожлантириш.

#### Гапириш:

#### Диалог нутк

- ижтимонй мавзуларда сухбат ва норасмий диалог,
- ✓ касбий ёки бошка мавзуларда расмий ва норасмий мунозаралар;
- мунозарани бошкариш, интервью, музокаралар ва телефон оркали мулокот олиб бориш.

#### Монолог нутк

- ✓ ихтисосликка онд мавзуларда маъруза тайёрлаш ва ўкиш;
- мунозара, далил ва исботларни олға суриш, фикрни асослаб бериш;
- реклама ва махсус мавзуларда такдимот тайёрлаш хамда чикиш килиш;
- маълумотларни умумлаштириш, маколалар ёзиш, мухокама килиш.

#### Укиш

- танишув ўкиш, кўз югуртириб ўкиш ва синчиклаб ўкиш куникма ва малакаларини ривожлантириш;
- хат-хабар, ёзишмалар ва электрон почтани ўкиш;
- махсус материалларни ўзида акс эттирган аутентик матиларни ўкиш;
- махсус сўз ва терминларга эга матнларни, илмий ва касбга онд адабиётларни, электрон манбалар ва матбуот материалларини ўкиш.

## Ёзма нутк

- ✓ турли ёзишмалар, хат-хабарлар ва махсус докладлар (эслатма CVs ва хоказо) ёзиш;
- эссе, баён, резюме, тадкикот иши (маколалар, битирув малакавий ишлар) ёзиш.

#### Касбга йўналгирилган боскич

### Касбга йўналтирилган боскичнинг асосий максади:

- нутк турлари буйича касбий сохада чет тилини амалий эгаллаш;
- ✓ талабани ижодий шахс сифатида ривожлантириш;
- ✓ соха буйича адабиётларни таржима килиш малака ва куникмаларини ривожлантириш;

#### Тинглаб тушуниш:

- касбга йўналтирилган аутентик материалларни бир марта эшитиб асосий мазмунини тушуниш ва зарур ахборотни олиш;
- кундалик вокеалар хакида янгиликлар, репортажларин тушуниш, фильм кахрамонлари нуткини тушуниш.

#### Гапириш:

#### Диалогик нутк

- тил сохиблари билан эркин мулокотда бўлиш ва касбий мавзулара ўз фикр ва мулохазаларини исботлаб бериш;
- сухбатни бошлаш ва тугатишни билиш, сухбатдошига таклиф ва маслахат бериш, саволларига жавоб бериш, ахборот алмашиш, мухокама килинаётган далилларни аниклаштириш, ўкиган ёки эшитганларини мухокама килиш;
- матн асосий мазмунини ифодаловчи лексик ва синтактик курилмаларга асосланиб гапириб бериш;
- ✓ ассоциатив тафаккурга асосланиб мулохаза, танкид, бахолаш далиллар билан исботлаш оркали ўз нуткини тузиш;
- риторик характерга эга диалог нутк малакаларини такомиллаштириш;
- касбий мулокотлар, конференция, симпозиум, учрашув ва мунозараларда катнашиш учун нутк фаолияти, кўникма ва малакаларини такомиллаштириш.

#### Монологик нутк:

- долзарб муаммо юзасида барча "Тарафдор" ва "Қарши" далилларни келтирган холда ўз фикрини баён килиш;
- тинглаган ва ўкиган матн мазмунини гапириш;

- ✓ мазмунга бахо бериш;
- ўрганилган мавзулар бўйнча ахборот бериш
- Укиган матини тахлил килиш ва шархлаш;
- Укиган ёки типглаган матини кискача мазмунини баён этиш;
- ўрганилган мавзуда чикиш килиш;
- ижтимонй –сиёсий матнларни ўкиб шархлаб бериш.

#### Укиш:

#### Танишув ўкиш

- ✓ матн: 10 % гача нотаниш сўз бўлган илмий-оммабоп, ижтимоий-сиёсий, махсус бадиий матнлар;
- матн мазмунини чет тилида ёки она тилида сўзлаб бериш, параграфларни номлаш, тест топшириш.

#### Синчиклаб (ўрганиб) ўкиш

 матнии асосий ахборотни ажратиб олган холда мазмунини тулик ва аник тушуниб укиш.

#### Укиш тезлиги, хажми:

- лугатдан фойдаланиб 1600 босма белгили матини 1,0 академик соатда ўкиш.
- матн: махсус, илмий оммабоп 12% гача нотаниш сўзга эга бўлади.

#### Кўз югуртириб ўкиш:

- матн мазмуни хусусиятларини аниклаш;
- ✓ зарур ахборотни матидан топиш;
- ✓ сўз (мати) маъно мазмунини контекст асосида фахмлаб олиш;
- матидаги бирламчи (асосий) иккинчи даражали ахборотни ажратиш;
- ✓ матн калит сўзларини ажрата олиш;
- матн кисмларига сарлавха куйиш.

#### Ёзма нутк

#### Ёзма нутк бўйича:

- ✓ касбға йўналтирилган босқичда шаклланган малакаларни такомиллаштириш;
- реферат, аннотация ёзиш техникасини такомиллаштириш;
- хужжатларни расмийлаштиришни билиш (тузилиши, услуби, хужжат тили) ва у асосида хужжатларни намунага караб, схемага кура, клише ва фразаларни куллаб, ахборотни хисобга олиб, иш юритиш вазиятлари талабларига мос равишда расмийлаштириш;
- ✓ берилган мавзуда баён, эссе, резюме тузиш,сохага оид адабиётлар буйича реферат

### Лингвистик компетенция

Лексик компетенция чет тилида кенг құлланиладиган рецептив ва репродуктив актив, пассив, потенциал сұз бойлигини оширишга қаратилган бұлиб, унинг таркибига турғун сұз бирикмалари, нутқ намуналари, клише ва касбий терминлар киради. Мазкур лексик минимум тили ұрганилаёттан мамлакат маданиятини ифодалайди.

Ихтисослик буйича лексик минимум методик принциплар - куп маънолилик, тематик, суз ясаш хусусиятларини хисобга олиш тамойилларига кура касбга йуналтирилган чет тили таълими асосида танлаб олинади. Санаб утилган тамойилларга кура лексик минмум 2 турдан иборат;

- а) умумтаълимий;
- б) касбий лексика

Қуйндағи жадвалда таклиф этилаётған лексик минимум курслар буйича тақсимлаб берилган:

Курс	Умумта	ълимий минимум	Касбий лексика	Жами	
	Актив*	Пассив**	Актив	-	
1	350	700	100	800	
2	350	500	150	800	
3	150	500	200	700	
4	150	500	200	700	
Жами	1000	2200	650	3000	

<sup>\*</sup> Минимумда олдинги боскичда ўрганилган лексика сони кўрсатилмаган.

#### Нутк фаолияти турлари устида ишлаш учун вактин тўгри таксимлаш

Куйнлган максадларга эришиш учун хар бир дарсда нутк фаолияти турлари куйндаги нисбатда булиши максадга мувофик:

тинглаб тушуниш - 25%;

гапириш - 25%;

ўкиш - 30%;

ёзув - 20%.

#### Талабалар билимини назорат килиш

Талабаларнинг чет тили буйича эгаллаган билим, малака ва куникмалари жорий, оралик ва якуний назоратлар оркали назорат килинади.

Жорий назорат: хар бир дарсда алохида талаба билан ишлаб уларнинг дарсга тайёргарлик даражаси савол-жавоб оркали текширилиб, кундалик баллар куйиб борилади.

Оралик назорат: кафедранинг фан буйича ишчи дастурига асосланган холда, хар бир семестрга куйилган талаблар асосида бир канча дарслар утилганидан кейин утказилади. Натижаларни дастурда берилган талаблар билан киёслаш оркали талабаларнинг малака ва куникмалари канчалик усганлиги аниклаб борилади.

Якуний назорат: фан бўйнча бакалавриат курсининг якунида ўтказилади. Якуний назорат ўгказилиши натижасида дастур талаблари бўйнча касбий чет тили компетенцияси аниклаб олинади.

## Якуний назорат мазмуни

#### 1. Тинглаб тушуниш бўйнча:

Касбга йуналтирилган матнни тинглаш ва уни тушунганлигини аниклаш максадида тестлар ечиш.

#### 2. Гапириш буйича:

Касбга йўналтирилган мавзу бўйнча батафсил, синчиклаб, аргументлар билан бойитган холда ўз фикрини баён этиш.

#### 3. Укиш буйича:

Касбий йўналишдаги матнни ўкиб, тушунганлиги асосида тест топширикларини ечнш. Укиган матн мазмунини аник ва тўлик тушунганлигини текширишни ёзма таржима билан амалга ошириш мумкин. Бунда луғатдан фойдаланишга рухсат берилади.

#### 4. Ёзув буйнча:

Соханинг долзарб муаммоларига багишланган эссе ёзиш.

#### Лаборатория ишларини ташкил этиш бўйнча кўрсатмалар

Фан буйича лаборатория ишлари намунавий ўкув режада кўзда тутилмаган

#### Курс ишини ташкил этиш буйича услубий курсатмалар

Фан буйича курс иши намунавий Укув режада режалаштирилмаган

Пассив лексикага актив лексика хам киради.

#### Мустакил таълимии ташкил этишнинг шакли ва мазмуни

Чет тили фанидан мустакил ишларининг максади - талабаларнинг касбий, коммуникатив фаолиятини шакллантириш ва ривожлантириш, уларнинг ижодий фаолиятини ўстириш, ва чет тили устида мустакил ишлай олиш малака ва кўникмаларини хосил килиш ва ривожлантиришдан иборат. Ушбу умумий максадга эришиш учун куйилаги бир неча вазифаларни бажариш назарда тутилади:

- талабаларнинг тил тайёргарлик сифатини ошириб бориш, тил ва мутахассислик буйича адабиётлар устида ишлай олиш куникмаларини шакллантириш ва ривожлантириш;
- ўз касбий билим ва малакаларини кейинчалик мустакил тўлдириб ва янгилаб туриш эхтиёжларини яратиш ва саклаб колиш, чет тили бўйнча яратилган малака ва кўникмаларни ўстириб, ривожлантириб бориш;
- талаба бажариши керак булган ишларни тугри ташкил килиш, келиб чикадиган кийинчиликларни олдиндан била олиш, хис этиш ва уларни бартараф килиш йулларини топа олиш.

#### Тавсия этилаётган мустакил ишларнинг мазмуни

Талабаларыны мустақил ишлари нутқ фаолиятининг қуйидаги турлари бўйича ташкил килинали.

Укиш: (танншиб чикиш, синчиклаб, караб чикиш), ёзув, тинглаб тушуниш ва гапириш; Тинглаб тушуниш: хажми турлича бўлган аудио- ва видео матиларни тинглаб тушуниш,

саволларга жавоб бериш, гашириб бериш, аннотация ёза олиш;

Гапириш талабаларинш диалогик ва монологик нутклари буйича мустакил ишлари аудиторияда ўргагилган матилар, ўкув материаллари асосида ташкил килинади. Гапириш буйича мустакил иш сифагида мавзу асосида маълумот тайёрлаш, мати мазмунини гапириб бериш. Урганилган лексик материаллар асосида хикоялар тузиш, берилган муаммоли масала ва назнятларни мухокама килиш каби топшириклар бериш мумкин. Гапириш куникмаларинш ривожлантириб бориш учун мультимедиа дастурларини ва онлайн технологияларины куллашга асосий эътибор каратилади;

Укиш: талаба ўрганаёттан сохасига онд адабиётлар билан танишиб чикиши ва ўзи учун кизикарли ва керакли бўлган ахборотни тушуниши, публицистик, илмий-оммабоп ижтимонй-снёсній адабиётларни ўкиши ва керакли ахборотни олиши лозим. Машғулотларда юкорида айтилган малака ва кўникмаларни шакллантириш ва ўстириш жуда мураккаб бўлганлиги учун уларни мустакил иш жараёнида синчиклаб, кўз югуртириб, караб чикиб ўкиш турлари оркали ташкил килинади. Ушбу ўкиш турларнин назорат килиш-матини бутунлай таржима килиш ёки унинг танлаб олинган кисмларини таржима килиш билан амалга оширилади.

Таниший чикий ўкиш мустакил иш тури сифатида уйда ўкиш шаклида олиб борилади. Ўкиннинг бу тури учун аутентик ёки адаптация килинган адабий, илмийоммабоп адабиёт танлаб олинади. Текшириш шакллари: ўкиганини мазмунини тушунганлиги бўйнча савол-жавоб ишлари, ажратиб олинган масалалар бўйнча ахборот олиш, бахс-мунозаралар ўтказиш, ахборотта режа тузиш ва х.к.

Караб чикиб, кидириб топиш учун ўкиш. Ўкишнинг бу турида оммавий-сиёсий, публицистик матнлар, газета ва журнал материаллари берилади ва хар бир дарсда кискача ахборот олинади. Талаба битта газета маколалари асосида ахборот беради ёки мавзу бўйича бир канча газета ва журналлардан ахборот тайёрлайди.

Езув. Ёзув буйича мустакил иш ўз ичига ўрганилаётган тилда фикрни баён кила олиш ишларини олади. Бунда мустакил иш мазмунига куйидагилар киради:

- аннотация, реферат, резюмелар туза олиш;
- огзаки равишда нутк хосил килиш учун режа ёки тезис тузиш;
- турли хатлар, табрикнома, таклифлар, иш юзасидан хатлар туза олиш;

ўкишга ва ишга кабул юзасидан аризалар ёза олиш;

сохага оид турли хужжатларни тўддириш;

 баён, иншо, эсселар ёза олиш; касби буйича иш юритиш ишларини (ёзувларини) олиб бориш.

Укиб таржима килинган материаллар курс ишлари ва рефератларда кулланилади.

### Дастурнинг информацион - методик таъминоти

Чет тили фанини ўкитиш жараёнида таълимнинг замонавий интерфаол усулларидан, педагогик ва ахборот-коммуникация технологияларидан кенг фойдаланилади. Амалий машгулотларда аклий хужум, кластер, блиц-сўров, кичик гурухларда ишлаш, инсерт, презентация, кейс стади каби усулларнинг мавзуга мос танланиши ва кўлланилиши дарс самарасини оциришга катта хисса кўшади.

# Фойдаланиладиган адабиётлар руйхати

### Асосий адабиётлар

- 1. Абдалина Е.Н. Учебник английского языка для студентов неязыковых вузов. Т. 1996
- Мухитдинова Г.Ш. Техника Олий Укув юртлари учун // Инглиз тили дарслиги. Т.: Узбекистон. 1997

### Кушимча адабиётлар

- Агзамова З.И. Турдиева С.Х. Физика факультети бакалавриат талабалари учун инглиз тилидан матилар тўплами. НУУЗ. Т. 2007
- Артикова Ю.А. Механика-математика факультети бакалавриат талабалари учун инглиз тилидан матилар туплами НУУЗ. Т. 2006
- Артикова Ю.А., Сабирова Г.П., Джумабаева Ж.Ш. Англо-русско-узбекский словарь для математиков. НУУЗ. Т. 2004
- АртиковаЮ. A. Numerals and mathematical symbols. НУУЗ. Т. 2013
- Саттарова З.Б.Методическая разработка по английскому языку на тему «Экология».
   НУУЗ. Т. 2003
- Юсупова З.Ш.Сборник английских текстов для неязыковых факультетов. НУУЗ. Т. 2003
- 7. Х.Аловитдинова., Д. Раджабова ва б. English for esl and esp learners. T.2012

### Интернет сайтлари

http://www.adu.uz

http://www.zivonet.uz

http://www.teachingenglish.org.uk/

http://www.inspiringteachers.com/

http://teachnet.org/ntpi/research/prep/Cooper/http://www.alt-teachercert.org/Mentoring.html

www.examenglish.com

http://www.edufle.net

# V.2 ISHCHI O'QUV DASTURI

# ЎЗБЕКИСТОН РЕСПУБЛИКАСИ ОЛИЙ ВА ЎРТА МАХСУС ТАЪЛИМ ВАЗИРЛИГИ АНДИЖОН ДАВЛАТ УНИВЕРСИТЕТИ

"ТАСДИҚЛАНДИ"

Уканалари буйича проректор

ъфей доц. А.Маматюсупов

DEVONXONA 3019 йил "31" август

"АМАЛИЙ ВИГЛИЗ ТИЛИ"

фантиния

ИШЧИ ЎКУВ ДАСТУРИ

(4 курс)

Билим сохаси:

100000 - Гуманитар соха

Таълим сохаси:

140000 - Табиий фанлар

Таълим йўналишлари: 5140500 -Кимё

Умумий ўкув соати -76 соат

Шу жумладан:

Амалий машғулотлар -42 соат

(7-семестр-20, 8-семестр-22)

Мустакил таълим соати- 34 соат

(7-семестр-16, 8-семестр-18)

Андижон-2019й.

Фанцинг ишчи ўкув дастури Андижон давлат университети кенгашининг 2019 йил "31" августдаги і сонди баёни билан тасдикланган "Амалий инглиз тили" фанцинні ўкув дастури асосида тайёрланган.

Фаи дастури Андижон давлат университети Кенганиннин 2019 йил "31" августдаги "1" сонли баёни билан тасдикланган.

Тузувчилар:

Д.Рустамов- АндДУ, Факультетлараро чет тиллар (аник на табиий фанлар) кафедраси мудири

 Курбанов- АндДУ, Факультетлараро чет тиллар (аник на тибини) фанлар) кафедраси ўкитувчиси

А.Атажонов — АндДУ, Факультетлараро чет тиллар (аншк ви тябний фанлар) кафедраси ўкитувчиси

Туракулова – АндДУ, Факультетлараро чет тиллар (аник на табиий фанлар) кафедраси ўкитувчиси

Такризчилар:

М.Абдувалиев – АндДУ, "Инглиз тили ва адабнёти" кафедраси доценти, филология фанлари номзоди.

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С.Солижонов - АндДУ, "Инглиз тили фонетикаен" кафедраен мудири, филология фанлари помлоди.

АндДУ Чет тиллар факультети

декапи:

2019 йнд "3/"

08

А.Маматкулов

Факультетлараро чет тиллар (аник ва табиий фанлар)

кафедраси мудири:

2019 йил " 3/ "

OX

Л Ристомов

# КИРИШ

Мазкур дастур Ўзбекистон Республикаси Президентининг 2012 йил 10 декабрдаги "Чет тилларни ўрганиш тизимини янада такомиллаштириш чоратадбирлари тўғрисида"ги ПҚ-1875-сонли, Ўзбекистон Республикаси Вазирлар Маҳкамасининг 2013 йил 8 майдаги "Чет тиллар бўйича таълимнинг барча босқичлари битирувчиларининг тайёргарлик даражасига қўйиладиган талаблар" тўғрисидаги 124-сонли қарорлари ҳамда Европа Кенгашининг "Чет тилини эгаллаш умумевропа компетенциялари: ўрганиш, ўқитиш ва баҳолаш" тўғрисидаги умумэътироф этилган ҳалқаро меъёрлари (СЕFR — Common European Framework of Reference) га мувофиқ қайта ишлаб чиқилди.

Вазирлар Маҳкамасининг "Чет тиллар бўйича таълимнинг барча босқичлари битирувчиларининг тайёргарлик даражасига қўйиладиган талаблар" га кўра олий таълим муассасаларининг ихтисослиги чет тили бўлмаган факультетлари бакалавриат босқичи битирувчилари тўрт йиллик таҳсиллари ниҳоясида ўрганган чет тили бўйича В2 даражани эгаллашлари лозим.

"Амалий инглиз тили" фанидан тузилган ушбу дастур асосида чет тили ўкитувчилари ихтисослик хусусиятларини хисобга олган холда ишчи дастур, ўкув-методик мажмуалар ва ўкув кўлланмаларни ишлаб чикишлари мумкин. Ушбу дастур "Амалий инглиз тили" фанини бир боскичга бўлинган холда ўкитишни назарда тутади, яъни касбга йўналтирилган боскич (чет тили махсус максадларда ўргатилади).

Курс учун ажратилган ўкув соатлари инглиз тилини ўргатиш ихтисослик хусусиятларидан келиб чиқиб, "Инглиз тили махсус мақсадлар учун" тамойилларига ва коммуникатив, интегратив компетентлик ёндашувларига асосланади.

Коммуникатив фаолиятга йўналтирилган ёндашув - таълимнинг ривожлантирувчи, функционал ва коммуникатив хусусиятларига эга бўлиб, таълим жараёнида билиш фаоллигини оширишга кўмаклашади. Таълим жараёнида мазкур ёндашув талабаларда рефлексия. этишга кўмаклашади; ривожлантириш, намоён чет ТИЛИ таълимини маданиятлараро мулоқот сифатида ташкил этишга; дарс жараёнида ўкитувчи талабаларнинг ўзаро тенг хукукли иштирокчи сифатида ўзини намоён этишларини таъминлайди; таълимнинг интерактив шаклларини қўллаш; талабаларда янги тил малакалари, социо-маданий билимлар, амалий малакавий кўникмаларни мустақил эгаллашни ривожлантириш.

**Шахсга йўналтирилган ёндашув** - чет тилини ўқитишда нафақат илмий билимлар бериш, балки таълим жараёнининг иштирокчилари (талабалар, ўқитувчилар, ота-оналар) муносабатларининг фаол шаклларига асосланиш; талаба характери ва унинг ўзини ривожлантириш усулларини ўрганиш; индивидуалликни шакллантириш учун талабага қулай шартшароитлар яратиш; маданиятимизда шаклланган шахснинг психик ривожлантириш меъёрлари ҳақидаги тасаввурларни ўзгартириш (горизантал

эмас, балки вертикал, яъни талаба ривожланиш динамикасини унинг олдинги ҳолати билан таққослаш орқали амалга оширишни, бошқалар билан эмас, балки уни ўзи билан таққослаш).

**Интегратив ёндашув** — турли фанлардан олинган билимлар, кўникма, малака ва тажрибани ҳисобга олиш, таяниш, интеграция ҳилиш, чет тилида коммуникатив, касбий коммуникатив, ижтимоий компетентликни баравар ривожлантиришни назарда тутади.

Таълимда компетентлик ёндашув - муайян натижаларга эришиш ва мухим компетенцияларни эгаллашга қаратилади. Компетенция бўлажак касбий фаолиятга қараб шаклланиб боради. Бундай шароитда таълим жараёни янги мазмунга эга бўлади, у ўрганиш ва ўргатиш жараёнига айланади, яъни касбий ва ижтимоий аҳамиятга эга компентентликни мустақил ўқиб ўрганиш, ижтимоий-меҳнат, маданий, маиший ҳамда маданий ҳордиқ соҳаларда чет тилини қўллашга эришилади.

# Фаннинг максад ва вазифалари

Чет тили фанининг мақсади талабаларнинг кўп маданиятли дунёда касбий, илмий ва маиший соҳаларда фаолият юритишларида коммуникатив компетенция (унинг таркибий қисмлари ҳисобланувчи лингвистик, социолингвистик, прагматиква бошқа компетенциялари)ни шакллантиришдан иборат.

**Компетенция** — коммуникация (мулоқот) иштирокчиларитомонидан таълимнинг аниқ мақсадларига қаратилганнутқ фаолиятини ривожлантиришга имкон берадиган билим, кўникма,малака ва шахсий фазилатлар йиғиндисини ифодалайди.

**Чет тили коммуникатив компетенцияси** — ўрганилаётган чет тилида сўзлашувчилар билан мулоқот қилишни амалга ошириш қобилияти ва тайёргарлиги, шунингдек, талабаларнинг тили ўрганилаётган мамлакат маданияти билан танишиш, ўз мамлакати маданиятини янада яхшироқ англаш, уни мулоқот жараёнида тақдим эта олишини назарда тутади. Мазкур ўкув фанини ўрганишнинг асосий вазифаларига талабаларда қуйидаги компетенцияларни ривожлантириш киради:

**Пингвистик компетенция** ўрганилаётган тил сохиблари билан мулоқот қилиш учун тил материаллари (фонетика, лексика, грамматика)ни етарли даражада билиш ва нутқ фаолияти турлари (тинглаб-тушуниш, гапириш, ўқиш ва ёзув)дақўллай билишни назарда тутади.

*Ижтимоий-лингвистик компетенция* сўзловчининг бирон бир нутқий вазият, коммуникатив максад ва хохиш-истагидан келиб чиққан холда керакли лингвистик шакл, ифода усулини танлаш кўникма ва малакаларни ўз ичига олади.

**Ижиимоий-маданий компетенция** аутентик нутқнинг миллий хусусиятларини: ўзи яшаётган мамлакатнинг урф-одатлари, қадриятлари, маросимларива бошқа миллий-маданий хусусиятларини тили ўрганилаётган мамлакат билан таққослаган холда тақдим эта олиш компетенциясидир.

Ижтимоий компетенция - ижтимоий-лингвистик ва социо-маданий компетенцияларни ўз ичига олади. У хозирги кўп маданиятли дунёдатаълим олувчиларда чет тилини ўрганиш мухимлиги тушунчаси, чет тилида мулокот килиш, ўз устида мустакил ишлаш ва ижтимоий мослашув воситаси сифатида фойдаланиш эхтиёжини шакллантириш ва ривожлантириш, фукаролик, ватанпарварлик фазилатларини тарбиялашда, чет тили оркали маданиятлараро мулокотни амалга ошириш истаги ва хохишида намоён бўлади.

Прагматик компетенция куйидагилардан иборат:

Дискурсивкомпетенция (дискурс — огзаки ёки ёзма нутк матни) матнни тўгри талкин килиш ва тузиш, шунингдек, шунга мос нуткий мулокот турини танлаш учун огзаки ва ёзма (стилистик ҳамда таркибий кисмларини билиб олишни назарда тутган) матнлар тузиш кўникма ва малакаларидан иборат.

Стратегик (компенсатор) компетенция чет тили мухитида нуткий хамда ижтимоий мулокот тажрибасидаги камчилик ва нуксонларни айрим вербал/новербал воситалар ёрдамида тўлдириш, коммуникатив вазиятдатушунмовчиликлар пайдо бўлганда такроран сўраш, узр сўраш ва хоказолар оркали мураккаб вазиятлардан уддабуронлик билан чикиб кета олиш кобилиятини назарда тутади.

 $reve{y}_{\kappa v e}$  - билиш компетенцияси таълим олувчининг мустакил билим маданиятларни фаолиятида чет тиллар ўрганишнинг ОЛИШ ва компетенциялар йиғиндиси бўлиб, замонавий таълим технологияларидан фойдаланиш билан боғлиқ бўлган мантиқий, методологик умумтаълимвазифаларни ўз ичига олади.

Чет тилини ўкитиш дидактик, методик, лингвистик тамойилларни хамда замонавий таълим технологияларини кўллаш асосида амалга оширилади.

# Фан бўйича талабаларнинг билим, кўникма ва малакаларига кўйиладиган талаблар

Чет тиллар бўйича таълимнинг барча боскичлари битирувчиларининг талаблар"да тайёргарлик даражасига қўйиладиган олий таълим муассасаларининг ихтисослиги чет бўлмаган ТИЛИ факультетлари бакалавриат босқичи битирувчилари тўрт йиллик тахсиллари нихоясида ўрганган чет тили бўйича В2 даражани эгаллашлари шарт. Унга кўра битирувчи талабалар В2 даражани таъминловчи қуйидаги коммуникатив компетенцияларни эгаллашлари лозим.

## Лингвистик компетенция:

# Тинглаб тушуниш

- ✓ узоқ давом этган суҳбат ва мураккаб далиллар келтирилган матнни тушуниш ва идрок этиш;
- ✓ маьруза, суҳбат, мукаммал йўриқномалар, академик ва касбий презентациялар, савол-жавоблар асосий мазмунини тушуна олиш;

- ✓ реклама, эьлон ва маьлумотномаларни тушуниш;
- ✓ мураккаб аутентик нуткни таниш ва нотаниш контекстда тушуна олиш;
- ✓ тил сохиблари сухбатлари ва бахс- мунозараларини тушуна олиш;
- ✓ радио ва интернет материаллари, интервьюларни (суҳбат) тўлиқ даражада тушуна олиш.

# Гапириш

# Диалог

- ✓ бизнесдаги ҳамкори билан музокара олиб бориш;
- ✓ аниқ масалалар бүйича ахборот олиш;
- ✓ узоқ муддатли музокараларда тил сохиби билан қатнашиш, уларни қўллаб-қувватлаш, керак бўлса музокараларни бошқариш;
- ✓ кундалик мавзуларда баҳс-мунозара, музокараларда фаол қатнашиш;
- ✓ ихтисослик (касб) бўйича интервью, суҳбатларда қатнашиш;
- ✓ фикрни аниқлаштириш, қайтадан тузиш ва баҳс- мунозара ривожига ўз ҳиссасини қўшиш;
- ✓ музокаралар олиб бориш жараёнида муаммоларни ечимини усталик билан ҳал этиш;
- ✓ вазиятта қараб саволлар бериш ва жавоб қайтариш.

# Монолог

- ✓ алоҳида мавзу бўйича қилинган презентациялар ўтказиш;
- ✓ ихтисослиги бўйича асбоб-ускуналарни аник ва равшан тасвирлаш;
- ✓ алоҳида мавзу бўйича оғзаки маьруза тузиш;
- ✓ мақола, маьруза, баҳс-мунозараларни аниқ ва равшан қилиб умумлаштириш;
- ✓ аниқ тизимга асосланган ҳолда қўшимча, етарли бўлган ҳолда ва таниш мавзу бўйича ўз фикрини ифода қила олиш.

# Ўқиш

- ✓ таниш ва нотаниш мавзу бўйича тузилган матнлардан асосий / керакли бўлган ахборотни, шахсий ва мутахассислик бўйича корреспонденцияларни (хат-хабарларни) тушуниш;
- ✓ диаграмма, схема, чизмаларни қисқача таьрифини тушуниш;
- ✓ мураккаб бўлган маьлумотларни идрок этиш;
- ✓ махсус, мураккаб бўлган ёзма йўрикнома ва кўлланмаларни тушуниш;
- ✓ касбга оид мақола ва маьрузалардан керакли ахборотни ажратиб олиш;
- ✓ керак ёки нокераклигини аниқлаш мақсадида матнни у ёки бу қисмини синчиклаб ўқиш, конференция дастурларини ўқиб тушуниш.

# Ёзув.

- ✓ махсус маьлумотларни (тил юзасидан бўлган хатларни, маьлумотларни, электрон хатларни) ёза олиш;
- ✓ эссе ва маърузаларни ёза олиш;
- ✓ аниқ мантиққа эга бўлган илмий мақолалар ва илмий тадқиқот ишларни ёза олиш;
- ✓ ёзма таклифлар, ҳисобот ва резюмелар туза олиш;

- ✓ битирув малакавий ишларни зарур бўлганда ёза олиш.
- ✓ Тил компетенцияси

# Лексик компетенция

- ✓ касбий лексика ва терминларни ишлата олиш;
- ✓ коммуникатив вазиятларда мавзуга оид бўлган лексикани ишлата олиш;
- ✓ интернационал сўзларни тушуниш ва қўллай олиш.

# Грамматик компетенция

- ✓ мураккаб грамматик ва синтактик қурилмаларни коммуникатив вазиятларда қўллай олиш;
- ✓ боғловчи сўзларни тўғри қўллаш;
- ✓ мутахассисликка оид матнларни унинг мазмунини тушуниш максадида матнни тахлил килиши талаб этилади..

# Фаннинг ўкув режадаги бошқа фанлар билан ўзаро боғликлиги ва услубий жихатдан узвийлиги

Хорижий тил фанининг мантикий давоми сифатида амалий инглиз тили фани ижтимоий-иктисодий фанлар ва ихтисослик фанлари билан ўзаро боғлик. Ушбу фан бошка фанлар билан интеграллашган холда ўргатилади.

# Фаннинг фан, таълим ва ишлаб чикаришдаги ўрни

Амалий инглиз тили фани ишлаб чиқариш жараёни билан бевосита боғланмаган. Талабалар мазкур фандан ўрганган билимларидан бошқа ихтисослик фанларини ўзлаштиришда (соҳага оид маълумотларни чет тилида излаб топиш, таҳлил қилиш ва билим олиш жараёнида фойдаланиш), келгусидаги касбий фаолиятларида фойдаланишлари мумкин.

# Фанни ўкитишда замонавий ахборот ва педагогик технологиялар

"Амалий инглиз тили" фанини ўқитишда таълимнинг қуйидаги илғор ва замонавий технология ва методларидан фойдаланилади:

- ✓ педагогик махорат технологияси (Ю.Н.Кулюткин, Е.Б.Спасская);
- ✓ билимдонлар бахси;
- ✓ мавқеингизни эгалланг шиорлар асосидаги баҳс;
- ✓ таълимнинг фаол услублари: "Кейс-услуби" (Гарвард университети бизнес мактаби), ишбоп ўйинлар.

# Ижодий топширикларни гурух билан хал килиш услубларидан:

- ✓ дельфи услуби таклиф қилинган ечимдан статистик услуб асосида беш камчиликни аниқлаш ва улардан энг яхшисини танлаб, баҳолаш, камчиликлар сабабини аниқлаш;
- ✓ қора қути услуби масалани таҳлил қилиш, ижодий баҳс орқали камчиликлар сабабини аниқлаш;

- ✓ кундаликлар услуби гурух аъзоларининг ён дафтарчаларидаги ёзувларни тахлили ва уларда берилган таклиф-мулохазаларни мухокама қилиш, умумий фикр ишлаб чиқиш;
- ✓ "Тўғридан-тўғри жамоавий ақлий хужум" (Дж.Дональд Филлипс) 20-60 кишилик катта аудиторияда янги фикрларни, самарадорликни ошириш иш ёки машқ мини-гуруҳларда олиб борилади ва фикрлар жамоада муҳокама қилинади;
- √ "Ақлий ҳужум" (Е.А.Александров и Г.Я.Буш) гуруҳ қатнашчилари ижодий ғояларини жамоа, ғоялари билан қарши ғоялар ёрдамида фаоллаштириш, уларни қўллашни баҳолаш;
- ✓ сенектика услуби (У.Гордон) муаммони ифодалашга ўргатиш, унинг кисмларини аниклаш, муаммони ечишдаги ўхшашликларни топиш. Креативликни ўстириш, оддий ходисаларнинг ғайри-табиий томонларини топиш, ижодий қобилиятларини аниклаш;
- ✓ «**АРИЗ ТРИЗ**» (Г.С.Альтшуллер ва унинг мактаби, ТРИЗ кашфиёт топшириклари технологияларини ривожлантириш) ўрганилаётган тизим ривожланиши қонуниятларига бўйсундирилган мантиқий операциялар тизими 40 усулдан иборат: "қўшилиш", "матрёшка", "қарама-қарши", "зарарни фойдага айлантириш" ва бошқалар.

# АСОСИЙ ҚИСМ

# Нутқ мавзулари:

- ✓ **Таълим мавзуси** (ўкув муассасаси, ўкув куроллари ва унга муносабат, ихтисослик фанларининг хозирда ўкитилиши ва хоказо)
- ✓ **Ижтимоий маданий** (Ўзбекистон Республикаси ва тили ўрганилаётган мамлакатнинг тарихий, географик, иклимий, маданий, маиший хусусиятлари).
- ✓ **Касбга йўналтирилган мавзу** (ўрганилаётган ихтисослик тарихи, йўналишлари, соҳанинг буюк намоёндалари, долзарб муаммолари, касбий этика ва ҳоказо).

# "Хорижий (инглиз) тил" фани бўйича амалий машғулотларнинг мавзулар ва соатлар бўйича таксимланиши:

		Ажратилган соат			
№	Мавзулар номи	Жами	Амалий	Мустак. таълим	
	VII- семестр				
1.	<b>Таълим мавзуси</b> (ўкув муассасаси, ўкув куроллари ва унга муносабат, ихтисослик фанларининг хозирда	36	20	16	

	ўкитилиши ва ҳоказо) ва <b>Ижтимоий маданий</b> (Ўзбекистон Республикаси ва тили ўрганилаётган мамлакатнинг тарихий, географик, иклимий, маданий, маиший хусусиятлари)							
	VIII- семестр							
2.	<b>Касбга йўналтирилган мавзу</b> (ўрганилаётган ихтисослик тарихи, йўналишлари, соҳанинг буюк намоёндалари, долзарб муаммолари, касбий этика ва ҳоказо)	40	22	18				
	Жами	76	42	34				

# Амалий машғулот бўйича кўрсатма ва тавсиялар

Амалий машғулот учун қуйидаги мавзулар тавсия этилади:

- 1. Ўрганилаётган ихтисослик тарихи;
- 2. Ўрганилаётган ихтисослик йўналишлари;
- 3. Ўрганилаётган соханинг буюк намоёндалари;
- 4. Ўрганилаётган соханинг долзарб муаммолари;
- 5. Касбий этика;
- 6. Ихтисослик фанларининг хозирда ўкитилиши;
- 7. Ихтисосликка оид матнлар, атамалар тушунчаларни ўкитилиши ва таржима қилиш масалалари;
- 8. Ихтисослик бўйича чет эл тажрибасини ўрганиш, илмий адабиётларни шархлай олиш малакасини шакллантириш;
- 9. Ихтисосликка оид мавзуда такдимот тайёрлаш ва уни такдим килиш малакасини шакллантириш;
- 10. Ихтисослик бўйича илмий мақола ва унга аннотация тайёрлаш.

# "Амалий инглиз тили" фани бўйича амалий машғулотларнинг календар тематик режаси (VII-семестр)

No	Амалий машғулотлар мавзулари	Соат
1.1	Lesson 1	4
	History of the specialty studied	
1.2	Lesson 2	4
	Areas of specialization studied	
1.3	Lesson 3	4
	Great representatives of the studied area	
1.4	Lesson 4	4
	Actual problems of the studied area	
1.5	Lesson 5	4
	Professional ethics	
	Jami:	20

# (VIII-семестр)

№	Амалий машғулотлар мавзулари	Соат
2.1	Lesson 1	2
	Relative disciplines to chemistry	
2.2	Lesson 2	4
	Issues of teaching and interpreting texts, terms and definitions	
	of specialization	
2.3	Lesson 3	4
	Currently being taught of special subjects	
2.4	Lesson 4	4
	Studying of foreign experience in the specialty, formation of	
	the ability to interpret scientific literature	
2.5	Lesson 5	4
	Preparation of presentations on specialization and formation	
	of skills of presentation	
2.6	Lesson 6	4
	Preparation of an article and annotation for the specialty	
	Жами:	22

# Умумий боскич Нутк компетенцияси

# Боскичнинг асосий максади:

- ✓ узлуксиз таълим тизимининг аввалги боскичлари (академик лицей ва касб-хунар коллежлари)да талабалар хорижий тилда эгаллаган малака ва кўникмаларини коррекция килиш ва тенглаштириш;
- ✓ талабаларни нутқ фаолияти турлари бўйича касбий мулоқотга тайёрлашдан иборат;

# Тинглаб тушуниш:

- ✓ маъруза, такдимот ва мунозаралар, радио ва телевидение эшиттиришлари, янгиликлар, интервьюлар, хужжатли фильм ва шу каби оғзаки матнлар;
- ✓ реклама ва эълонлар;
- ✓ тил сохиблари нутқ ёзувлари (бадиий, хужжатли фильмлар, оммавий чикиш ва хоказо);
- ✓ тил соҳибларининг ижтимоий мавзулардаги ўзаро суҳбати;
- ✓ тингланган ахборотнинг асосий максади, тўлик мазмунини тинглаб тушуниш малака ва кўникмаларини ривожлантириш.

# Гапириш:

# Диалог нутк

- ✓ ижтимоий мавзуларда суҳбат ва норасмий диалог;
- ✓ касбий ёки бошқа мавзуларда расмий ва норасмий мунозаралар;

 ✓ мунозарани бошқариш, интервью, музокаралар ва телефон орқали мулоқот олиб бориш.

# Монолог нутк

- ✓ ихтисосликка оид мавзуларда маъруза тайёрлаш ва ўқиш;
- ✓ мунозара, далил ва исботларни олға суриш, фикрни асослаб бериш;
- ✓ реклама ва махсус мавзуларда такдимот тайёрлаш ҳамда чиқиш қилиш;
- ✓ маълумотларни умумлаштириш, мақолалар ёзиш, муҳокама килиш.

# Ўкиш

- ✓ танишув ўқиш, кўз югуртириб ўқиш ва синчиклаб ўқиш кўникма ва малакаларини ривожлантириш;
- ✓ хат-хабар, ёзишмалар ва электрон почтани ўқиш;
- ✓ махсус материалларни ўзида акс эттирган аутентик матнларни ўкиш;
- ✓ махсус сўз ва терминларга эга матнларни, илмий ва касбга оид адабиётларни, электрон манбалар ва матбуот материалларини ўкиш.

# Ёзма нутқ

- ✓ турли ёзишмалар, хат-хабарлар ва махсус докладлар (эслатма CVs ва ҳоказо) ёзиш;
- ✓ эссе, баён, резюме, тадқиқот иши (мақолалар, битирув малакавий ишлар) ёзиш.

# Касбга йўналтирилган боскич

Касбга йўналтирилган боскичнинг асосий максади:

- ✓ нутқ турлари бўйича касбий соҳада чет тилини амалий эгаллаш;
- ✓ талабани ижодий шахс сифатида ривожлантириш;
- ✓ соҳа бўйича адабиётларни таржима қилиш малака ва кўникмаларини ривожлантириш;

# Тинглаб тушуниш:

- ✓ касбга йўналтирилган аутентик материалларни бир марта эшитиб асосий мазмунини тушуниш ва зарур ахборотни олиш;
- ✓ кундалик воқеалар ҳақида янгиликлар, репортажларни тушуниш, фильм қаҳрамонлари нутқини тушуниш.

# Гапириш:

# Диалогик нутк

- ✓ тил сохиблари билан эркин мулоқотда бўлиш ва касбий мавзулара ўз фикр ва мулоҳазаларини исботлаб бериш;
- ✓ суҳбатни бошлаш ва тугатишни билиш, суҳбатдошига таклиф ва маслаҳат бериш, саволларига жавоб бериш, ахборот алмашиш, муҳокама қилинаётган далилларни аниқлаштириш, ўқиган ёки эшитганларини муҳокама қилиш;
- ✓ матн асосий мазмунини ифодаловчи лексик ва синтактик курилмаларга асосланиб гапириб бериш;

- ✓ ассоциатив тафаккурга асосланиб мулоҳаза, танқид, баҳолаш далиллар билан исботлаш орқали ўз нутқини тузиш;
- ✓ риторик характерга эга диалог нутқ малакаларини такомиллаштириш;
- ✓ касбий мулоқотлар, конференция, симпозиум, учрашув ва мунозараларда қатнашиш учун нутқ фаолияти, кўникма ва малакаларини такомиллаштириш.

# Монологик нутк:

- ✓ долзарб муаммо юзасида барча "Тарафдор" ва "Қарши" далилларни келтирган ҳолда ўз фикрини баён қилиш;
- ✓ тинглаган ва ўқиган матн мазмунини гапириш;
- ✓ мазмунга баҳо бериш;
- ✓ ўрганилган мавзулар бўйича ахборот бериш
- ✓ ўқиган матнни таҳлил қилиш ва шарҳлаш;
- ✓ ўқиган ёки тинглаган матнни қисқача мазмунини баён этиш;
- ✓ ўрганилган мавзуда чиқиш қилиш;
- ✓ ижтимоий –сиёсий матнларни ўқиб шарҳлаб бериш.

# Ўкиш:

# Танишув ўқиш

- ✓ матнни луғатсиз, берилган савол ёки умумий мазмунини тушуниш мақсадида ўқиш;
- ✓ матн: 10 % гача нотаниш сўз бўлган илмий-оммабоп, ижтимоийсиёсий, махсус бадиий матнлар;
- ✓ матн мазмунини чет тилида ёки она тилида сўзлаб бериш, параграфларни номлаш, тест топшириш.

# Синчиклаб (ўрганиб) ўкиш

✓ матнни асосий ахборотни ажратиб олган ҳолда мазмунини тўлиқ ва аниқ тушуниб ўқиш.

# Ўкиш тезлиги, хажми:

- ✓ луғатдан фойдаланиб 1600 босма белгили матнни 1,0 академик соатда ўкиш.
- ✓ матн: махсус, илмий оммабоп 12% гача нотаниш сўзга эга бўлади.

# Кўз югуртириб ўкиш:

- ✓ матн мазмуни хусусиятларини аниқлаш;
- ✓ зарур ахборотни матндан топиш;
- ✓ сўз (матн) маъно мазмунини контекст асосида фахмлаб олиш;
- ✓ матндаги бирламчи (асосий) иккинчи даражали ахборотни ажратиш;
- ✓ матн калит сўзларини ажрата олиш;
- ✓ матн қисмларига сарлавҳа қўйиш.

# Ёзма нутқ

# Ёзма нутқ бўйича:

- ✓ касбга йўналтирилган босқичда шаклланган малакаларни такомиллаштириш;
- ✓ реферат, аннотация ёзиш техникасини такомиллаштириш;

- ✓ ҳужжатларни расмийлаштиришни билиш (тузилиши, услуби, ҳужжат тили) ва у асосида ҳужжатларни намунага қараб, сҳемага кўра, клише ва фразаларни қўллаб, аҳборотни ҳисобга олиб, иш юритиш вазиятлари талабларига мос равишда расмийлаштириш;
- ✓ берилган мавзуда баён, эссе, резюме тузиш,соҳага оид адабиётлар бўйича реферат ёзиш.

# Лингвистик компетенция

Лексик компетенция чет тилида кенг қўлланиладиган рецептив ва репродуктив актив, пассив, потенциал сўз бойлигини оширишга қаратилган бўлиб, унинг таркибига турғун сўз бирикмалари, нутқ намуналари, клише ва касбий терминлар киради. Мазкур лексик минимум тили ўрганилаётган мамлакат маданиятини ифодалайди.

Ихтисослик бўйича лексик минимум методик принциплар - кўп маънолилик, тематик, сўз ясаш хусусиятларини хисобга олиш тамойилларига кўра касбга йўналтирилган чет тили таълими асосида танлаб олинади. Санаб ўтилган тамойилларга кўра лексик минмум 2 турдан иборат:

- а) умумтаълимий;
- б) касбий лексика

Куйидаги жадвалда таклиф этилаётган лексик минимум курслар бўйича таксимлаб берилган:

Курс	Умумтаъл	имий минимум	Касбий лексика	Жами	
	Актив*	Пассив**	Актив		
1	350	700	100	800	
2	350	500	150	800	
3	150	500	200	700	
4	150	500	200	700	
Жами	1000	2200	650	3000	

<sup>\*</sup> Минимумда олдинги боскичда ўрганилган лексика сони кўрсатилмаган.

# Нутқ фаолияти турлари устида ишлаш учун вақтни тўғри тақсимлаш

Қўйилган мақсадларга эришиш учун ҳар бир дарсда нутқ фаолияти турлари қуйидаги нисбатда бўлиши мақсадга мувофиқ:

тинглаб тушуниш - 25%; гапириш - 25%; ўкиш — 30%; ёзув — 20%.

# Талабалар билимини назорат қилиш

<sup>\*</sup> Пассив лексикага актив лексика хам киради.

Талабаларнинг чет тили буйича эгаллаган билим, малака ва куникмалари жорий, оралик ва якуний назоратлар оркали назорат килинади.

Жорий назорат: ҳар бир дарсда алоҳида талаба билан ишлаб уларнинг дарсга тайёргарлик даражаси савол-жавоб орқали текширилиб, кундалик баллар қуйиб борилади.

Оралиқ назорат: кафедранинг фан бўйича ишчи дастурига асосланган ҳолда, хар бир семестрга қўйилган талаблар асосида бир қанча дарслар ўтилганидан кейин ўтказилади. Натижаларни дастурда берилган талаблар билан қиёслаш орқали талабаларнинг малака ва кўникмалари қанчалик ўсганлиги аниқлаб борилади.

Якуний назорат: фан бўйича бакалавриат курсининг якунида ўтказилади. Якуний назорат ўтказилиши натижасида дастур талаблари бўйича касбий чет тили компетенцияси аниқлаб олинади.

# Якуний назорат мазмуни

# 1. Тинглаб тушуниш бўйича:

Касбга йуналтирилган матнни тинглаш ва уни тушунганлигини аниқлаш мақсадида тестлар ечиш.

# 2. Гапириш бўйича:

Касбга йўналтирилган мавзу бўйича батафсил, синчиклаб, аргументлар билан бойитган холда ўз фикрини баён этиш.

# 3. Ўқиш бўйича:

Касбий йўналишдаги матнни ўқиб, тушунганлиги асосида тест топшириқларини ечиш. Укиган матн мазмунини аник тўлик тушунганлигини текширишни ёзма таржима билан амалга ошириш мумкин. Бунда луғатдан фойдаланишга рухсат берилади.

# 4. Ёзув буйича:

Соханинг долзарб муаммоларига бағишланган эссе ёзиш.

# Лаборатория ишларини ташкил этиш бўйича кўрсатмалар

Фан бўйича лаборатория ишлари намунавий ўкув режада кўзда тутилмаган

**Курс ишини ташкил этиш бўйича услубий кўрсатмалар** Фан бўйича курс иши намунавий ўкув режада режалаштирилмаган

# Мустақил таълимни ташкил этишнинг шакли ва мазмуни

Чет тили фанидан мустақил ишларининг мақсади - талабаларнинг касбий коммуникатив фаолиятини шакллантириш ва ривожлантириш, уларнинг ижодий фаолиятини ўстириш, ва чет тили устида мустақил ишлай олиш малака ва кўникмаларини ҳосил қилиш ва ривожлантиришдан иборат. Ушбу умумий мақсадга эришиш учун қуйидаги бир неча вазифаларни бажариш назарда тутилади:

- талабаларнинг тил тайёргарлик сифатини ошириб бориш, тил ва мутахассислик бўйича адабиётлар устида ишлай олиш кўникмаларини шакллантириш ва ривожлантириш;

- ўз касбий билим ва малакаларини кейинчалик мустақил тўлдириб ва янгилаб туриш эхтиёжларини яратиш ва сақлаб қолиш, чет тили бўйича яратилган малака ва кўникмаларни ўстириб, ривожлантириб бориш;
- талаба бажариши керак бўлган ишларни тўғри ташкил қилиш, келиб чиқадиган қийинчиликларни олдиндан била олиш, ҳис этиш ва уларни бартараф қилиш йўлларини топа олиш.

**VII-семестр 16 соат** 

N₂	Theme	Hours
1.	Profession skills.	4
2.	Life and creativity of famous people in the studied scince.	6
3.	News of the iearning scince.	6

VIII-семестр 18 соат

N₂	Theme	Hours
1.	Working on the text "Professionality and speciality".	10
2.	Actual problems on speciality.	8

# Тавсия этилаётган мустақил ишларнинг мазмуни

Талабаларнинг мустақил ишлари нутқ фаолиятининг қуйидаги турлари бўйича ташкил қилинади.

**Ўкиш**: (танишиб чиқиш, синчиклаб, қараб чиқиш), ёзув, тинглаб тушуниш ва гапириш;

Тинглаб тушуниш: ҳажми турлича бўлган аудио- ва видео матнларни тинглаб тушуниш, саволларга жавоб бериш, гапириб бериш, аннотация ёза олиш;

Гапириш: талабаларнинг диалогик ва монологик нутклари буйича мустакил ишлари аудиторияда ўргатилган матнлар, ўкув материаллари асосида ташкил килинади. Гапириш буйича мустакил иш сифатида мавзу асосида маълумот тайёрлаш, матн мазмунини гапириб бериш, ўрганилган лексик материаллар асосида хикоялар тузиш, берилган муаммоли масала ва вазиятларни мухокама килиш каби топшириклар бериш мумкин. Гапириш куникмаларини ривожлантириб бориш учун мультимедиа дастурларини ва он-лайн технологияларини куллашга асосий эътибор қаратилади;

Укиш: талаба ўрганаётган соҳасига оид адабиётлар билан танишиб чиқиши ва ўзи учун қизиқарли ва керакли бўлган ахборотни тушуниши, публицистик, илмий-оммабоп ижтимоий-сиёсий адабиётларни ўқиши ва керакли ахборотни олиши лозим. Машғулотларда юқорида айтилган малака ва кўникмаларни шакллантириш ва ўстириш жуда мураккаб бўлганлиги учун уларни мустақил иш жараёнида синчиклаб, кўз югуртириб, қараб чиқиб ўқиш турлари орқали ташкил қилинади. Ушбу ўқиш турларини назорат қилишматнни бутунлай таржима қилиш ёки унинг танлаб олинган қисмларини таржима қилиш билан амалга оширилади.

Танишиб чиқиб ўқиш мустақил иш тури сифатида уйда ўқиш шаклида олиб борилади. Ўқишнинг бу тури учун аутентик ёки адаптация қилинган адабий, илмий-оммабоп адабиёт танлаб олинади. Текшириш шакллари: ўқиганини мазмунини тушунганлиги бўйича савол-жавоб ишлари, ажратиб олинган масалалар бўйича ахборот олиш, бахс-мунозаралар ўтказиш, ахборотга режа тузиш ва ҳ.к.

Қараб чиқиб, қидириб топиш учун ўқиш. Ўқишнинг бу турида оммавий-сиёсий, публицистик матнлар, газета ва журнал материаллари берилади ва ҳар бир дарсда қисқача ахборот олинади. Талаба битта газета мақолалари асосида ахборот беради ёки мавзу бўйича бир қанча газета ва журналлардан ахборот тайёрлайди.

Ёзув. Ёзув бўйича мустақил иш ўз ичига ўрганилаётган тилда фикрни баён қила олиш ишларини олади. Бунда мустақил иш мазмунига қуйидагилар киради:

- аннотация, реферат, резюмелар туза олиш;
- оғзаки равишда нутқ ҳосил қилиш учун режа ёки тезис тузиш;
- турли хатлар, табрикнома, таклифлар, иш юзасидан хатлар туза олиш;
- ўқишга ва ишга қабул юзасидан аризалар ёза олиш;
- сохага оид турли хужжатларни тўлдириш;
- баён, иншо, эсселар ёза олиш; касби бўйича иш юритиш ишларини (ёзувларини) олиб бориш.

Ўқиб таржима қилинган материаллар курс ишлари ва рефератларда қулланилади.

# Дастурнинг информацион – методик таъминоти

Чет тили фанини ўқитиш жараёнида таълимнинг замонавий интерфаол усулларидан, педагогик ва ахборот-коммуникация технологияларидан кенг фойдаланилади. Амалий машғулотларда ақлий хужум, кластер, блиц-сўров, кичик гуруҳларда ишлаш, инсерт, презентация, кейс стади каби усулларнинг мавзуга мос танланиши ва қўлланилиши дарс самарасини оширишга катта ҳисса қўшади.

# Талабанинг Амалий инглиз тили фани бўйича ўзлаштириш кўрсаткичи куйидаги мезонлар асосида бахоланади

# Рейтинг тизими асосида бахолаш мезони

				1	Рей	тинг	г наз	opan	nu		
	Жорий назорат		Жорий		Жорий Мустақил		қил	ıŭ		ŭ	
Фаннинг номи			мумий	таълим Оралиқ назорат		Умумий	HK	Умумий			
	Сони	Балл	Жами	$N_{\mathcal{M}}$	Сони	Балл ,	Жами		Ёзма	Жами	
Хорижий	1	60	60	60	1	10	10	10	30	100	

тил					

Талабалар ЖН дан тўплайдиган балларнинг мезонлари

		Жорий назорат баллари		
№	Кўрсаткичлар	Максимал	Ўзгари ш оралиғи	
1	Дарсларга қатнашганлик ва ўзлаштириш даражаси. Амалий машғулотлардаги фаоллиги, амалий машғулот дафтарларининг юритилиши ва ҳолати	20	0-20	
2	Вазифа топширикларининг ўз вактида ва сифатли бажарилиши. Мавзулар бўйича уй вазифаларини бажарилиш ва ўзлаштириш даражаси.	20	0-20	
3	Оғзаки ўтилган мавзулар юзасидан саволларга жавоб.	20	0-20	
	Жами ЖН баллари	60	0-60	

# Талабалар ОН дан тўплайдиган балларнинг мезонлари

		Оралиқ назорат баллари		
№	Кўрсаткичлар	Максимал	Ўзгари ш оралиғи	
1	Талабаларнинг мустақил таълим топшириқларини ўз вақтида сифатли бажариши ва ўзлаштириш.	6	0-6	
2	Тайёрлаган топширикни такдимот килиш.	2	0-2	
3	Берилган саволларга жавоб бериш.	2	0-2	
	Жами ОН баллари	10	0-10	

# Талабалар ЯН дан тўплайдиган балларнинг мезонлари

		Оралиқ назорат баллари		
№	Кўрсаткичлар	Максимал	Ўзгари ш оралиғи	
1	Грамматик кўникмаларни текшириш.	10	0-10	
2	Ёзув кўникмаларини текшириш.	10	0-10	
3	Берилган саволларга жавоб бериш.	10	0-10	

Жами ОН баллари	30	0-30

# Умумий кўрсаткич:

Балл	Бахо	Талабаларнинг билим даражаси				
86-100 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Аъло	<ul> <li>✓ Янги мавзуни Инглиз тилида тушунтириш ва мазмунини оғзаки еркин баён қила олиш;</li> <li>✓ Инглиз тилида ижодий фикрлай олиш;</li> <li>✓ Инглиз тилида мустақил мушохада қила олиш;</li> <li>✓ Инглиз тилида оғзаки ахборот бера олиш;</li> <li>✓ Луғат ёрдамида таржима қила олиш;</li> <li>✓ Олган билимларни амалда қўллай олиш;</li> </ul>				
71-85 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Яхши	<ul> <li>✓ Тил ўрганилаётган мамлакат тилида ўз фикрини тушунтира билиш;</li> <li>✓ Мустакил мушохада юрита олиш;</li> <li>✓ Тасаввурга ега бўлиш;</li> <li>✓ Луғат ёрдамида таржима кила олиш;</li> <li>✓ Матн мазмунини кискача тушунтира олиш;</li> </ul>				
55-70 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Қониқарл и	<ul><li>✓ Билиш, янги мавзуни қисман айтиб бериш;</li><li>✓ Мавзуни қисман тушуна билиш.</li><li>✓ Мавзу ҳақида тушунчага ега бўлиш.</li></ul>				
0-54 балл билан талабанинг билим даражаси куйидаги холатларда бахоланади	Қониқарс из	<ul><li>У ўкий олмаслик;</li><li>✓ Гапира олмаслик;</li><li>✓ Тасаввурга ега бўлмаслик;</li><li>✓ Билмаслик.</li></ul>				

Фан бўйича саралаш бали 55 баллни ташкил етади. Талабанинг саралаш балидан паст бўлган ўзлаштириши рейтинг дафтарчасида қайд етилмайди.

Жорий **ЖН** ва оралиқ **ОН** турлари бўйича 55 балл ва ундан юқори баллни тўплаган талаба фанни ўзлаштирган деб ҳисобланади ва ушбу фан бўйича якуний назоратга кирмаслигига йўл қўйилади.

Талабанинг семестр давомида фан бўйича тўплаган умумий балли ҳар бир назорат туридан белгиланган қоидаларга мувофиқ тўплаган баллари йиғиндисига тенг.

**ОН** ва **ЯН** турлари календар тематик режага мувофик деканат томонидан тузилган рейтинг назорат жадваллари асосида ўтказилади. **ЯН** семестрнинг охирги 2 ҳафтаси мобайнида ўтказилади.

ЖН ва ОН назоратларда саралаш балидан кам балл тўплаган ва узрли сабабларга кўра назоратларда қатнаша олмаган талабага қайта топшириш учун, навбатдаги шу назорат туригача, сўнгги жорий ва оралиқ назоратлар учун еса якуний назоратгача бўлган муддат берилади. Талабанинг семестрда ЖН ва ОН турлари бўйича тўплаган баллари ушбу назорат турлари умумий балининг 55 фоизидан кам бўлса ёки семестр якуний жорий, оралиқ ва якуний назорат турлари бўйича тўплаган баллари йиғиндиси 55 балдан кам бўлса, у академик қарздор деб хисобланади. Талаба назорат натижаларидан норози бўлса, фан бўйича назорат тури натижалари еълон қилинган вақтдан бошлаб бир кун мобайнида факултет деканига ариза билан мурожаат етиши мумкин. Бундай холда факултет деканининг такдимномасига кўра ректор буйруғи билан 3 (уч) аъзодан кам бўлмаган таркибда апеллятсия комиссияси ташкил етилади.

Апеллятсия комиссияси талабаларнинг аризаларини кўриб чиқиб, шу куннинг ўзида хулосасини билдиради. Бахолашнинг ўрнатилган талаблар асосида белгиланган муддатларда ўтказилиши ҳамда расмийлаштирилиши факултет декани, кафедра мудури, ўкув-услубий бошқарма ҳамда ички назорат ва мониторинг бўлими томонидан назорат қилинади.

Якуний назорат ёзма шаклда ўтказилади.

Якуний назорат максимал 30 баллик тизимда ўтказилади.

# Фойдаланиладиган адабиётлар рўйхати Асосий адабиётлар

- 1. Абдалина Е.Н. Учебник английского языка для студентов неязыковых вузов. Т. 1996
- 2. Мухитдинова Г.Ш. Техника Олий Укув юртлари учун // Инглиз тили дарслиги. Т.: Узбекистон. 1997

# Қўшимча адабиётлар

- 1. Агзамова З.И. Турдиева С.Х. Физика факультети бакалавриат талабалари учун инглиз тилидан матнлар тўплами. НУУЗ. Т. 2007
- 2. Артикова Ю.А. Механика-математика факультети бакалавриат талабалари учун инглиз тилидан матнлар тўплами НУУЗ. Т. 2006
- 3. Артикова Ю.А., Сабирова Г.П.,Джумабаева Ж.Ш. Англо-русско-узбекский словарь для математиков. НУУЗ. Т. 2004
- 4. АртиковаЮ.А. Numerals and mathematical symbols. НУУЗ. Т. 2013
- 5. Саттарова З.Б.Методическая разработка по английскому языку на тему «Экология». НУУЗ. Т. 2003
- 6. Юсупова 3.Ш.Сборник английских текстов для неязыковых факультетов. НУУЗ. Т. 2003
- 7. Х.Аловитдинова.,Д. Раджабова ва б.English for esl and esp learners. T.2012 Интернет сайтлари

http://www.ziyonet.uz

http://www.teachingenglish.org.uk/

http://www.inspiringteachers.com/

http://teachnet.org/ntpi/research/prep/Cooper/http://www.alt-

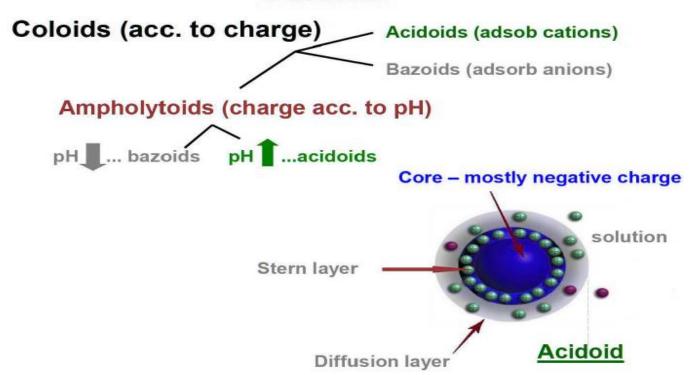
teachercert.org/Mentoring.html

www.examenglish.com

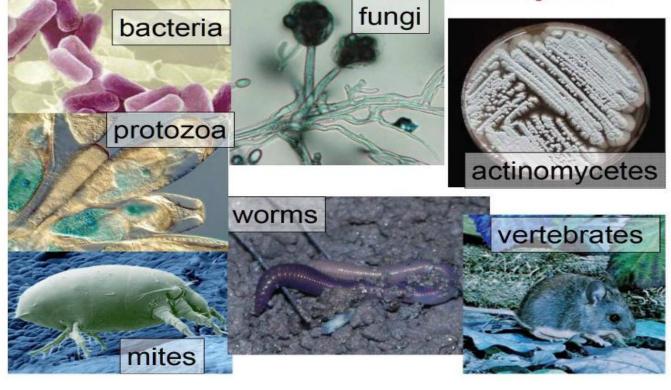
http://www.edufle.net

# V.3 TARQATMA MATERIALLAR

# Coloids



# phyto- a zoo-edaphon - examples



# **Human impact on soils**





- intensive agriculture
- ✓ fertilization
- ✓ pesticides
- √toxic compounds
- ·landfills
- urbanization



- desertificationerosion
- ✓ forest clearcutting ✓ agriculture

# **Vegetation**

natural plants, agriculture crops:

fields, meadows, pastures, forests

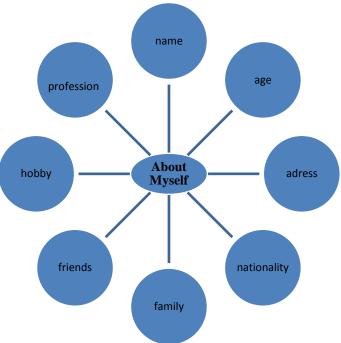


trees - forests, rainforests



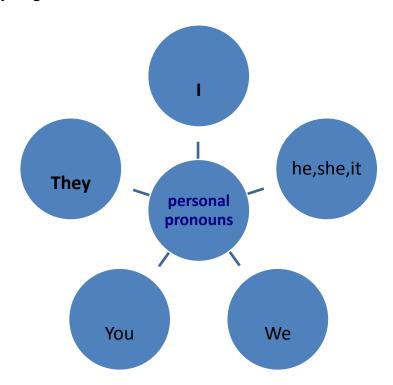
#### «KLASTER» metodi

Fikringizga nima kelsa, barchasini yozing.G'oyalar sifatini muhokama qilmang faqat ularni yozing.



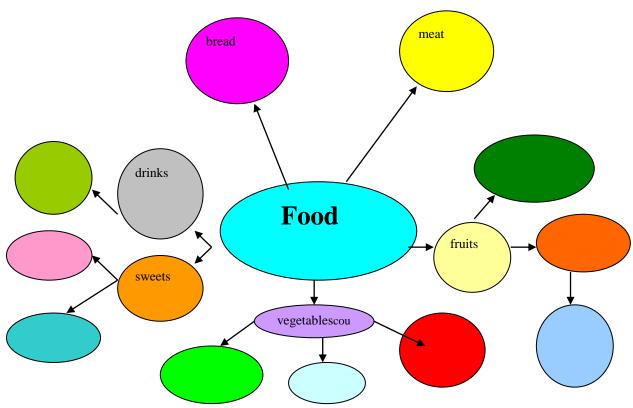
## Grammatika: Personal Pronouns –Kishilik olmoshlari

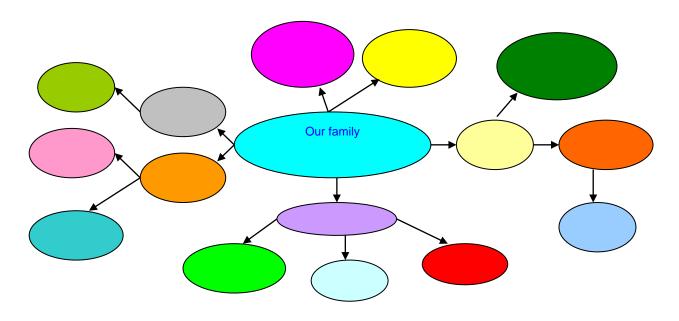
Shaxsni bildiruvchi olmoshlar kishilik olmoshlari deyiladi. Ingliz tilida kishilik olmoshlari quyidagilar





«KLASTER» metodi Fikringizga nima kelsa, barchasini yozing.G'oyalari sifatini muhokama qilmang





### Guruhlar uchun topshiriqlar:



Fikringizga nima kelsa, barchasini yozing. G'oyalar sifatini muhokama qilmang faqat ularni yozing.



#### Guruhlar uchun topshiriqlar.

Guruh №1 How do you spend your day off?

Guruh №2 How did you spend your last day off?

Guruh №3 What are your plans for your next day off?

# **Basic nomenclature**

Soil horizon designations layers with properties different from other adjacent layers

litter layer

A (humus)

B (leached)

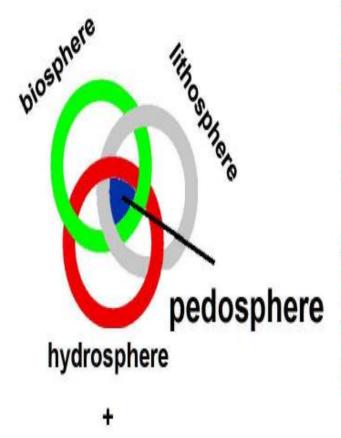
C (bedrock substrate)

R (bedrock)



Soil profile vertical section combining all soil horizons

# Soil – interface of systems



atmosphere

soil is natural unit generated at the interface of lithosphere and atmosphere under mutual process of pedogenetic factors

soil is binding element in between anorganic and organic matter and live organisms on the Earth

soil is desribed according to soil horizons

# V.4 TESTLAR

## 1. PRACTICE TESTS

### 1.1. GRAMMAR TESTS

## **Grammar Test 1**

Choose the best answer A, B, C or D.

1. The universe is estimated between 10 billion and 20 billion years old. A) being B) to be C) which is D) is
<ul> <li>2. Genetically, the chimpanzee is more similar to human</li> <li>A) and than any other animal B) than any other animal C) any other animal is D) and any other animal is</li> </ul>
<ul><li>3 in 1939, the Borne Bridge spans the Cape Cod Canal and is one of the many grand projects of the Depression era.</li><li>A) Completed B) Completing C) Completes D) Being completing</li></ul>
<ul><li>4. Like the pyramid, the volume of a cone by multiplying the area of the base by one third the altitude.</li><li>A) obtain B) is obtained C) obtaining D) obtains</li></ul>
<ul><li>5. Over the past 40 years, world demand for food</li><li>A) triple B) tripled C) have tripled D) has tripled</li></ul>
6. The organizers would have responded positively to proposals if they by 10 <sup>th</sup> June.  A) were submitted B) would be submitted C) had been submitted D) would have been submitted
7. When I finish the course next year I speak perfect French. A) can B) will can C) was able to D) will be able to
8. You to visit most museums in Britain. A) mustn't pay B) don't have to pay C) cannot pay D) need not have paid
<ul> <li>9. What? I can't find it in the dictionary.</li> <li>A) means the word 'heliotrope' B) mean the word 'heliotrope'</li> <li>C) does the word 'heliotrope' mean D) do the word 'heliotrope' mean</li> </ul>
10. He that his mobile phone had been out of action all day. A) told B) said C) asked D) wanted to know
11. We asked the travel agent a swimming pool at the villa.

A) is there B) was there C) if there was D) whether there is
12. I've never heard ridiculous speech. A) a such B) such a C) so a D) a so
Grammar Test 2 Choose the best answer A, B, C or D.
<ol> <li>The fact money orders can usually be easily cashed has made them a popular form of payment.</li> <li>A) of B) that C) is that D) which is</li> </ol>
<ul><li>2. The basic premise behind all agricultural production is the riches of the soil available for human consumption.</li><li>A) to be made B) the making C) making is D) to make</li></ul>
3. So many whales that they are in danger of dying out. A) were killed B) are killed C) have killed D) have been killed
4. By the third month of the war rebel forces most of the province.  A) takes B) took C) had taken D) were taking
5. If you the 'record' button, the green light will come on. A) will press B) would press C) press D) should press
6. The council find ways of cutting costs last year.  A) must B) had to C) will have to D) has to
7. Unfortunately, you grow bananas in the British climate. A) may not B) can't C) must not D) ought not to
8. Who usually the certificates at the graduation ceremony? A) does present B) do present C) presents D) present
<ul><li>9. The manager told us last Friday evening that he wanted us in at 8 a.m</li><li>to start the Saturday sale.</li><li>A) tomorrow B) the next day C) today D) the day before</li></ul>
10. The Stanford University survey asked respondents how much time

on the Internet.

A) did you spend B) did they spend C) they spend D) they spent
<ul><li>11. Generally, our best business comes via our website.</li><li>A) to speak B) speaking C) having spoken D) to have spoken</li></ul>
12. I have to say that the hotel wasn't quite the brochure claimed.  A) as luxurious as B) more luxurious as C) so luxurious how D) as luxurious how
Grammar Test 3
Choose the best answer A, B, C or D.
<ol> <li>Modern skyscrapers have a steel skeleton of beams and columns a three-dimensional grid.</li> <li>A) forms B) from which forming C) and forming D) that forms</li> </ol>
<ul> <li>2. In the late 1970s and early 1980s, the United States developed a reusable space shuttle to space cheaper and easier.</li> <li>A) to make access B) and making access C) which made accessible D) and made accessible</li> </ul>
3. When I graduate from college next June, I a student here for five years.  A) has been B) will be C) will have been D) had been
<ul><li>4. No biological life was found, though it by many scientists.</li><li>A) had speculated B) have been speculating C) speculated D) had been speculated</li></ul>
<ul><li>5. If the museum had charged money for entry, a lot of people able to use it at that time.</li><li>A) would not be B) would not have been C) were not D) had not been</li></ul>
6. Thanks to satellite technology, we now predict hurricanes quite accurately.  A) may B) ought C) can D) must
7. If you think a piece of equipment in the gym isn't working properly and mending, tell the instructor.  A) must B) may be C) should be D) needs
8. The government has broken all its pre-election promises regarding the Health Service,?  A) hasn't it B) hasn't the government C) has not it D) isn't it

<ul><li>9. The veterinarian told the farmer the animal sleep.</li><li>A) let B) to let C) not let D) to not let</li></ul>
<ul><li>10. Professor Jones rang from Vancouver. He said he to stay another week as the research was still going on there.</li><li>A) decides B) has decided C) had decided D) will decide</li></ul>
11. The Hyperlink modem is much than any others in our catalogue.  A) fastest B) the fastest C) more faster D) faster
12 regularly, the engine should last for 200,000 kilometers. A) Serviced B) Servicing C) Service D) Having been servicing
Grammar Test 4 Choose the best answer A, B, C or D.
<ol> <li> more than 65,000 described species of protozoa of which more than half are fossils.</li> <li>A) Being that there are B) There being C) Are there D) There are</li> </ol>
<ul><li>2. We are not allowed any arrangements for the conference before talking to him.</li><li>A) make B) made C) to make D) had made</li></ul>
<ul><li>3. In recent years, scientific and technological developments human life on our planet.</li><li>A) change B) have changed C) have change D) changed</li></ul>
4. If the form had been completed correctly, the transfer only two days. A) would take B) will take C) took D) would have taken
5. Latecomers to enter the theatre until there is a suitable break. A) may not B) will not may C) will not be allowed D) will not have
6. Applicants for this desk-top publishing course must have good keyboarding skills but to have prior publishing experience.  A) don't need B) must C) need D) mustn't
7 does it take you to get to the university campus? A) How quickly B) When C) How long D) How far
8. The manager asked the staff anything in the office before the police arrived.

A) to touch B) not to touch C) to not touch D) don't touch
9. There are so many people here! But that TV programme a few weeks ago said the smaller islands of the archipelago mostly uninhabited and very peaceful.  A) are B) is C) was D) were
<ul><li>10. The scientists said it was one of earthquakes ever.</li><li>A) most powerful B) the most powerful C) powerfullest D) more powerful</li></ul>
11 rich, he won't be able to afford this equipment. A) Being not B) Not being C) Having not been D) Not to be
12. The candidates in alphabetical order.  A) will be interviewed B) will interview C) will have been interviewed D) will have interviewed
Grammar Test 5 Choose the best answer A, B, C or D.
<ol> <li>The company launched an advertising campaign its market share.</li> <li>A) to increase B) that increase C) that it increases D) to be increased</li> </ol>
<ul><li>2. The new tax regulations are somewhat last year's.</li><li>A) rigorouser than B) more rigorous than C) more rigorous as D) as rigorous than</li></ul>
3. The value of the currency fell, foreign holidays more expensive.  A) having made B) making C) being made D) having been made
<ul><li>4. This area by closed circuit cameras.</li><li>A) is monitoring B) has been monitoring C) is being monitored D) is been monitored</li></ul>
<ul><li>5. The firm company cars to junior managers since 2002.</li><li>A) gives B) is giving C) has been giving D) has given</li></ul>
6. If the governments involved positive action after the 1997 crisis, the current crisis would not have happened.  A) took B) take C) have taken D) had taken
7. They finish the new motorway next month so we get to the coast much more quickly.  A) can B) will can C) will be able to D) will have to

8. You have an international driving license for this country.
A) don't have to B) must not C) has to D) must not to
9. Our CEO entered his chosen career quite late,? A) isn't it B) didn't he C) did not he D) didn't our CEO
<ul><li>10. The departmental manager it was my fault that we had lost the Siemens contract.</li><li>A) told B) said me C) said D) told to me</li></ul>
11. Does the brochure say in the villas.  A) how often is the bed linen changed  C) how is the bed linen changed often  D) how the bed linen often is changed  D) how the bed linen often is changed
12. The damage was severe that the pilot couldn't regain control.  A) so B) such C) so a D) such a
Grammar Test 6 Choose the best answer A, B, C or D.
1. Much of the forest out in the hurricane, as you can see.  A) has been wiped B) has wiped C) wiped D) was wiped  2. I your report yesterday – could I see it now?  A) have not received B) not received C) did not receive D) did not received  3. Could you look after Mrs White tomorrow – I can't do it because I back from the conference when she gets here.  A) will have travelled B) was travelling C) was going to travel D) will be travelling  4. The telecoms operator figures showing that the demand for broadband Internet has grown twice this year.  A) has been published B) has published C) is being published D) will be published  5. If that package from Neilson's arrives this afternoon, it up to my office immediately.
A) you are bringing B) you would bring C) bring D) you brought
6. No conclusions from this chapter.
A) can be drawn B) can't be drawn C) cannot be drawn D) can be not drawn
7 The files aren't here _ I them back at the office

A) may leave left	B) must be leav	ing C) sho	ould have left	D) must have
8. Every new dis			rizon and increas	e the extent of
A) our B) us				
9. I asked Martha	the co	nference had go	one well.	
A) what 10. My boss was			mefor	the promotion.
A) to apply B) to 11. Tourism today in many countries revenue.	y is an industry _	has gr	own so much in r	
A) who 12. There is hardl A) nobody B) ar 13. The new man A) to looking 14. Our new secu	y to be aybody C) everylager is sure B) to look C)	e seen in the city oody D) on into ways being looked	y centre after dusk e to cut costs. D) to be lo	oked
A) generouser 15. The Black Sea A) not so stormy stormy as	B) more genero	user C) ges North Sea.	nerousest D) n	nore generous
Choose the best of		rammar Test 7 · D.	7	
1. I for A) work B) had 2. We or have found some A) will use B) ard 3. The statistics pare turning to high A) shows B) shades are turning to high A. Gas is made up A. Gas is made up A. few 5. They refused to A) some 6. We had to get the some 6.	nve worked C) our normal supplement ones that are the going to use ublished yesterdath-speed Internet show C) are show of very B) less o give B) any	have been work lers, but we have e cheaper.  C) will be un exervices.  Own D) we molecules. C) much explanation to t C) no	king D) worked the changed our minus sing D) were go at over 30000 subtree shown  D) a large the fact. D) not any	nds because we bing to use scribers a week number
6. We had to go Japanese.	et an interpreter	in Japan beca	use none of us_	speak
A) knew	B) were able	C) could	D) succeed	led

7. The Manager asked me of the new proposal.
A) what did I think B) if I thought C) that I did think D) what I thought
8. He apologized at the meeting late.
A) to arrive B) that he arrived C) of arriving D) for arriving
9. You yet whether to study management or business administration.
A) need decide B) need deciding C) needn't decide D) need to have decided
10. Do you think we will be able to find amongst all the people at the exhibition hall?
A) ourselves B) us C) each other D) our
11. All the problems from both theoretical and experimental viewpoints.  A) will deal B) will deal with C) will be dealt with D) deal with  12. This keyboard is much than any other in our catalogue.  A) convenienter B) convenientest C) more convenienter D) more convenient  13. These are available in current literature.  A) datum B) datums C) datas D) data  14. The atomic weight of sulphur is twice that of oxygen.  A) as large as B) as large than C) larger as D) so large as  15. There will be a repeat of the smog crisis of two years ago here if nothing to control the fires.
A) be done B) will be done C) would be done D) is done
Grammar Test 8
Choose the best answer A, B, C or D.
<ol> <li>We that the authorities are not doing enough to restore this beautiful lake to its former state.</li> <li>A) believingB) are believing C) believes D) believe</li> <li>Customers in remote areas do not know whether the phone lines in their areas</li> </ol>
A) will be being upgraded B) will upgrade C) will be upgraded D) will have upgraded
3. Monsieur Degas this afternoon, but he rang to change the
appointment to next Tuesday.  A) would come B) was going to come C) is going to come D) will have come  4 you those figures yet?
A) Has he sent B) Have he sent C) Has he send D) Did he send

5. Neil's a good administrator, but if he deals with customers, he always	
problems.	
A) creating B) creates C) created D) would create	
6. If the temperature, the experiment might have been a failure.	
A) had been not raised B) had not been raised C) had not raised D)	
would have been raised 7. I haven't seen Simone for ages - she in a different department.	
	to
A) should work B) needn't have worked C) must be working D) ought have been working	ιο
8 these hypotheses can explain the origin of the solar system.	
A) Nothing of B) No of C) Nobody of D) None of	
9. At the meeting the shareholders asked how the companyin	the
previous year.	
A) did B) had done C) have done D) has done	
10. At present intensive research on the improvement of spacefli	ght
conditions.	_
A) is done B) is doing C) is being done D) has been done	
11. You such a long essay. Three paragraphs would be enough	to
demonstrate your writing ability. You have written much more than that.	
A) need have written B) needn't have written C) need write D) need write	eed
writing	
12. I thought the Government genetically modified food. Didn't	the
Prime Minister say that himself?	
A) is supported B) supported C) have been supported D) will support	
13. Electronic devices are in wide use in this	
A) laboratory research  B) laboratory's researches  C)	
laboratories researches D) laboratories's research	7011
14. The physiologists are rather worried about the side effects of aspirin. Can y recommend a alternative?	you
A) safier B) safer C) more safe D) more safer	
15. The older the formations, generally to study.	
A) hard they are B) they are hard C) the harder they are D) harder they are	re
Grammar Test 9	
Choose the best answer A, B, C or D.	
1. The main advantage of broadband Internet is that files by users up	to to
40 times faster than with a dial-up modem.	
A) can download B) can be downloaded C) must be loaded D) co	uld
download  2. How many units last wear?	
2. How many units last year?	

A) sold you B) have you sell C) have you sold D) did you sell 3. If sales continue to do this well, we our target by the end of next
month.
A) will have reached B) are reaching C) will be reaching D) were
reaching
4. Each year millions of reports on scientific research are published, a great
number of being in foreign languages.
A) their B) theirs C) them D) they
5. The device has got a year's guarantee, so you can bring it back if anything
wrong.
A) will go B) would goC) goes D) had gone
6. The research group might good results.
A) getting B) got C) get D) not got
7. The detailed study of planets close to the Earth in our knowledge
concerning the origin of the solar system.
A) won't filled gaps B) will fill gaps C) not fill gaps D) fill gaps
8. I couldn't find Mrs Arnoux, so I asked her secretary
A) was she there B) where was she C) where she was D) where she was being
9. He rang to askwe were still interested in the site or not.
A) whether B) when C) where D) that
10. I can't wait so you must give me an answer.
A) immediately B) immediate C) more immediate D) most immediate
11. You can't have lost the laboratory key. It's got to be
A) anywhere B) somewhere C) everywhere D) where some
12. The problems that exist with your experimetrs today should a
month or two ago.
A) have been solved B) be solved C) have solved D) have been
solving
13. In our study children on a diet high in dairy products tended to be
considerably than average.
A) more fat B) fatter C) fater D) more fatter
14. Petrol is it was a few years ago.
A) twice more expensive as B) two times more expensive as C) twice as
expensive as D) two times much expensive than
15. They are often confronted with difficult problems which they have to

A) have solved B) solve C) be solving D) have been solving

## **Grammar Test 10**

## Choose the best answer A, B, C or D.

1. The weather forecast says there'll be wind from the north west tonight. That
always snow with it at this time of year.
A) bring ing B) bring C) brings D) has brought
2. I can't find Ms Brown – to lunch?
A) Have she gone B) Has she gone C) Did she go D) Has she went
3. The materials excessively wet or excessively dry for this purpose.
A) must be not B) must not be C) have not be D) has not be
4. Usually outstanding scientists to give review papers.
A) are being invited B) are invited C) invited D) were being invited
5. If you tomorrow, you'll have problems because of the volcano
eruption in Iceland.
A) will travel B) travelled C) would travel D) travel
6. I the contract if I had read it properly.
A) will have signed B) wouldn't have signed C) didn't sign D) signed
7. Sorry, but you give me a hand with these test tubes? They're very
fragile.
A) might B) may C) would D) shall
8. Wethem the reminder on Monday morning because the cheque
arrived that afternoon.
A) needed to send B) needn't send C) needed to have sent D) needn't have
sent
9. I didn't receive the ticket, so I rang the travel agent to find out if they
it.
A) sent B) had sent C) have sentD) sends
10. I rang to ask when they, but in fact they had already relocated.
A) are moving B) will move C) shall move D) were moving
11. Many research scientists are inspired by the hope of diseases by
genetic engineering,
A) cure B) having cured C) being cured D) curing
12. The new chess champion from Ukraine is amazing can beat him!
A) Anyone B) Everyone C) No one D) One
13. He brought a laptop his e-mails when he was travelling.

A) access B) to access C) to have accessed D) to be accessed
14. I don't mind the Mediterranean summer because it's a heat than you
find in the tropics.
A) dryer B) drier C) more dry D) more drier
15. It doesn't rain it does in autumn.
A) as much in summer as B) as many in summer as C) so
much in summer than D) as much in summer like
<b>,</b> ,
Grammar Test 11
Choose the best answer A, B, C or D.
1. Prior to the 19 <sup>th</sup> century, professional scientists and scientific
research was largely carried out by amateurs.
A) have not existed B) not existed C) did not exist D) do not exist
2. Everybody that rainforests are disappearing.
A) is knowing B) are knowing C) know D) knows
3. Analysis of the Martian soil suggests that water exists on Mars, and there are a
areas where scientists believe ice forms and melts.
A) many B) much C) few D) little 4. In recent years, many plans for large 'floating cities' with living
accommodation for as many as 50,000 people.
A) have made B) have been making C) have been made D) making
5. The world's oceans contain huge amounts of salt. In fact, if you all
the salt from the oceans, you to use it to build a wall about 300 km wide
and a kilometer tall all around the Earth!
A) remove/will be able  B) removed/would be able
C) had removed/would have been able  C) would remove/were able
6. When you look into the night sky, you may not be able to tell the difference
between stars and planets, but planets are to Earth.
A) a lot nearer B) nearer than C) less near than D) more nearer
7. The explorer tried the journey the next year, but failed again.
A) complete B) completing C) to complete D) in completing
8. Rapid population growth cause problems.
A) must B) can C) need D) have to
9. You look at other students' work. It's against the rules.
A) had better not B) needn't C) don't have to D) mustn't
10. The latest study by these two environmental engineers has produced
mixed results.
A) conducting B) conducted C) been conducted D) having been
A) conducting B) conducted C) been conductedD) having been conducted
A) conducting B) conducted C) been conducted D) having been

12. It remains to be seen great companies or make them stronger than
ever.
A) if the new technology will weakenB) will the new technology weaken
C) weaken the new technology D) when the new technology weakens
13. The participants were told any questions while the experiment was
going on.
A) not to ask B) not ask C) do not ask D) to not ask
14. According to the plans, for this project, this huge ship from smalle
units.
A) will construct B) will be constructed D) will
have been constructed
15 a range of forest types depending on the annual rainfall.
A) It is B) They are C) There are D) There is
Grammar Test 12
Choose the best answer A, B, C or D.
1. Although rainforests cover only six per cent of the Earth's land surface
they about 50% of all species of life on the planet.
A) containing B) are containing C) contain D) have been containing
2. When Edouard Benedictus, a French scientist, in his laboratory, he
dropped a glass bottle which had some plastic inside – and invented safety glass.
A) was working B) has worked C) works D) worked
3 desert plants store food in their leaves or roots, and some deser
plants can live for many years.
A) Many B) A lot C) Lots D) much
4. The passengers of the cruise ship with all kinds of entertainment and
sports facilities.
A) will have provided B) will be provided C) will provide D) wil
be providing
5. Humans are among the few animals to have colour vision. If you a
horse, for example, you everything in black and white.
A) would be/saw B) are/will see C) had been/would have seen D) were/would see
6. Planets are very far away, and a journey to Mars would take about 9 months
a journey to the Moon (about 3 days).
A) more longer than B) as long as C) much longer than D) longes
than
7. John Stuart decided Australia from south to north in 1859.
A) cross B) to cross C) crossing D) in crossing
8. One of the possible reasons for sleeping is that if we didn't sleep and save some
energy, we have to eat a lot more food.
A) can't B) will C) may D) must
9. Are you any good at athletics? How fast you run?

A) should	B) must	C) nee	d	D) can			
10. Before	al	out the proble	ems caused	by large-	-scale indu	stry, i	t makes
		scale pollution				•	
A) worryin	gB) worried	C) been worr	ried	D) havir	ng been wo	orried	
11. Today,	mountain f	orests and fres	sh springs	surround	the rim o	of the	crater's
walls,	reach a	an elevation of	2286 km.				
A) that	B) w	hat	C) those	D	) which		
12. Do you	happen to k	now	similar in s	size?			
A) are the A	Arabian Dese	ert and the Gob	oi Desert	$\mathbf{B}$	) whether	the .	Arabian
Desert and	the Gobi De	sert are					
C) the Arab	oian Desert a	nd the Gobi De	esert are	$\mathbf{C}_{i}^{c}$	) if are	the .	Arabian
Desert and	the Gobi De	sert					
13. The Ma	naging Dire	ctor told his se	cretary	aı	nyone in d	uring t	the staff
meeting.							
A) not let	B) de	on't let C) not	to let D) to	not let			
14. Old con	npanies alwa	ıys r	new technol	logy.			
A) fear	B) aı	re feared	C) are	e being fe	eared	D) ha	ve been
feared							
15. Each	species of f	frog has a pa	rticular set	t of sour	nds, becau	ise	
important tl	hat frogs of t	the same specie	es find each	other.			
A) it is	B) th	ey are C) there	re is D) th	ere are			
		Gran	ımar Test 1	13			
<i>C</i> 1	7 ,		illul lest l				
		A, B, C or D.	.1. 1.1. 4.1.		1'1 1'	. 1 41.	. 4 . 4 . 1 1
		he Moon throu	igh his teles	scope, Ga	ilileo realiz	zea tha	at it had
mountains a			(C) 1	D) 1	. •		
A) observed	aB) was obs	erving (	C) observes	SD) obsei	rving	1	1 1
		cellent! It		irteen yea	ars, and it	nas pi	roaucea
	-	ges of the unive		1 *	<b>D</b> )	.1 . 1	
A) Works	B) nave wo	orked (	C) nas been	working	D) Wo	rkea	
3. You can	t swim in th	e Dead Sea bed	cause it con	tains too		sait.	
A) many	B)	a lot of	C) lots	D	) much		
		ottled water				next	year.
		ed C) is for				c · · ·	1.407
5. If a stor	m	Bartolomeu l	Dias's ship	off the c	coast of A	trica i	n 148/,
•		dian Ocean by		1 1 * . /	. 11		
		t have arrived					
C) would n	ot hit/did no	t arrive	D) w	ouid not l	nave hit/ha	a not a	arrived
		cold		~			
	<del>-</del>	B) more easi	ıy than	C	) as easier	as	
D) ea	asiest as						

7. Finally in 1861 Stuart managed at the northern coast of Australia,
near the modern city of Darwin.
A) to arrive B) arriving C) in arriving D) arrive
8. Scientists could not understand why Mercury appeared to rotate faster than it
should, and some astronomers suggested that there be an undiscovered
planet causing this unusual orbit and even gave it the name 'Vulcan'.
A) can not B) might C) need D) mustn't
9. You eat so many sweets. They aren't good for you.
A) had better B) don't have to C) shouldn'tD) needn't
10. The results by our American colleagues are easy to explain if you
apply Einstein's theory of relativity.
A) obtaining B) been obtained C) having been obtained D) obtained
11. Millions of years ago, Ngorongoro was an active volcano with a cone
some scientists believe was as high as Mount Kilimanjaro.
A) what B) where C) that D) why
12. Do you know?
A) how high is Mount Everest B) how Mount Everest is high C) Mount Everest
how high is D) how high Mount Everest is
13. The explorer asked his companions fires after dark.
A) not make B) don't make C) to not make D) not to
make
14. In many countries in recent years, areas of urban land which were once used
for industry for other purposes.
A) have redeveloped B) have been redeveloped C) have
redeveloping D) have being redeveloping
15. At the Equator, a lot of rain, on average more than 200 cm per year.
A) it is B) they are C) there is D) there are
Grammar Test 14
Choose the best answer A, B, C or D.
1. In recent years, cable television the power of the broadcasters.
A) has undermined B) undermined C) was undermined D)
undermining
2. In 1999, 156 countries the Kyoto protocol, part of a United Nations
agreement on climate change.
A) have signed B) signed C) signing D) were signing
3. In geography, a desert is an area which receives little rain and which loses
its moisture through evaporation.
A) a lot of B) a lot of C) many D) much
4. Overcrowded classrooms frequently levels of carbon dioxide that
would be regarded as unacceptable on board a submarine.
A) are contained B) contain C) contains D) containing

5. If Charles Darwin a voyage to South America between 1831 and
1836, he his famous book The Origin of Species, which argued that
living creatures evolved over millions of years.
A) did not take/would not write  B) would not take/did not write
C) would not have taken/had not written D) had not taken/would not
have written
6. Research shows that levels of pollutants are usually indoors than out,
even in the most polluted cities.
A) highest B) most high C) more high D) higher
7. On that expedition, Stuart failed the coast, and turned back ill and
short of food.
A) to reach B) reaching C) in reaching D) reach
8. Lack of sleep damage the immune system, so people who do not
sleep enough tend to fall ill more often.
A) can B) should C) must D) need to
9. I'm really tired, but luckily I get up early in the morning.
A) can't B) don't have to C) had better D) shouldn't
10. Some amateur paleontologists insist that fossils can be really
exciting.
A) having collected B) collect C) having been collected D) collecting
11. The Polar Bear, is threatened by global warming, may become
extinct by the end of the century.
A) that B) which C) whom D) those
12. We still don't know how many in the earthquake.
A) have people been injured B) if people have been injured
C) people have been injured D) whether have people been injured
13. People once thought that coal and sulphur burning below ground
volcanic eruptions
A) cause B) are causing C) caused D) will cause
14. Since the 1980s, \$ 10 billion on the project.
A) has been spent B) has spending C) has been spending D) has
spent
15. In a tropical forest, difficult for plants on the forest floor to develop,
as tall trees (25-35 metres) block the light.
A) they are B) there are C) there is D) it is
C
Grammar Test 15
Choose the best answer A, B, C or D.
1. News of this technological development some years ago.
A) has been published B) was published C) published D) have been
published
2. Since the early 1980s, we aware of the devastating effects of large-
scale environmental pollution.

A) areB) have been C) are being D) will be
3. Reptiles, such as snakes, lizards and tortoises, spend hours in the sum
to generate body heat.
A) lots B) a lot C) many D) much
4. New technologies always within them both threats and opportunities.
A) contain B) are contained C) containing D) have been contained
5. If Columbus about Marco Polo's trip to China, he to sail
there by crossing the Atlantic.
A) did not read/would not try  B) had not read/would not have tried
C) would not have read/had not tried D) would not read/would not try
6. Brazil's Amazon forest is disappearing scientists previously
imagined.
A) as fast than B) less faster than C) fastest than D) faster
than
7. John Stuart's expedition succeeded a huge desert.
A) to discover B) discovering C) in discovering D) discover
8. Most of us enjoy a good night's sleep, but we not realize just how
important sleep is.
A) must B) should C) may D) can
9. I think that was the last bus look for a taxi.
A) We needn't B) We'd better C) We're able to D) We don't
have to
10 all those contradictory data, the researchers had some difficulty
trying to interpret them in a proper way.
A) Collected B) Having been collected C) Having collected
D) Being collected
11. Contained within the Ngorongoro Conservation Area is the geologically
important and historically controversial Olduvai Gorge, the
anthropologists Louis and Mary Leakey discovered numerous specimens of the
fossil remains of early humans.
A) which B) where C) that D) whom
12. The researchers are wondering how long in tap water.
A) chlorine stays B) does chlorine stays C) does chlorine stays D) it
chlorine stays
13. Scientists predicted when by measuring movements in the Earth.
A) the volcano will erupt B) will the volcano erupt
A) the volcano will erupt  B) will the volcano erupt  C) the volcano would erupt  D) would the volcano erupt
14. Modern recycling methods to save energy on board the Freedom
Ship.
A) will use B) will be using C) will have used D) will be used
15. Frogs lay large numbers of eggs, because likely that predators will
eat most of them.
A) they are B) it is C) there is D) there are

#### 1. 2. VOCABULARY TESTS

#### Vocabulary Test 1

#### Read the text below and decide which answer A, B, C or D best fits each space.

#### Sound Advice for Language Learners

A recent  $(0) \dots B \dots$  of a language learning magazine has consulted a number of experts in the (1)......of second language acquisition. Their advice may prove invaluable for those (2) ......a language course. One suggestion is that you (3)...... whether you are likely to be successful at learning a language. Did you enjoy studying languages at school, for example? Do you have enough time to learn a language? The major (4) ...... will be your own time and effort. Therefore you must make sure that the course on offer leads to a (5) ...... qualification. Also, be realistic in your (6)..... If you don't set achievable aims you are most likely to give up. Do not be deceived (7)...... thinking that the most expensive courses are the best. (8)...... around to get the best possible value for money. You should also bear in mind that the quicker you learn a language the more quickly you forget it. Sandra Miller, a French teacher, tried to teach herself German by enrolling on a (9)...... course. Already fluent in four languages and with a sound knowledge of teaching methodology her chances of (10)...... progress were high. Three years (11)...... she remembers very little. She feels her biggest mistake was not to follow (12)...... her first experience. "I should have consolidated what I had learnt by continuing to study, even if it were by myself."

0	A series		B issu	e		C pro	gramn	ne	D release
1	A domain	B bran	nch	C fiel	d		D are	a	
2	A wonderin	g	B thin	king	C loo	king	D cor	ısideri	ng
3	A assess		B revi	ew	C bal	ance	D sur	vey	
4	A charge	B cost		C prio	ce		D val	uation	
5	A recognise	ed	B und	erstoc	od	C val	ued	D reg	garded
6	A sights		B ends	S		C obj	ects	D goa	als
7	A by	B abou	ut		C into	)	D in		
8	A Nose		B Pusl	h		C Ru	n		D Shop
9	A rapid		B cras	h		C qui	ck		D fast
10	A achieving	B doir	ıg		C gai	ning	D ma	king	
11	A on	B forv	vard	C from	m		D onv	ward	
12	A up	B on		C thro	ough	D out	•		

#### Vocabulary Test 2

#### Read the text below and decide which answer A, B, C or D best fits each space.

#### Improving Your Intellect

A (0)...B.... of researchers at the University of California claimed in a recently published report that listening to classical music can actually improve one's level of intelligence. This surprising claim was (1)...... after groups of volunteers listened to three different tapes and completed IQ tests after listening to each one. The volunteers (2)...... ten minutes of Mozart, a relaxation tape and a recording of silence. When making the test after listening to Mozart, the subjects' scores were noticeably (3)...... than after the other two. However, the tape had no (4)..... effect on any of the volunteers' intelligence levels.

Researchers believe that this kind of music opens certain neural networks which are used when performing intellectual tasks like puzzle (5)........ They do not claim that Mozart alone among classical composers is (6)....... of lifting your spirits and boosting brain-power, but they do believe that this particular composer's distinctive style makes his works ideally suited for stimulating our grey matter. Researchers in New Zealand attempted to (7)....... these results, but their efforts did not (8)....... with success. Despite this lack of this outside verification, the Californian team are determined to carry (9)....... Further (10)....... have been planned, this time using a (11)....... range of audio material. Chris Band, one of the leaders in the UK intelligence research field, has poured cold water on Californian claims. He asserts that their results cannot be (12)....... seriously until someone else manages to reproduce them.

0	A party	B team	C band	D gang
1	A made	B said	C stated	D done
2	A heard	B listened	C followed D att	ended
3	A larger	B more	C greater	D higher
4	A last	B permanent	C final	D constant
5	A solving	B working C do	ing D pu	tting
6	A capable	B able	C competent	D proficient
7	A redo	B copy	C imitate	D reproduce
8	A engage	B welcome C me	eet D acc	cept
9	A off	B on C alc	ong D ou	t
10	A trials	B experience	ces C efforts	D attempts
11	A longer	B richer	C further	D broader
12	A faced	B accepted	C taken	D believed

#### Vocabulary Test 3

Read the text below and decide which answer A, B, C or D best fits each space.

#### **Environmental Concerns**

Earth is the only (0)...B.... we know of in the universe that can support human life. (1)..... human activities are making the planet less fit to live on. As the western world (2)...... on consuming two-thirds of the world's resources while half of the world's population do so (3)...... to stay alive we are rapidly destroying the (4)...... resources we have by which all people can survive and prosper. Everywhere fertile soil is (5)...... built on or washed into the sea. Renewable resources are exploited so much that they will never be able to recover (6)...... We discharge pollutants into the atmosphere without any thought of the consequences. As a (7)...... the planet's ability to support people is being (8)...... at the very time when rising human numbers and consumption are (9)...... increasingly high demands on it.

The Earth's (10)...... resources are there for us to use. We need food, water, air, energy, medicines, warmth, shelter and minerals to (11)...... us fed, comfortable, healthy and active. If we are sensible in how we use the resources they will (12)..... indefinitely. But if we use them wastefully and excessively they will soon run out and everyone will suffer.

A situation	B place	C pos	sition D site	e
A Still	B Eve	en though	C In spite of	ofD Despite
A continues	B repeats	C carries	D follows	
A already	B just	C for	D en	tirely
A alone	B indi	ividual	C lone	D only
A sooner	B neither	C either	D rat	her
A quite	B grea	atly C utt	erly	D completely
A development	B resu	ılt	C reaction	D product
A stopped	B narrowed	C reduced	D cut	
A doing	B hav	ing C tak	ing	D making
A natural	B real	C living	D ge	nuine
A hold	B mai	ntain C sta	y D ke	ер
A last	B stand	C go	D rer	nain
	A Still A continues A already A alone A sooner A quite A development A stopped A doing A natural A hold	A Still B Ever A continues B repeats B just B just B individual B and B neither B great B result A stopped B narrowed A doing B have A natural B real A hold B main	A Still  A continues  A continues  B repeats  C carries  B just  C for  B individual  B neither  C either  B greatly  C utte  B result  B narrowed  C reduced  B narrowed  C reduced  B natural  B real  C living  B maintain  C sta	A Still  A continues  A continues  B repeats  C carries  D follows  A already  B just  C for  D end  A alone  A sooner  A quite  A development  A stopped  A doing  A natural  A hold  B Even though  C In spite of  D follows  D to  D end  D rate  C either  D rate  D rate

#### Vocabulary Test 4

#### Read the text below and decide which answer A, B, C or D best fits each space.

#### No More Classes

The use (0)...C.... computers has meant students can study language programmes (1)...... their own speed when and for how long they want – and no need to worry about the teacher having a favourite or doing (2)...... another boring lesson. What's more, in the virtual classrooms of the future the student will (3)...... on their headset, and be transported into an imaginary school, choose

their class, take the books they need off the shelf and (4)...... conversations with other computerized students.

They might (5)...... choose to pay a visit to the supermarket or the train station, the bank or the restaurant. At the (6)...... of a button they would be transported to (7).....realistic settings where they could practice their English, maybe getting a hand (8)...... a virtual English companion. All this perhaps, at the computer, from the comfort of their home: no (9)......to catch the bus to college, or a plane to England.

Exciting? Certainly, and an interesting alternative to traditional classroom lessons. But would it ever (10)....... the classroom? Hopefully not. (11)....... the need to relate to real people talking about real issues and generally learning a little more about others will always lead language learners to (12)......at least a little of their time with real people.

0	A in	B at	C of		D to		
1	A with	B for		C at		D in	
2	A still	B for	C yet		D alre	eady	
3	A place	B put		C set		D get	
4	A take	B do		C cate	ch	D hol	d
5	A although	B preferably	C inst	tead	D con	itrary	
6	A force	B hit		C dep	ress	D push	
7	A so	B such		C like	<b>)</b>	D alike	
8	A with	B to		C from	n	D for	
9	A role	B duty		C obl	igation	D need	
10	A replace	B restore	C suc	ceed	D rec	over	
11	A definitely	B mainly	C tota	ılly		D surely	
12	A spend	B mal	кe		C hav	e	D do

#### **Vocabulary Test 5**

#### Read the text below and decide which answer A, B, C or D best fits each space.

#### The Sahara

Around 4,000 BC, the Sahara began to turn (0)...A..... a desert. Since that time, it has slowly been growing larger and larger and today it is the world's largest desert. It (1)...... nine million square kilometers of Africa, that is, as (2)...... land as the United States. The Sahara is mostly made up of mountains, bare rocky plains and high flatlands (3)...... plateaus. The rest is a(n) (4)...... sea of sand which in some (5)...... piles up into dunes. Very few plants survive more than a few weeks and those that do have adapted deep roots or take in moisture (6)...... their leaves. The desert is hot and dry during the day but (7)......cool at night. Many of the two million people who (8)......in the Sahara are nomads – people

who travel from place to place to (9)....... food and water for themselves and their animals. This traveling is necessary since the Sahara gets less than ten centimeters of water a year. Other people (10)......, prefer not to travel and live in oases. Oases are places where water comes from wells or springs and where people can (11)...... their crops and water their animals. This picture of the Sahara is different to how it was over ten thousand years (12)......, when it had lakes and streams and was a fertile place.

0	A into	B to	C from	m		D out	
1	A has	B covers		C tak	es		D owns
2	A long	B far		C mu	ch		D many
3	A said	B nar	ned	C tolo	d	D call	led
4	A extreme	B huge		C bul	ky		D extended
5	A sites	B eve	ents		C pla	ces	D positions
6	A in	B on	C thro	ough	D abo	out	
7	A turns	B cor	verts	C cha	anges	D has	
8	A inhabit	B live	C stay	y	D exi	st	
9	A explore	B invent		C fine	d	D sup	ply
10	A although	B but	C and	l	D hov	wever	
11	A grow	B rais	se		C dev	elop	D increase
12	A since	B bef	ore		C ago	)	D after

#### **Vocabulary Test 6**

Choose the word or phrase (A, B, C or D) that best keeps the meaning of the original sentence if it is substituted for the underlined word or phrase.

1. The buyer wanted t	he furniture m	anufacturer to	o <u>cut</u> his prices.	
A) do away with	B) make us	se of	C) reduce	D) review
2. The <u>prime</u> ingredie	nt in table salt	is sodium.		
A) curious B)	unexpected	C) ef	fective D) main	
3. The temperature of	water can acc	<u>elerate</u> a cher	nical reaction.	
A) quicken B)	increase	C) delay	D) stop	
4. He is very enthusia	stic about his a	acceptance to	the University.	
A) excited B) please	d C) passive	D) non-con	nmittal	
5. What is necessary i	now is a correct	ct balance of	the use of coal, ga	as, oil and
nuclear power.				
A) method in B) n	nixture of (	C) technique	D) technol	logy in
6. The cup was filled	to the rim.			
A) to the brim	B) too full	C) overflow	ving D) half wa	ıy
7. She always avoide	d her bad-tem	pered aunt.		
A) disliked B) remen	nbered C) to	ook care of	D) evaded	
8. I was all alone and	felt like crying	g.		

A) sad B) unhappy C) lonely D) unloved
9. He looked up just as the sun <u>emerged from</u> the cloud.
A) vanished in B) covered C) appeared out of D) revealed
10.A flying aeroplane maintains its equilibrium as long as there is sufficient
support from the pressure of air or wind against its wings.
A) equanimity B) balance C) ability to fly D) flight path
Vocabulary Test 7
Choose the word or phrase (A, B, C or D) that best keeps the meaning of the
original sentence if it is substituted for the underlined word or phrase.
1. A conscientious scientist <u>hardly</u> ever bases his research on a guess.
A) probably B) variably C) scarcely D) undeniably
2. The University basketball team is <u>undoubtedly</u> the best one in the city.
A) persistently B) relativelyC) certainly D) practically
3. There is an <u>abundance</u> of ore in the mountain area.
A) a wide variety B) more than sufficient C) a unique type D) a commo
type
4. <u>Severe</u> criticism does not create a supportive learning environment.
A) harsh B) unfair C) special D) light
5. They <u>adapted</u> slowly because their surroundings were so new to them.
A) warmed up B) adjusted C) frozen D) improved
6. Congress is <u>discussing</u> tax rates tomorrow in a closed session.
A) abolishing B) reducing C) debating about D) revoking
7. He has a fine <u>apartment</u> with all the modern conveniences.
A) house B) flat C) office D) department
8. The child died from <u>lack</u> of care and proper nourishment.  A) excess  B) desire  C) denial  D) absence
A) excess B) desire C) denial D) absence 9. The <u>basic</u> colours of the spectrum are red, blue and yellow.
A) necessary B) secondary C) exceptional D) primary
10. His attempts to shift the <u>blame</u> for his defeat onto his companion met no
response.
A) responsibility B) importance C) reason D) necessity
Try responsibility By importance Cy reason By necessity
Vocabulary Test 8
Choose the word or phrase (A, B, C or D) that best keeps the meaning of the
original sentence if it is substituted for the underlined word or phrase.
1. Modern technology was not generally available <u>before</u> the 1930s.
A) at the time of B) prior to C) due to D) thanks to

2. A group of geologists explored	the caves.		
A) isolated B) inscribed C)		D) examined	
3. Ecologists are advocating meas			
A) supporting B) opposing C)		_	
4. The Mississippi River flood in	1994 was devas	tating.	
A) divisible B) crushing C) dama			
5. At times the vital balance betw			an's
interference.		1 1 3	
A) good intentions	B) intrusion	C) assistance	D)
withdrawal	,	,	,
6. Congress is discussing tax rate	s tomorrow in a	closed door session.	
A) abolishing B) reducing C)			
7. Suddenly a cloud appeared on	_	, .	
A) emerged B) grew larger C)		D) turned back	
8. His enthusiasm for sports affect			on.
A) effected B) improvedC) influe			
9. The population of the town is $\underline{s}$		-	nd people.
	D) m		
10. <u>Gradually</u> the participan	its of the conference	ence filled the conference	ence hall.
		D) little by little	
		,	
		•	
$\mathbf{V}$	ocabulary Test	9	
Choose the word or phrase (A,	B, C or D) tha	t best keeps the med	uning of the
original sentence if it is substitute	ed for the under	lined word or phrase	2.
1. If water freezes, its volume incr	<u>reases</u> .		
A) varies B) expands	,	,	
2. The scientist studied his subject			ject.
· · · · · · · · · · · · · · · · · · ·	•	D) imperceptibly	
3. In the laboratory the test tube ra	_		
	behind D) ne	ext to	
4. The drop in temperature was $\underline{\mathbf{n}}$	• •		
A) unimportant B) average C)		_	
5. The young engineer had to tak	te upon himself	all the <u>blame</u> for the	e failure of
the project.			
A) recognition B) praise	-	•	it
6. The rain was lashing and it was			
A) stuffy B) cosy	C) icy	D) chilly	
7. I am <u>alone</u> and can do more or			
A) solitary B) superior C) amon	•	-	
8. The government's failure to est	ablish any soun	d economic policy wa	as
<u>acknowledged</u> by the minister.	<b>~</b>	5)	
A) talked about B) made public	c C) admitted	D) denied	

9. Our manufacturing methods	_	
	newed C) adjusted D) to	
	health care reform seen	
A) discussion B) co	mplaints C) disquie	tude D) disagreement
	Vocabulary Test 10	
Choose the word or phrase (a original sentence if it is substi-		
1. The Alps are <u>huge</u> and treac	herous mountains.	
A) low B) spectacu	lar C) enormous	D) solid
2. In colonial times marketing	was basically <u>an exchan</u>	ge of goods and services.
A) a harmony B) a collecti	ion C) a trade D) a	cycle
3. The doctor <u>verified</u> that the	· · · · · · · · · · · · · · · · · · ·	•
A) confirmed B) stated	-	
4. The economic conditions inf		
A) effected B) affected		
5. We put up tents on the bord		,
A) on the edge of the lake		C) on the pier of the lake
D) in front of the lake	_ /	C) 111 HI F111 11 1111
6. We asked a plumber to take	a look at our bathroom	so he could make an
estimate of the repair costs.		
A) a hypothesis B) a rough	calculation C) a long l	list D) a proposal
7. We are <u>alone</u> here; you can		
A) among friends B) by ourse	<del>_</del>	
8. Want of money forced the o		D) lorgotten
•	C) banishment	D) lack
9. He <u>acknowledged</u> his defeat		
_	in the chess tournamen	it by failing to appear in the
last game.	analza ahaut (1) admitta	d D) loomed about
·	<u>*</u>	d D) learned about
10. The gallery displayed		
A) genuine B) antique C) ex	pensive D) forgotte	en
	Vocabulary Test 11	
Choose the word or phrase (A	, B, C or D) which best	completes each sentence.
170 1 1 1 1 1 1 1 1		1' . 1
1. Technology has indeed had		
A) change B) role	C) effort D) e	ffect

2. The experiment was successfully	by a team of scientists.
A) performed B) created C) operated	
3. The third of the book has not b	
A) report B) publicity C) edition	
4. Since he lost his job last year, he has been	1
A) unworked B) resting C) sitting	
5. This tradition is It is found no	where else in the world.
A) rare B) individual	
6. Her problem was that she stand	
A) couldn't B) wouldn't C) didn't	
7. They decided to the deadline.	•
A) proceed B) travel C) extend	
8. The management promise to	
treated by the staff.	1 3
A) take B) get C) ma	ike D) do
9. The next generation of telephones in ev	
person we are speaking to.	<u></u>
A) permit B) enable C) assist	D) let
10. The repairs will be carried out	a week of receipt of your call.
A) with B) for about C) unti	1 D) within
Vocabulary	Test 12
Choose the word or phrase (A, B, C or D)	which best completes each sentence.
- · · · · · · · · · · · · · · · · · · ·	-
1. The bigger the memory on your hard disk	t, the more you can store.
A) details B) money C) data	
2. Alexander Graham Bell the tel	ephone.
A) invented B) discovered C) founded	D) created
3. This job requires certain	You have to be good at operating
computers and dealing with people.	
A) qualifications B) skills C) tec	chniques D) knowledge
4. The pumping of industrial into	the sea kills marine life.
A) sewage B) litter C) rubbish	
5. Traffic congestion can to delay	
A) lead B) drive	
6. Please make your mind what y	ou what to do.
A) out B) clear	
7. The requirements for British un	niversities is usually three A levels.
A) exit B) reception C) ent	<del>_</del>
8. You ought to take of the great	
A) opportunity B) advantage C) pro	ofit D) benefit
9. The hang-glider pilot to land sa	afely, despite the strong wind.
A) achieved B) managed C) resulted D) such	ccadad

10. She's got a new job. She's been put in of the Loans Department in the bank.
A) control B) authority C) power D) charge
Vocabulary Test 13
Choose the word or phrase (A, B, C or D) which best completes each sentence.
1. A lot of has been put into finding effective ways to protect our
natural environment.
A) effort B) job C) task D) attempt
2. Nicolas Copernicus the orbits of the planets.
A) created B) invented C) devised D) discovered
3. Computer services are at the public's in most libraries.
A) availability B) employment C) disposal D) practicality
4. The vegetation in one part of the forest is so that when you look up
you cannot see the sky.
A) dense B) dim C) close D) heavy
5. I was under the that you knew how to use this programme.
A) understanding B) impression C) belief D) feeling
6. The famous scientist came against different kinds of problems when
he first settled in Spain.
A) out B) in C) off D) up
7. When developing new products, there can be any number of problems that
A) await B) arise C) come D) exist
8. She was going to apply for a new job, but in the end she changed her
A) mind B) heart C) thoughts D) opinion
9. Playing a sport can help people to with the stress of modern life.
A) live B) manage C) cope D) survive
10. There is a relationship between the quality of our employees and the
quality of our products.
A) strong B) high C) deep D) sharp
Vocabulary Test 14
vocabulary rest 14
Choose the word or phrase (A, B, C or D which best completes each sentence.
1. The computer should be seen as a we use to help us do our work.
A) power B) research C) tool D) source
2. Prices for accommodation greatly depending on location.
A) range B) vary C) adjust D) waver

3. we thought	the nonday	resort we stayed 1	n naa very good for
children.			
A) services B)	equipment	C) facilities D) co	onveniences
4. Due to a/an	of	cash, the governme	nt has cancelled its development
plans.			
A) decrease B):	minus	C) absence D) sh	ortage
5. As a	_ of leaving t	he window open, th	e laboratory was burgled.
		C) decision D) re	
			k infection.
		C) about	
		people to be	
		nvolved D) good	
-	-	ılt, you must try to _	vour best.
		C) have	
			a school where they are happy.
A) likely	B) sure	C) definite	D) certain
•	*	ny while a	•
		$\frac{1}{C}$ ) then	
	_, _,	-,	_,
		<b>Vocabulary Test</b>	15
Chaosa tha war	d or nhrasa (	A R C or D) which	best completes each sentence.
Choose the nor	a or pirrase (1	i, b, c or b) which	best completes each semence.
1 Most voung r	seonle in the V	Western world have	to a decent education.
		C) access D) or	
		o the mor	
		C) owe	
			economies of some countries.
A) trada	IS VEI	y C) business D) pr	refersion
A) traut	D) mausu y	f von loove von me	nov in an account
4. Danks pay yo	u 11	f you leave your mo	D) in some
		C) value	
			of life in another country.
A) kind		C) system	
_	_	_	two minutes average.
A) at		C) by	
		discuss a	
		ol C) lasting D) lo	
			dn't get of.
		way C) ric	
		naveout t	hat there are still long queues in
many branches.		<b>a</b> > 1	
		C) let	
			of his staff.
A) account B)	behalf C) n	olace D) ho	onour

#### **APPENDIX A**

#### **KEY TO PRACTICE TESTS**

#### **Grammar Tests**

Grammar Test 1: 1-B, 2-B, 3-A, 4-B, 5-D, 6-C, 7-D, 8-B, 9-C, 10-B, 11-C, 12-B

Grammar Test 2: 1-B, 2-D, 3-D, 4-C, 5-C, 6-B, 7-B, 8-C, 9-B, 10-D, 11-B, 12-A

Grammar Test 3: 1-D, 2-A, 3-C, 4-D, 5-B, 6-C, 7-D, 8-A, 9-B, 10-C, 11-D, 12-A

Grammar Test 4: 1-D, 2-C, 3-B, 4-D, 5-C, 6-A, 7-C, 8-B, 9-D, 10-B, 11-B, 12-A

Grammar Test 5: 1-A, 2-B, 3-B, 4-C, 5-C, 6-D, 7-C, 8-A, 9-B, 10-C, 11-B, 12-A

Grammar Test 6: 1-A, 2-C, 3-D, 4-B, 5-C, 6-A, 7-D, 8-A, 9-C, 10-A, 11-B, 12-B, 13-B, 14-D, 15-D

Grammar Test 7: 1-D, 2-D, 3-B, 4-A, 5-B, 6-C, 7-D, 8-D, 9-C, 10-C, 11-C, 12-D, 13-D, 14-A, 15-D

Grammar Test 8: 1-D, 2-C, 3-B, 4-A, 5-B, 6-B, 7-C, 8-D, 9-B, 10-C, 11-B, 12-B, 13-A, 14-B, 15-C

Grammar Test 9: 1-B, 2-D, 3-A, 4-C, 5-C, 6-C, 7-B, 8-C, 9-A, 10-B, 11-B, 12-A, 13-B, 14-C, 15-B

Grammar Test 10: 1-C, 2-B, 3-B, 4-B, 5-D, 6-B, 7-C, 8-D, 9-B, 10-D, 11-D, 12-C, 13-B, 14-B, 15-A

Grammar Test 11: 1-C, 2-D, 3-C, 4-C, 5-B, 6-A, 7-C, 8-B, 9-D, 10-B, 11-B, 12-A, 13-A, 14-C, 15-D

Grammar Test 12: 1-C, 2-A, 3-A, 4-B, 5-D, 6-C, 7-B, 8-C, 9-D, 10-A, 11-D, 12-B, 13-C, 14-A, 15-A

Grammar Test 13: 1-B, 2-C, 3-D, 4-D, 5-A, 6-B, 7-A, 8-B, 9-C, 10-D, 11-C, 12-D, 13-D, 14-B, 15-C

Grammar Test 14: 1-A, 2-B, 3-A, 4-B, 5-D, 6-D, 7-A, 8-A, 9-B, 10-D, 11-B, 12-C, 13-C, 14-A, 15-D

Grammar Test 15: 1-B, 2-B, 3-C, 4-A, 5-B, 6-D, 7-C, 8-C, 9-B, 10-C, 11-B, 12-A, 13-C, 14-D, 15-B

#### Vocabulary Tests

Vocabulary Test 1: 1-C, 2-D, 3-A, 4-B, 5-A, 6-D, 7-C, 8-D, 9-B, 10-D, 11-A, 12-A

Vocabulary Test 2: 1-A, 2-A, 3-D, 4-B, 5-A, 6-A, 7-D, 8-C, 9-B, 10-A, 11-D, 12-C

Vocabulary Test 3: 1-A, 2-C, 3-B, 4-D, 5-C, 6-D, 7-B, 8-C, 9-D, 10-A, 11-D, 12-A

Vocabulary Test 4: 1-C, 2-C, 3-B, 4-D, 5-C, 6-D, 7-B, 8-C, 9-D, 10-A, 11-D, 12-A

Vocabulary Test 5: 1-B, 2-C, 3-D, 4-B, 5-C, 6-C, 7-A, 8-B, 9-C, 10-D, 11-A, 12-C

Vocabulary Test 6: 1-C, 2-D, 3-A, 4-A, 5-B, 6-A, 7-D, 8-C, 9-C, 10-B

Vocabulary Test 7: 1-C, 2-C, 3-B, 4-A, 5-B, 6-C, 7-B, 8-D, 9-D, 10-A

Vocabulary Test 8: 1-B, 2-D, 3-A, 4-C, 5-B, 6-C, 7-A, 8-C, 9-B, 10-D

Vocabulary Test 9: 1-B, 2-B, 3-D, 4-A, 5-C, 6-D, 7-A, 8-C, 9-C, 10-A

Vocabulary Test 10: 1-C, 2-C, 3-A, 4-B, 5-A, 6-B, 7-B, 8-D, 9-C, 10-A

Vocabulary Test 11: 1-D, 2-A, 3-C, 4-D, 5-D, 6-A, 7-C, 8-A, 9-B, 10-D

Vocabulary Test 12: 1-C, 2-A, 3-B, 4-D, 5-A, 6-D, 7-C, 8-B, 9-B, 10-D

Vocabulary Test 13: 1-A, 2-D, 3-C, 4-A, 5-B, 6-D, 7-B, 8-A, 9-C, 10-A

Vocabulary Test 14: 1-C, 2-B, 3-C, 4-D, 5-D, 6-A, 7-C, 8-D, 9-A, 10-B

Vocabulary Test 15: 1-C, 2-B, 3-B, 4-A, 5-B, 6-D, 7-A, 8-C, 9-D, 10-B

# V.5 БАХОЛАШ МЕЗОНИ

# Талабанинг Амалий инглиз тили фани бўйича ўзлаштириш кўрсаткичи куйидаги мезонлар асосида бахоланади

#### Рейтинг тизими асосида бахолаш мезони

				J	Рей	тина	г наз	opan	nu	
Фаннинг номи	Жорий назорат		Умумий	Мустақил таълим Оралиқ назорат		Умумий	НК	Умумий		
	Сони	Балл	Жами	X	Сони	Балл	Жами		Ёзма	Жами
Хорижий тил	1	60	60	60	1	10	10	10	30	100

Талабалар ЖН дан тўплайдиган балларнинг мезонлари

		Жорий назорат баллари		
№	Кўрсаткичлар	Максимал	Ўзгари ш оралиғи	
1	Дарсларга қатнашганлик ва ўзлаштириш даражаси. Амалий машғулотлардаги фаоллиги, амалий машғулот дафтарларининг юритилиши ва ҳолати	20	0-20	
2	Вазифа топширикларининг ўз вактида ва сифатли бажарилиши. Мавзулар бўйича уй вазифаларини бажарилиш ва ўзлаштириш даражаси.	20	0-20	
3	Оғзаки ўтилган мавзулар юзасидан саволларга жавоб.	20	0-20	
	Жами ЖН баллари	60	0-60	

## Талабалар ОН дан тўплайдиган балларнинг мезонлари

		Оралиқ назорат баллари		
№	Кўрсаткичлар	Максимал	Ўзгари ш оралиғи	
1	Талабаларнинг мустақил таълим топшириқларини ўз вақтида сифатли бажариши ва ўзлаштириш.	6	0-6	
2	Тайёрлаган топширикни такдимот килиш.	2	0-2	
3	Берилган саволларга жавоб бериш.	2	0-2	
	Жами ОН баллари	10	0-10	

# Талабалар ЯН дан тўплайдиган балларнинг мезонлари

		Оралиқ назорат баллари			
№	Кўрсаткичлар	Максимал	Ўзгари ш		
			оралиғи		
1	Грамматик кўникмаларни текшириш.	10	0-10		
2	Ёзув кўникмаларини текшириш.	10	0-10		
3	Берилган саволларга жавоб бериш.	10	0-10		
	Жами ОН баллари	30	0-30		

## Умумий кўрсаткич:

Балл	Бахо	Талабаларнинг билим даражаси			
86-100 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Аъло	<ul> <li>✓ Янги мавзуни Инглиз тилида тушунтириш ва мазмунини оғзаки еркин баён қила олиш;</li> <li>✓ Инглиз тилида ижодий фикрлай олиш;</li> <li>✓ Инглиз тилида мустақил мушоҳада қила олиш;</li> <li>✓ Инглиз тилида оғзаки ахборот бера олиш;</li> <li>✓ Луғат ёрдамида таржима қила олиш;</li> <li>✓ Олган билимларни амалда қўллай олиш;</li> </ul>			
71-85 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Яхши	<ul> <li>✓ Тил ўрганилаётган мамлакат тилида ўз фикрини тушунтира билиш;</li> <li>✓ Мустақил мушоҳада юрита олиш;</li> <li>✓ Тасаввурга ега бўлиш;</li> <li>✓ Луғат ёрдамида таржима қила олиш;</li> <li>✓ Матн мазмунини қисқача тушунтира олиш;</li> </ul>			

55-70 балл учун талабанинг билим даражаси куйидагиларга жавоб бериши лозим	Қониқарл и	<ul><li>✓ Билиш, янги мавзуни қисман айтиб бериш;</li><li>✓ Мавзуни қисман тушуна билиш.</li><li>✓ Мавзу ҳақида тушунчага ега бўлиш.</li></ul>
0-54 балл билан талабанинг билим даражаси куйидаги холатларда бахоланади	Қониқарс из	<ul><li>✓ Ўқий олмаслик;</li><li>✓ Гапира олмаслик;</li><li>✓ Тасаввурга ега бўлмаслик;</li><li>✓ Билмаслик.</li></ul>

Фан бўйича саралаш бали 55 баллни ташкил етади. Талабанинг саралаш балидан паст бўлган ўзлаштириши рейтинг дафтарчасида қайд етилмайди.

Жорий **ЖН** ва оралиқ **ОН** турлари бўйича 55 балл ва ундан юқори баллни тўплаган талаба фанни ўзлаштирган деб ҳисобланади ва ушбу фан бўйича якуний назоратга кирмаслигига йўл қўйилади.

Талабанинг семестр давомида фан бўйича тўплаган умумий балли ҳар бир назорат туридан белгиланган қоидаларга мувофиқ тўплаган баллари йиғиндисига тенг.

**ОН** ва **ЯН** турлари календар тематик режага мувофик деканат томонидан тузилган рейтинг назорат жадваллари асосида ўтказилади. **ЯН** семестрнинг охирги 2 ҳафтаси мобайнида ўтказилади.

ЖН ва ОН назоратларда саралаш балидан кам балл тўплаган ва узрли сабабларга кўра назоратларда қатнаша олмаган талабага қайта топшириш учун, навбатдаги шу назорат туригача, сўнгги жорий ва оралик назоратлар учун еса якуний назоратгача бўлган муддат берилади. Талабанинг семестрда ЖН ва ОН турлари бўйича тўплаган баллари ушбу назорат турлари умумий балининг 55 фоизидан кам бўлса ёки семестр якуний жорий, оралик ва якуний назорат турлари бўйича тўплаган баллари йигиндиси 55 балдан кам бўлса, у академик қарздор деб хисобланади. Талаба назорат натижаларидан норози бўлса, фан бўйича назорат тури натижалари еълон қилинган вақтдан бошлаб бир кун мобайнида факултет деканига ариза билан мурожаат етиши мумкин. Бундай холда факултет деканининг такдимномасига кўра ректор буйруги билан 3 (уч) аъзодан кам бўлмаган таркибда апеллятсия комиссияси ташкил етилади.

Апеллятсия комиссияси талабаларнинг аризаларини кўриб чиқиб, шу куннинг ўзида хулосасини билдиради. Бахолашнинг ўрнатилган талаблар асосида белгиланган муддатларда ўтказилиши ҳамда расмийлаштирилиши факултет декани, кафедра мудури, ўкув-услубий бошқарма ҳамда ички назорат ва мониторинг бўлими томонидан назорат қилинади.

**Якуний назора**т ёзма шаклда ўтказилади. Якуний назорат максимал 30 баллик тизимда ўтказилади.