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АНГЛІЙСЬКА МОВА

для здобувачів вищої освіти (другого (магістерського) рівня) агрономічних спеціальностей



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Підручник з англійської мови для студентів другого (магістерського) рівня вищої освіти створено з метою розвитку та удосконалення у здобувачів навичок читання, говоріння та письма. Підручник містить тестові завдання та вправи, які входять до складу міжнародних іспитів.

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ПЕРЕДМОВА

Болонський процес, інтеграція України в європейську освітню систему, Загальноєвропейські рекомендації Комітету ЄС з мовної освіти до вивчення та викладання європейських мов висувають нагальну потребу в розробці національних типових програм, навчальних планів, підручників з мовної підготовки для здобувачів другого магістерського рівня освіти, які б задовольняли сучасним освітнім потребам в Україні.

Підручник розроблений відповідно до освітньо-професійної програми «Агрономія» другого (магістерського) рівня вищої освіти галузі знань 20 «Аграрні науки та продовольство» закладу вищої освіти «Подільський державний університет» з урахуванням вимог до викладання та навчально-робочої програми з дисципліни «Ділова іноземна мова», розробленої та затвердженої у закладі вищої освіти. Підручник призначений для студентів агрономічних спеціальностей ЗВО, керівників розмовних клубів з англійської мови та інших зацікавлених осіб.

Навчальне видання розроблено за результатами багаторічного колективного досвіду щодо викладання ділової англійської мови у Закладі вищої освіти «Подільський державний університет».

У підручнику зроблено акцент на компетентнісному, інтегрованому, інтерактивно-діяльнісному, технологічному та диференційованому підходах до навчання Ділової англійської мови у ЗВО.

Підручник складається з двох частин: основної та додаткової, укладених згідно з актуальними напрямами підготовки майбутніх фахівців у галузі агрономії. Кожна тема першої частини присвячена окремим професійно-методичним та науково-практичним питанням та містить грунтовний лексичний та практичний матеріал, друга частина пропонує комплекс вправ для засвоєння лексики та граматики, професійних текстів для прекладу та різноманітні творчі завдання.

Автори підручника також пропонують додатковий матеріал, який укладений у вигляді 5 Додатків лексичного та граматичного характеру, завдань та тестів для самоконтролю, а також містить зразки та шаблони ділової документації та список рекомендованої літератури.

ЧАСТИНА 1

ТЕМА 1. ДОСЯГНЕННЯ НАУКИ В ФАХОВІЙ ГАЛУЗІ

Practical classes 1, 2, 3

1. Translate and learn the words:

- 1. Selection
- 2. preparation
- 3. cell engineering
- 4. hybrid
- 5. gene
- 6. simultaneously
- 7. processing
- 8. to transfer
- 9. cereals
- 10.dezoxyribonucleic acid (DNA) nitrogen-fixing genes
- 11.cell
- 12.variety
- 13.granule
- 14.gene engineering
- 15.utensils
- 16.interaction
- 17.bacterium (pl. bacteria)
- 18.pest resistance

2. Read and translate the text:

SELECTION OF AGRICULTURAL CROPS

Selection is an important direction of agronomy. For a long time, plant-breeders have been breeding new varieties of drought-resistant grain crops and other agricultural plants which are resistant to the unfavorable climatic and weather conditions. At the same time, they are characterized by a high yield productivity. The agricultural biotechnology is of the greatest importance. It should create the new highly productive varieties and hybrids of the agricultural plants, biological means of the plant protection, different preparations, and the ways of the waste recovery. Thanks to the cell engineering the researchers have bred an unvirus substance for different potatoes varieties. They have been breeding new varieties and hybrids of grain crops, fruits and vegetables.

They breed seeds of sugar beets in the form of seedlings. Later they are ready for the further sowing in the granule form.

The biotechnology is based on the fact that a celled organism is fully preserved by a gene of the previous type. Simultaneously this simplest organism has much common with the microorganism. Exactly it is a basis of the cell engineering and biotechnology. The plant cells are able to divide without any limit. It's necessary to keep the cell sterility and that's why we use special utensils. The cell amount for the cultivation is provided with the help of the plant organs processing. Their cultivation is provided into separate cells. They are put on the nutrient environment. The gene engineering is based on the molecular gives the possibility of inserting biology. It into the molecular interaction of the principal molecules inside the cell and outside it. Recombinant DNA are used and will be used in the work with microorganism for the production of different valuable substances in medicine, biochemical industry and agriculture. Besides their use is connected with two important discoveries. New techniques developed a rapid analysis of complicated biological molecules. After analysis came synthesis. gene was synthesized. Then it became possible to synthesize necessary genes.

The construction technology of recombinant DNA is the most important a chievement of the biotechnology. The agricultural, possibilities of such techniques are almost as exciting.

For example, it may become possible to transfer the nitrogen-fixing genes of certain bacteria to plants such as cereals which are unable to fix nitrogen. Should this prove possible, the savings in terms of fertilizer and improved soil fertility will be enormous. Similarly of there is the prospect of transferring to a number of different crops civic genes responsible for improved yield or pest resistance.

3. Answer the following questions:

What is the selection purpose?

How are new plant varieties characterized?

What should the agricultural biotechnology create?

What have the plant-breeders been breeding?

What is the biotechnology based on?

What is the basis of the cell engineering?

What do we use to keep the cell sterility?

What is the gene engineering based on?

Where is the recombinant DNA used?

What are two important discoveries in the gene engineering?

What substances are transferred for cereals?

4. Translate into Ukrainian:

- 1. Plant-breeders have been breeding new highly productive grain varieties for a long time.
- 2. For ten years the researchers have been inserting changes into the molecular interaction.
- 3. The scientists have been breeding new sugar-beets varieties for a long time.
- 4. Plant-breeders have been breeding new grain crops varieties with a high productivity and useful heredity for many years.

5. Put the infinitives in brackets in Present Perfect Continuous:

- 1. Plant-breeders (to breed) new varieties and hybrids of grain crops.
- 2. They (to create) new highly productive varieties of agricultural plants.
- 3. The researchers (to breed) an unvirus substance for different potatoes varieties.
- 4. The scientists (to transfer) the nitrogen-fixing genes of certain bacteria to cereals for twenty years.

6. Fill in the blanks with the necessary verbs:

to synthesize, to create, to use, to sow, to insert

- 1. The agricultural biotechnology ... new plant varieties with a high productivity and good heredity.
- 2. The farmers ... new varieties of feed crops.
- 3. The researchers ... special utensils to keep the cell sterility.
- 4. The gene engineering ... changes into the molecular interaction of the principal biological molecules inside the cell and outside it.
- 5. The researchers ... necessary genes with a high productivity and useful heredity.

7. Read, translate, explain the underlined words:

DNA is the basic genetic material present in most animate organisms. Molecules of DNA are found in a cell's chromosomes. Chromosomes occur in pairs: one from the mother and one from the father. The number of chromosomes differs from spices to species. DNA is made up of genes, linear sections of a DNA molecule which contain the instructions for the development of a DNA

molecule characteristics that living things <u>inherit from their forbears</u>. DNA molecules contain the genetic instructions needed for cells <u>to organize strands</u> wrapped around each other <u>to form a double-helix</u>.

8. Translate into Ukrainian:

The plant immunity and the pest resistance has substantially increased after the seed processing with special preparations. The special combination of different plants during the vegetation time is of the greatest importance. The researchers found out that the hemp plants in the sugar beets field may liquidate pests. A lot of different wild plants may be poisonous for pests and microorganisms. In Germany farmers sow different wild plants. Their leaves resist the pest multiplication. Different substances preserved in the leaves protect the agricultural plants from pests and microorganisms. The substances are also synthesized artificially.

REMEMBER THE FOLLOWING WORD AND WORD-COMBINATIONS:

fungus (pl. fungi) — грибки wild species — дикі види cross-breeding – схрещування trimmed — осушений

9. Translate the following sentences:

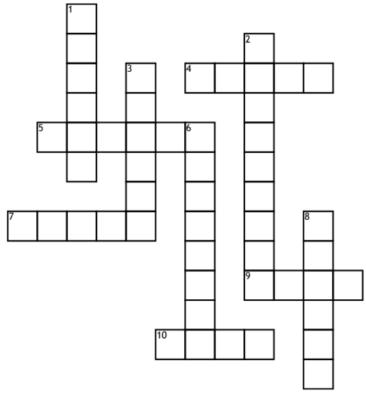
The choice of varieties and hybrids which are diseases- and pest-resistant is very important in the plant protection. The plant-breeders solve this problem differently. They breed varieties which have some peculiar structure of a stem and leaves. These plants are pest resistant. It's possible to use certain varieties which disorientate certain fungi. Nowadays the researchers have been breeding new agricultural crops. They use wild species of plants, and breed resistant varieties with the help of crossbreeding, selection, molecular biology, and gene engineering. Wheat with trimmed leaves enables to protect plants from pests.

10. Translate into English:

- 1. Селекція є важливим напрямом агрономії.
- 2. Селекціонери виводять посухостійкі сорти.
- 3. Нові сорти характеризуються високою врожайністю.
- 4. Сільськогосподарська біотехнологія створює високопродуктивні сорти і гібриди.
- 5. Дослідники вивели безвірусну речовину для різних сортів картоплі.
- 6. Мікроорганізми ϵ базою клітинної інженерії.
- 7. Генна інженерія базується на молекулярній біології.
- 8. ДНК має вигляд довгої подвійної спіральної молекули в ядрі клітин, що містить генетичний код і спрямовує розвиток і функціонування всіх клітин.
- 9. Сучасні технології розвинули швидкий аналіз складнихбіологічних молекул.
- 10. Селекціонери виводять специфічні гени, які регулюють підвищення врожайності.

11. Do the puzzle.

Plant parts and functions



Across

- **4.** This is what the (brown) stem of a tree is called
- 5. This is the colorful part of a plant
- 7. I find water for the plant
- **9.** I am what the plant starts to grow from
- **10.** I bring water to the other parts of the plant

Down

- 1. I make seeds for the plant
- 2. The roots find this in the soil
- 3. I make food for the plant
- 6. The stem helps the plant stand up
- **8.** The leaves use this from the sun to help it make food

Word Bank

Flower roots seed leaves stem petals trunk straight nutrients energy

12. Read and retell the texts

HIGHER EDUCATION IN UKRAINE

All educational institutions can provide teaching for all types of training programs according to the Law of Ukraine "About Higher Education". Education in Ukraine provides the following degrees:

Bachelor. The preparation of Bachelors is carried out on the basis of complete general secondary education. The duration of studying is 4 years. Graduates, who successfully pass the state exams, obtain Bachelor's degree, which gives the right to work on studied profession and the right to be admitted to the program for Master's degree receiving.

Master. Master's degree studying is possible on the basis of Bachelor's degree. The period of the course is 1-2 years. The graduates pass the state certification, which includes a public presentation of the Graduate Work. Persons who successfully pass the state certification obtain Master's degree, which gives the right to work on the profession and the right for post-graduate department admission;

PhD. PhD degree is a scientific degree received on finishing the post-graduate course. A person who has Masters qualification can be admitted to the postgraduate department of the university. PhD degree receiving involves a public presentation of the Dissertation. Duration of the studying course is 3-6 years;

Master is an educational proficiency level of higher education of a person who has attained complete higher education, special skills and knowledge, sufficient to cope with professional tasks and duties (work) of innovative character at a certain level of professional activity (in engineering, business administration, pedagogy, arts, etc.).

Training specialists at the level of Master may also be carried out on the basis of the educational-proficiency level of Specialist. The period of training makes typically 1–1.5 year (60-90 ECTS credits).

During their at the Master's or Specialist's level, students are required to write their final work on a selected subject and make presentations, to be able to collect, analyse and summarize, synthesize and to communicate study and practical material. Knowledge of a foreign language is often required.

Training specialists of the level of Specialist or Master in such fields as medicine, dentistry, veterinary medicine, teaching is carried out on the basis of complete secondary education within the period of 5–6 years (301-360 ECTS credits), as is common in Western Europe for state registered professions.

MASTER'S DEGREE ABROAD

A master's degree (from Latin magister) is a postgraduate academic degree awarded by universities or colleges upon completion of a course of study demonstrating mastery or a high-order overview of a specific field of study or area of professional practice.

Generally speaking, there are two main types of master's degrees: course-based (taught) and research-based. Course-based master's degrees are based on structured course modules taught through lectures, seminars, laboratory work or distance learning, while research-based master's degrees require the student to carry out their own research project(s) in a specialized field of study. Research master's degrees normally take a little longer than taught master's degrees to complete.

A **Master of Arts** (MA) is usually awarded in disciplines categorized as arts or social sciences, such as communications, education, languages, linguistics, literature, geography, history and music. Candidates are taught through a combination of lectures and seminars and assessed through an examination and/or a dissertation based on an independent research project.

A Master of Science (MS, MSc) is usually awarded in disciplines categorized as the sciences, such as biology, chemistry, engineering, health and statistics. Certain fields such as economics and the social sciences can fall under both arts and sciences, with the individual institution deciding on what to call their master's degree program. In such subjects, it may be the case that the MS has a stronger research component and can be perceived to hold more weight than an MA in some industries.

A **Master of Research** (MRes) degree is designed to provide training in how to become a researcher. Containing a significantly larger research element than MA or MSc programs, an MRes may give candidates an advantage if they wish to pursue a PhD or enter a career in research. Note that some institutions may refer to MRes-style degree programs as an MSc, so it's worth checking the course content carefully before applying.

A **Master by Research** (MPhil) is an advanced research-based degree which allows the candidate to focus on a particular topic in-depth and independently, to complete a single large research project. An MPhil is often seen as a precursor to a PhD and is often used by institutions to allow students to 'test the water' before commencing a PhD degree program. This often takes longer to complete than other types of master's degrees – though the length of time and the

status awarded to an MPhil varies significantly depending on the country and institution.

Taught in only a few places (including the University of Oxford and the University of Cambridge), a **Master of Studies** (MSt) degree is comparable to the MA or MSc, requiring both classroom learning and the completion of a thesis and an examination. An MSt can serve as a provisional enrolment for a PhD in some cases. The need for this category of master's degree partly stems from the fact that at Oxbridge universities students who have completed a Bachelor of Arts are automatically awarded an MA after a defined time-period has passed. In contrast, those with a MSt have completed postgraduate coursework to gain the title.

There are also more specialized types of master's degrees, often focusing on a specific professional area. These are sometimes known as 'tagged master's degrees', because they are 'tagged' to a certain field, or professional master's degrees, because they focus on career development in a particular profession. Some professional master's degrees start with the word Professional in the title, such as the **Professional Science Master's Degree** (PSM), a hands-on degree with a heavy practical component giving students the skills and knowledge needed to work professionally in their chosen field.

As ever, classifications and course details will differ depending on the country and institution. Here are some of the most common examples of specialized and professional master's degrees:

The Master of Business Administration (MBA) is designed to give students the skills and knowledge required for career progression in business and management roles. Candidates are given broad training in all aspects of business, allowing them to apply their learning to a variety of careers. Many MBA candidates are mid-career professionals, with most programs requiring at least three years' professional experience. You can also choose to combine an MBA with a specialization such as accounting or finance, and tailor the degree to a specific field of interest. Related master's degrees include the Master of Professional Accountancy (MPAcc) and Master of Science in Information Systems (MSIS).

The **Master of Library Science** is designed to give students both academic and professional knowledge for entry into the workplace – in this case, libraries. Taught at an accredited library school, an MLS includes theoretical components along with a practicum (supervised practical teaching) or internship, ending with a research project or thesis. The MLS is often a requirement for professional librarian positions in the US and Canada.

The **Master of Public Administration** is a public policy degree similar to an MBA but focusing on the public sector rather than the private sector. Students

can specialize in areas such as the environment, international administration and science and technology with an aim to work for the government, non-governmental organizations (NGOs), not-for-profit organizations and in consulting. The MPA combines academic and professional elements, with a focus on policy analysis and management. Other public policy master's degrees include Master of Public Policy (MPP), Master of Public Affairs (MPA) Master of Urban Planning (MUP) and Master of International Affairs (MIA).

The **Master of Public Health** has academic and professional elements, taking an interdisciplinary approach to areas related to public health. Students are taught how to monitor, diagnose and regulate the health concerns of communities through public policies. Many MPH degree programs are specialized in areas such as epidemiology, global health, occupational health, and nutritional sciences. While some countries accept students with accredited bachelor's degrees for the MPH, others only accept medical graduates.

The **Master of Social Work** degree prepares students for careers within the field of social work, focusing on improving the quality of life for individuals, groups and communities. The MSW is offered either as a clinical degree allowing students to work directly with clients, or as a macro-practice degree preparing students for work in political advocacy and community organizing.

The **Master of Laws** degree is usually taken after having graduated from a professional law degree and gives candidates the chance to combine their knowledge of the basic skills needed to become a lawyer with specialist knowledge gained through research in a particular area of law.

The **Master of Arts in Liberal Studies** is an interdisciplinary program designed to provide rigorous teaching in the liberal arts. Candidates graduate with both depth and breadth of postgraduate knowledge, with MALS programs drawing from courses and instructors from across the university's postgraduate curriculum. Typically, liberal arts students choose the course for an opportunity to intellectually challenge themselves, explore ideas and pursue knowledge, rather than to pursue a specific career path.

The **Master of Fine Arts** is a creative degree granted in disciplines such as the visual, performing and studio arts. This may include creative writing, graphic design, photography, filmmaking, theatre and painting. Assessment and study are both practical, culminating in a major work or performance.

Awarded by universities and music conservatories, the **Master of Music** degree combines advanced studies in a specialist applied area chosen by the student (such as music performance, composition or conducting) with advanced studies in musical theory. MM degrees could be preparation for teaching music or to become a professional in a chosen field.

The **Master of Education** degree prepares students for careers in education. Some Master of Education degrees prepare student teachers to become certified, while others are more suited for experienced, already certified teachers to specialize in areas such as curriculum, instruction, special education, counselling and administration. The MIT and MAT degrees include coursework and a student teaching internship and lead to the teacher certification qualification needed to teach in public schools.

The **Master of Engineering** degree can be either academic (with a focus on engineering theories and practice) or professional (with a focus on preparing students for work in the engineering field). While some MEng programs require students to become published in an industry journal, others involve training periods in industry or laboratories, or a combination of the two in order to graduate.

The **Master of Architecture** is a master's degree in architecture that assesses students through practical internships, final examinations and/or a thesis or final project in order to receive a license. As M.Arch degrees vary in kind, you may find different names for different types of programs. Students are required to produce coursework in subjects such as design, building science, structural engineering, architectural history and theory and professional practice.

Finally, master's degrees also vary in terms of the entry requirements applicants need to meet. To meet the requirements of a master's degrees it's usually necessary to have graduated with a bachelor's degree (though not always), and some programs require a certain amount of professional experience.

The **Master of Science in Agronomy** is a degree that will prepare the student for very important work in the agriculture industry. This degree is not the easiest to earn however, as dedication, drive, and a passion for agricultural science are almost certainly necessary.

What exactly is a master of science in agronomy? Let's take a look at some of the basics.

"Agronomy" is the official term for the scientific study of crop growth. An agronomist therefore is a professional working in the field of agronomy. Agronomists spend most of their time studying crop growth and ways to improve it. As discussed by the American Society of Agronomy, aside from basic plant growth, the science also gives specific focus to soil and all other natural resources relevant to the science of crop growth. Understanding all aspects of agronomy and using these principles to the advantage of humans and nature is the ultimate goal here.

Master's of Science in Agronomy

The master of agronomy science is a valuable credential to have. First, one must earn it though. The degree itself consists of core competency classes in science, math, and English. Beyond these core classes, more specialized courses abound. A look at the renowned Iowa State University's course list for the MS in agronomy gives quite an accurate feel as to what these courses entail. Students will take courses such as:

Chemistry, Physics, and Biology of Soils Integrated Pest Management Agronomic Systems Analysis Crop Protection Soil-Plant Environment

Such specialized subjects of study will prepare the learner for their career in modern agronomy. In the end, this degree program will typically require four to six years of college dedication. A few of the nation's top colleges for agronomy majors include Iowa State University, Cornell University, the University of Florida, and the University of Wisconsin-Madison. For those interested in other college choices here, there are also several other alternatives to choose from in the field.

Subsequent Career Paths

Private Agronomists

The most direct application of an MS in agronomy is through a career as an agronomist. The private agronomist is a valuable asset to any companies that are in the agricultural business. Again, the agronomist provides ongoing study and research in the science of crop growth, and in this case, provides the results of these efforts to their employer. The employer here may be a small farming company, a soil amendment company, or even a major produce supplier.

Field Manager

In agriculture, a field manager is one who is responsible for the overall growing conditions of a given land plot. The field manager gathers agronomy data from this specific area and uses the resulting data in order to maximize growing potential here. In this pursuit, they may enact many different policies, provide continuous directives to other workers there, and report regularly to the upper levels of the operation.

Line Breeder

Another career matched perfectly to holders of the MS in agronomy is that of the line breeder. Line breeders, or plant breeders are responsible for the

evolution and creation of new, more beneficial forms of the plants we know and consume today. By identifying desired and unwanted traits in a specific plant, the breeder can then use agronomy and agricultural skills to selectively breed the plant to a more desirable, future form. The ultimate goal of such breeding practices is simply the continued evolution towards the "perfect" plants and growing results for future generations.

These are the ins and outs of the MS in agronomy as well as the job opportunities afforded by its receipt. As our world grows, such experts will continue to be needed in order to keep the masses happy and fed. More information regarding this field and the Master of Science in Agronomy can be found by contacting any one of the aforementioned colleges specializing in these areas.

13. Fill in the gaps based on the text

- 1. The preparation of ... is carried out on the basis of complete general secondary education.
- 2. Master's degree studying is possible on the basis of
- 3. PhD degree receiving involves a public presentation of the
- 4. The ... degree prepares students for careers in education.
- 5. The ... is a degree that will prepare the student for very important work in the agriculture industry.
- 6. The ... degree can be either academic (with a focus on engineering theories and practice) or professional (with a focus on preparing students for work in the engineering field).
- 7. A ... is usually awarded in disciplines categorized as the sciences, such as biology, chemistry, engineering, health and statistics.
- 8. The ... provides ongoing study and research in the science of crop growth, and in this case, provides the results of these efforts to their employer.
- 9. A ... is one who is responsible for the overall growing conditions of a given land plot.
- 10.Line breeders, or ... are responsible for the evolution and creation of new, more beneficial forms of the plants we know and consume today.
- 11."..." is the official term for the scientific study of crop growth.

14. Answer the questions based on the text

- 1. What degrees can a person obtain in Ukraine?
- 2. Specify Master's degree in Ukraine.
- 3. What does "Master's degree" stand for?
- 4. What is the difference between course-based and research-based masters' degrees?
- 5. In what disciplines is Master of Arts usually awarded?

- 6. In what disciplines is Master of Sciences usually awarded?
- 7. What are the most common examples of specialized and professional master's degrees?
- 8. What exactly is a master of science in agronomy?
- 9. What are the career possibilities for Masters in Agronomy?
- 10. Why have you decided to become a Master in Agronomy?



ТЕМА 2. МІЖНАРОДНИЙ НАУКОВИЙ СЕМІНАР У ФАХОВІЙ ГАЛУЗІ.

Сільське господарство в зарубіжних країнах

Practical classes 4, 5, 6, 7

1. Translate and learn the words to the texts A, B, C

A

consist of

peninsula

nearby

islands,

countryside

flat

forest

lake

farmland

asset

purchase

range

pigs

bacon

remaining

wheat

rye

oats

potatoes,

legumes

especially

B

to receive

to support

agriculture

sheep

cattle

cow

oats

hemisphere

opposite

\mathbf{C}

to cover more

border

suitable for

trucks capable of

2. Translate the following collocations

\boldsymbol{A}

silage corn wide range seed crops due to intensive fertilizer use relatively high rainfall crop productivity during dry periods are extensively used cultivated grasses fodder beets, lighter soils is mainly based on imported combine harvesters sugar beets, canola seed, gentry rolling highly productive farm land occasionally interrupted by earn a farming license specializing in four to six different crops livestock dual purpose in spite of its size dairy products crop production is dominated winter and spring varieties of barley is grown great variety of crops dairy cattle

thinly populated land
along the coast
total surface
is used for rough grazing
grain crop
four-wheel drive tractors
self-propelled equipment
under license

for grain hauling stable weather pattern seeding and harvesting seasons bed preparation C is utilized for farming are used for permanent grazing. common crop yields prairie regions limits fertilizer application pulling large implements well -equipped workshops handling common farm repairs

3. Read and translate the text:

AGRICULTURE IN DENMARK

Denmark is small country consisting of a main peninsula and nearby 500 islands, of which 60 are populated. The Danish countryside is either quite flat or gentry rolling. More than 70 percent of the country is highly productive farmland, only occasionally interrupted by forests, lakes, and towns.

Farmland is considered an important national asset in Denmark. Before young farmers can purchase land, they must earn a farming license. Also, Danish farms have long specialized in exports.

The typical farm is in the 110-to 500-acre range, specializing in four to six different crops and one type of livestock, normally dual-purpose dairy cattle, or pigs. Despite its size, Denmark is the world's largest exporter of bacon and the fourth largest exporter of dairy products.

Danish crop production is dominated by winter and spring varieties of barley, which is grown on about 60 percent of the farmland. On the remaining 40 percent, a great variety of crops are grown including wheat, rye, oats, fodder beets, sugar beets, canola seed, potatoes, cultivated grasses and legumes, silage corn, and a wide range of seed crops. Due to intensive fertilizer use and the relatively high rainfall, crop productivity is high: however, during dry periods irrigation machines are extensively used, especially on the lighter soils. Farm mechanization is mainly based on imported 50-to 125-horsepower tractors, Danish and imported combine harvesters, and Danish-made implements.

The climate is practically the same all over the country – mild winters with some frost and snow, and relatively cool summers with many rainy days.

4. Answer the questions:

- 1. What part of Denmark is covered by forests, lakes, and towns?
- 2. What is the most important national asset in Denmark?
- 3. What the crop productivity like? Why?
- 4. What is the climate like in Denmark?
- 5. What does Denmark export?

5. Translate the sentences paying attention to indefinite and negative pronouns.

- 1. All plants need some water.
- 2. We waited for the train some twenty minutes.
- 3. You can get this book in airy library.
- 4. I do not find any English book on the shelf.
- 5. Is there anybody in die room?

6. Use the pronoun in proper degree of comparison. Translate the sentences.

- 1. The (important) thing for the farmer is to get the land into good conditions and to keep it that way.
- 2. Such land is (much) easily cultivated and provides (good) conditions for plant growth.
- 3. Cotton regimes (high) temperature for its growth than wheat.
- 4. The (great) conductivity a substance has, the (little) its resistance.
- 5. The problem of water supply is expected to be one of the (urgent) problems.

7. Underline the predicate in each sentence. Translate the sentences.

- 1. The dog draws sledges in Northern parts of the country.
- 2. Sea water contains various salts, including those that are harmful to most land plants and animals.
- 3. Man will not be able to live without growing plants for himself and for himself and for feeding form animals.
- 4. Man required some 10000 years to years to make braids.
- 5. The new plow, introduced in 1865, allowed the farmer to ride instead of walk behind it.

8. Rewrite the sentences. Define parts of the speech of the words with ending -s, and what functions they perform:

- a) the Possessive Case
- b) the Plural Noun
- c)the Singular of the verb in 3rdform

- 1) The amount of Sun's energy fixed by plants does not seem to be peat.
- 2) A tree grows in three directions.
- 3) The materials upon which a tree feeds are derived from the soil and the air.

9. Fill in the gaps with proper modal verbs.

- 1) Next week I (повинен буду) to take an exam in English.
- 2) He (може) translate this article.
- 3) He (повинен) translate this article.
- 4) He (повинен був) to translate this article yesterday evening.
- 5) She (зможе) to translate this text.
- 1. Must 2. Had 3. Will have 4. Will be able 5. Can

Text B.

1. Read and translate the text:

AGRICULTURE IN AUSTRALIA

Australia is mainly a flat, dry, and thinly populated land. Only a few regions along the coast receive enough rain to support agriculture and large populations. Only three percent of Australia's total surface is cultivated, but another 62 percent is used for rough grazing for the very large sheep and cattle stations where up to 45 acres per cow is required.

Wheat is the dominate grain crop in Australia, and on nearly all livestock farms, hay is produced from grass or oats. Sheep are the dominating type of livestock. Farm mechanization is generally based on 100-to 200-horsepower four-wheel drive tractors pulling large implements. Large combine harvesters and other self-propelled equipment used are mostly made in North America, or under license in Australia. Most farms also have their own trucks for grain hauling and other transport tasks. Due to the normally stable weather pattern, both seeding and harvesting seasons are longer than elsewhere. Being a southern hemisphere country, Australia's seasons are opposite to Europe and North America. Nearly all grain crops are based on the winter varieties. This means that the bed preparation and seeding takes place mainly during April to June, with harvest November to January.

Word list:

to be cultivated — обробляти sheep — вівця (вівці) cattle — велика рогата худоба cow - корова grain crop — зернова культура

2. Answer the questions by the text:

- 1. What part of Australia's surface is cultivated?
- 2. What is the main grain crop in Australia?
- 3. Why do bed preparations and seeding take place during April to June?

3. Underline the predicates defining their tense form. Translate the sentences:

- 1) Water vapor falls as rain to the Earth.
- 2) Great necessity caused primitive man to grow plants.
- 3) Without plants life neither animals nor men will not be able to live.
- 4) The problem of rational utilization or natural resources is of great importance all over the world today.
- 5) A group of students helped the farmers to build a new bar for cattle.

Use the adjectives in the proper degree of comparison. Translate the sentences.

- 1) One of the (important) points to be taken into consideration in fanning is the soil.
- 2) The (healthy) animals are found on farms mat have productive soils producing high-quality' feed for livestock.
- 3) Some of the (good) buffalo cows yield as much as 2000 to 3000 pounds of milk per lactation period.
- 4) Soil is of the (great) importance in the life of people.
- 5) These pesticides may become (little) effective after some time.

5. Rewrite the sentences. Define parts of speech of the words with ending -s and what functions they perform:

- a) the Possessive Case
- b) the Plural Noun
- c)the Singular of the verb in the3rdform
- 1) Green plants use the Sun's energy in order to manufacture food.
- 2) In the leaves the food necessary for the trees' growth manufactured.
- 3) The raw food materials which reach the tree through the roots and the leaves are digested in the leaves.
- 4) Ruins of dams, canals and other structures can be found in many countries.
- 5) The new unit cultivates the soil and applies fertilizer simultaneously.

6. Translate the sentences paying attention to indefinite and negative pronouns.

- 1) Have you any foreign journals on biology?
- 2) There are some students from India in our institute.
- 3) No student in our group can speak Spanish.
- 4) Any site in the city reminds its ancient history.
- 5) Somebody was here.

7. Fill in the gaps using proper modal verbs.

- 1) We (повинні) do this work today.
- 2) They (вміють) speak English.
- 3) Yesterday he (дозволили) to work at the laboratory.
- 4) (Можна) 1 come in?
- 5) Tomorrow you (повинні) to go to Kiev.
- 1. Was allowed 2. May 3. Can 4. Must 5. Will have

Text C

1. Read and translate the text:

AGRICULTURE IN CANADA

Canada is the second largest country in the world and covers more that 50 percent of the North American continent. Most of the population lives less than 450 miles from the United States border, and most farm land is found there as well. Only 17 percent of Canada's land is utilized for farming and of that only about one third can be classified as good farm land. Most of the other two thirds are used for permanent grazing.

The climate is mainly continental with long, cold winters and relatively short but fairly warm summers. Winter grain crop varieties are not common, and the spring crops are often of 90-day varieties suitable for the short frost-free growing season. Crop yields in the prairie regions are low by world standards due to limited rainfall that also limits fertilizer application.

Field mechanization in these regions is based on U.S.- or Canadian - made tractors, many of which are in the 200-to 350-horsepower range with four-wheel drive and capable of pulling large

implements. Most farms have self-propelled combine harvesters and trucks for grain transport. Many farms have well -equipped workshops capable of handling common farm repairs.

Word list:

farm land — фермерська земля mechanization ["mekqnaI'zeISqn]— механізація combine harvesters — комбайн(сільськогосподарська машина)

2. Answer the questions by the text:

- 1) Where is most farm land of Canada found?
- 2) What part of Canada's land is utilized?
- 3) Why are crop yields in the prairie regions low?

3. Rewrite the sentences. Define parts of speech of the words with ending -s and what functions they perform.

- a) the Possessive Case
- b) the Plural Noun
- c)the Singular of the verb in the 3rd form
- 1) Rivers, lakes and underground waters are successfully used for irrigation purposes.
- 2) Today some hydropower developments are operating on the Dnieper making the river to serve the man's needs.
- 3) Only specific forms of plants can grow in deserts.
- 4) The new unit cultivates the soil and applies fertilizer simultaneously.
- 5) All these are machines of the very near future.

4. Use the adjectives in the brackets in the proper degree of comparison. Translate the sentences.

- 1) All biological problems the problem of nature protection is the (important).
- 2) The (large) ecosystem of all is our planet.
- 3) Robots do not ask for (high) payments and (good) working conditions.
- 4) The (good) the summer, the (good) the yields.
- 5) The (soon), the (good).

5. Underline the predicate in each sentence, define their tense form. Translate the sentences.

- 1) British economists report that the automation of production will reduce the number of workers by 15 per cent.
- 2) Both living and non-living components make up ecological systems that may be of different size.
- 3) Man will not be able to live without growing plants for himself and for feeding farm animals.

- 4) About 58–60 per cent of the milk produced in India comes from buffalo cows.
- 5) We know that man began domesticating animals very long ago.

6. Fill in the gaps using proper modal verbs.

- 1) We (зможемо) to help him.
- 2) He (вмів) swim.
- 3) Students (повинні) to study English.
- 4) We (дозволили) to take books from the library.
- 5) She (повинна була) to do it.
- 1. Were allowed 2. Have 3. Has 4. Shall be able 5. Could

7. Translate the sentences paying attention to indefinite and negative pronouns.

- 1) There are some difficult exercises in this text-book.
- 2) Do you know anybody in the group? No, I know nobody in it.
- 3) Will you go anyway tomorrow?
- 4) I know everything about this man.
- 5) Any child can do it.

Text C

1. Read and analyze the report on a scientific seminar:

BUSINESS POTENTIAL FOR MILLETS IN INDIA

Millets are one of the oldest crops known to humans. Earliest evidence for millets cultivation can be traced back to Indus civilization during 3000 BC. Millet crops were first domesticated in Asia and Africa and later spread across the globe. Millets are primarily categorized as major and minor millets and are grown in tropical, sub-tropical and slightly temperate regions of the world, with Asia and Africa accounting for major production and consumption centres. In many of the Asian and African countries millet grains are consumed as a staple food. Mostly the local varieties of specific adaptation and culinary niceties are predominantly grown with less appreciable yield potential. India is one of the largest producers of millets in the world with 41% of global production. India along with Niger, China, Nigeria and Mali accounts for 73% of millets produced in the world. India, recognizing the value of millets, declared 2018 as "National Year of Millets" followed by establishment of a "Millet Mission".

Recognizing the nutritional potential of millets, Government of India rebranded millets as "nutri-cereals" It has also proposed to United Nations to declare "2023" as the International Year of Millets (IYOM) which was supported by 72 countries. The United Nation's General Assembly (UNGA) also declared 2023 as International Year of Millets. Nevertheless, due to emergence of lifestyle related health disorders, millets with high content of proteins and minerals such as calcium, iron etc. can help in controlling such health ailments. Even, in terms of nutritional property, millets are superior to certain highly consumed cereals such as rice and wheat. As a result, a growing inclination of urban population towards healthy food in India, especially after COVID-19 is being sensed by many food business companies.

There is also resurgence of novel millet-based products to meet the increasing demand. As millet-based value-added products have started to enter the plates of urban consumers, business enterprises are able to fix a premium price for their product by way of managing quality and logistics. The Government of India also relooks to include millets in the food security measures like mid-day meals in schools. No doubt such policy changes will provide an opportunity for millet farmers as well as food business firms. Hence food business companies are eyeing on the increased demand for millet-based food products to meet demand in urban areas and on the other hand, Government is sincerely trying to utilize millets in achieving nutritional security and considered as a steppingstone towards achieving sustainable development goals. Therefore, there is a vast business opportunity for millets that can be tapped by farmers, food business firms and Government. This paper attempts to discuss these developments and tries to suggest a policy framework for the benefit of major stakeholders in millet production and consumption.

Source: https://agri-conferences.com/program/scientific-program/2023/business-potential-for-millets-in-india

ТЕМА 3. СОЦІОКУЛЬТУРНІ НОРМИ ДІЛОВОГО СПІЛКУВАННЯ.

Practical classes 8, 9, 10, 11

1. Translate and learn the words to the text:

tillage planting corn row crops directly sod practice grower remain several herbicides develop crops wide include combining cornfields

show yields increase considerably without residue reduce areas moisture conventional especially conditions late planting lower yields reduction in timelier attractive

kill double-cropping

during
cultivation
unnecessary
spraying
use
enough
at present
scientists
agree
continue
move
hill
flatland

surface
protect
rainfall
relatively
cheap
necessary
fuel costs
footing
apply
fertilizer
appear
difficult
advantages

heavy

2. Read and translate:

Row crops; without plowing; goes back; zero-tillage; unprepared soil; narrow seed opened with a coulter; careful in applying; proper amount; weed

control; contact herbicide; to kill early weeds; residual herbicide; has a high tolerance nearly all vegetation; poorly drained soils; be provided by plowing; this is mainly due to the fact that; soil organic matter; untreated upper soil layer; moisture loss areas; proper germination of seed; early growth; moldboard plowing; late planting; lower yields; fewer trips across the field; soil preparation equipment; fuel costs; heavy harvest machines; at the time of harvest

3. Read and translate the text:

NO-TILLAGE METHOD

Planting corn and other row crops directly into sod is a new practice. More and more growers are using this easy and economical method of planting row crops. The idea of planting row crops without plowing goes back to at least 1993. But no-tillage or zero-tillage remained largely experimental until several effective herbicides have been developed.

Crops are planted in unprepared soil in a narrow seed furrow opened with a coulter. The tilled area is only 2 to 3 inches wide. Using this tillage system one should be very careful in applying the proper amount of herbicides for weed control. They should include both a contact herbicide to kill early weeds or sod, and a residual herbicide. By combining a contact herbicide with a residual one to which corn has a high tolerance, nearly all vegetation present in the cornfields before planting, can be killed. The residual herbicide also controls weeds during the corn growing season, making cultivation unnecessary.

While spraying the sod one should use enough water with the herbicide to cover all the vegetation. As much as 150 gallons per acre may be needed in very heavy vegetative cover. At present scientists agree that zero-tillage is quite a promising method but it will never fit all farms and all conditions.

Zero-tillage continues to move from south to north and from hills to flatlands. This method is not used on heavy or poorly drained soils, because these soils need aeration that is provided by plowing.

Advantages of No-Tillage:

- 1. The experiments show that no-tillage corn yields 20 per cent more than corn grown with conventional tillage. This is mainly due to the fact that the soil organic matter increases considerably without tillage.
- 2. The crop residue and untreated upper soil layer reduce moisture loss. This is a very important factor for growers in areas where spring moisture is usually less than ideal for proper germination of seed and early growth.
- 3. Conventional moldboard plowing especially spring plowing cannot often be done early enough because of weather or soil conditions. This results in late planting and that means lower yields. The reduction in spring work, resulting in timelier planting is probably one of the most attractive advantages of the no tillage system.

- 4. Due to early planting it is possible to practice double-cropping, that is, growing two crops on the same soil during one growing season.
- 5. The presence of crop residue on the soil surface protects the soil from wind and water erosion. Erosion control is the main reason why the no-till production of corn is practiced in hilly areas where the rainfall is relatively high during the growing season.
- 6. Corn is very cheap to grow with the zero-tillage method. Since fewer trips across the field are necessary during the growing season and less soil preparation equipment is required, labour,

machinery and fuel costs are minimized.

7. No-tillage planting also provides a better footing for heavy harvest machines if there is much rain at the time of harvest. Under such conditions notillage farmers will be able to harvest while

conventional-tillage farmers will wait for fields to dry.

Disadvantages of No-Tillage:

- 1. With the no-tillage system applying fertilizers may appear to be difficult. The experiments conducted show that surface application of fertilizers is practical and effective. However, denitrification losses are higher under this system and most agronomists recommend applying 20 percent more nitrogen than normal.
- 2. Under the no-plow system a greater amount of chemicals is needed to control weeds.

4. Find the equivalents:

- 1.heavy harvest machines
- 2. at the time of harvest
- 3. soil preparation equipment
- 4. require labour
- 5. fewer trips across the field
- 6. proper germination of seed
- 7. early growth
- 8. moldboard plowing
- 9. untreated upper soil layer
- 10.moisture loss

- а) відвальна оранка
- b) менше поїздок по полю
- с) необроблений верхній шар грунту втрата вологи
- d) обладнання для підготовки грунту вимагати зусиль/праці
- е) під час збору врожаю
- f) правильна схожість насіння
- g) важкі збиральні машини
- h) раннє проростання

5. Answer the questions:

- 1. What is a new practice of planting row crops?
- 2. Characterize no-tillage method.
- 3. What is the synonym to zero-tillage?
- 4. Why should each part of the field be fertilized at its own rate?
- 5. What are the usual methods of fertilization of a field?
- 6. What nutrients are most variable?
- 7. What does the excess of nitrogen applied result in?

- 8. How much water may be needed in very heavy vegetative cover?
- 9. Why is no-tillage method not used on heavy or poorly drained soils?
- 10. Why can conventional moldboard plowing especially spring plowing not often be done early?
- 11. Is it expensive to grow corn with the zero-tillage method?

5. Translate:

1. Проведені досліди показують, що поверхневе внесення добрив ϵ практичним ефективним. 2. Завдяки ранньому висаджуванню можна практикувати подвійний посів, тобто вирощування двох культур на одному грунті протягом одного вегетаційного періоду. 3. Наразі вчені сходяться на думці, що нульовий обробіток грунту ϵ досить перспективним методом, але він ніколи не підійде для всіх господарств і всіх умов. 4. Ідея висаджувати просапні культури без оранки сяга ϵ щонайменше 1993 року.

ТЕМА 4. ПОШУК РОБОТИ У ФАХОВІЙ СФЕРІ. ДІЛОВЕ ЛИСТУВАННЯ. СПІВБЕСІДА.

Practical classes 12, 13, 14, 15

1. Match the words with their translation

- 1. inquiry
- 2. reply to
- 3. Letter of Credit (L/C)
- 4. invoice
- 5. Bill of Lading (B/L)
- 6. Bill of Exchange (draft)
- 7. Letter of insurance
- 8. explanatory letter
- 9. order
- 10. letter of packing
- 11. letter of shipment
- 12. letter of delivery
- 13. offer
- 14. letter of complaint
- 15. indented line
- 16. form
- 17. heading
- 18. address
- 19. salutation
- 20. subscription
- 21. letter-head

- а) адреса
- b) акредитив
- с) бланк
- d) відповідати
- е) відправний лист
- f) заголовок
- g) заголовок бланка
- h) замовлення
- і) запит
- і) звернення
- k) лист про доставку
- 1) накладна, коносамент
- m) отримувач
- n) пакувальний лист
- о) переказний вексель
- р) підпис (заключна форма ввічливості)
- q) посилання, указівка
- r) пояснювальний лист
- s) пропозиція
- t) рахунок

- 22. recipient
- 23. reference
- 24. sender
- 25. to affix signature
- 26. with best regards
- 27. position p. p. (per pro),
- 28. by warrant
- 29. subject
- 30. enclosure
- 31. to enclose

- и) рекламація, скарга
- v) страховка
- w) червона строка
- х) відправник
- у) вкладати
- z) вкладений
- аа) з найкращими побажаннями
- bb) по довіреності
- сс) посада
- dd) предмет обговорювання
- ее) ставити підпис

2. Read and translate the text:

FORMAL BUSINESS LETTER

Business letters include all kinds of commercial letters, inquiries, replies to inquiries, Letters of Credit (L/C), invoices, Bills of Lading (B/L), Bills of Exchange or drafts, letters of insurance, explanatory letters, orders, letters of packing, letters of shipment, letters of delivery, offers, letters of complaint, replies to those of mentioned above, etc.

A business letter should be as short as possible, intelligible, polite, benevolent and its language must be simple.

Rules and traditions of correspondence vary in time but some basic principles of a commercial letter remain unchanged.

A private business letter, is written by hand, each paragraph begins with an **indented line**. But if a letter is sent by an organization it is typed on the **form** of this organization. In this case it is not necessary to use indented lines.

A letter is composed of the following elements: **heading**, date, address, **salutation** text, **subscription**.

A letter can be typed on the organization's form. Any form has its **letter-**head printed typographically. The letter-head bears the name of organization or firm, sending this letter, its address, address for telegrams, telephone, telex, fax. If you do not use the form, write your address (as a sender) on the upper right side of the letter. Do not indicate your name here, it will follow your signature. Ukrainian names of foreign trade organizations are not translated into foreign languages. They are written with Latin letters using English transcription. Your telephone number may be written below.

The date is written on the right side above (under your address if the letter is written on a form or under a typographical letter-head of the form).

In Great Britain the date may be indicated as follows: 7th April, 1998 or 23 March, 1998.

In the USA it is usually written like this: April 7, 1998.

As a rule, before the address of **the recipient a reference** is indicated which the **sender** asks to mention in the reply to the letter. A common reference represents the initials of the person who wrote the letter and those of the typist who typed it.

In the samples of letters given below the references are as follows:

- ■Our Ref: MRE/JNK -- (in the first letter);
- Your Ref: BAT/SN -- (in the second one after the reply has been received);
- •MRE are the initials of the author of the letter (M. R. Erickson);
- ■The address of the recipient (inside address) is written on the left above, under the reference. Lower, the name of the firm is written under which the number of the house, street, city or town, state or country are indicated, the last element being the country.

The **salutation** is written on the left (not in the centre).

The salutation *«Dear Sir»* is appropriate, when you write to a real person if you do not know him. If you know this person, you should write *«Dear Mr Jones»*, for example.

If the letter is addressed to a firm, the salutation should be *«Dear Sirs»*. In modern business correspondence it is needless to use any other forms of politeness.

As was mentioned above, the text of the letter should be as short, simple and clear as possible.

In the subscription the expression « *Yours faithfully*» is usually used if you are not acquainted with the person(s) or « *Yours sincerely*» if you write to a man (woman) whom you know at least by correspondence. In American English the above expressions are rarely used. More common are the expressions *Sincerely yours*», «*With best regards*» or simply «*Sincerely*», and sometimes

« Very truly yours».

The **signature** is **affixed** by hand above the typed name of the author. It is not obligatory to indicate your **position**. If near the signature there are two letters «p.p.» (**perpro**) it means that the letter is **«by warrant»**.

The heading may be written above the main text of the letter. The heading indicates short contents of the letter or its **subject.**

If some material is added to the letter the words **«Enclosure»** are written in the left lower corner of the letter. You can also use the expression **«We enclose...»**.

3. Give the English for:

запит, страховка, акредитив, лист про доставку, скарга, накладна, бланк, заголовок, рахунок, звернення, отримувач, посилання, ставити підпис, посада, по довіреності, предмет обговорювання, вкладений, вкладати.

4. Translate the sentences used in business letters:

- 1. We refer to your advertisement in «Daily News».
- 2.We learn from your letter that you are manufactures of the electronic equipment we need.
- 3.We are interested in the equipment your firm producers.
- 4.We shall be obliged if you send us latest catalogues, brochures or any other publications containing a description of your equipment.
- 5.Please, let us know if you can offer us your equipment as per specification enclosed in your letter.
- 6.Please send us samples of your manufactures stating your lowest prices and best terms of payment.
- 7.We look forward to receiving your answer.
- 8. We expect to hear from you in the nearest future.
- 9. We wish to maintain cooperation with you.
- 10. Your prompt execution of our order will be appreciated.
- 11. We thank you for your letter of 20th May 2008 but regret to inform you that at the present time we cannot make you an offer for goods required by you.

5. Fill in the blanks with the necessary words:

- 1. It was a great pleasure for us to ... your letter of May, 21 (receive, get, send).
- 2. We would welcome the ... to cooperate with you (opportunity, desire, reason).

- 3.We would like to ... your catalogues periodically (recommend, get, receive).
- 4. May I have the ... of inviting you to visit our firm (pleasure, decision,permition).
- 5. We ask you to write us ... other day (some, any, every).
- 6. We would like to continue this ... with an educational programmer (trend, tradition, communication).

6. Fill out the form:	
Date	
Name	
Permanent address	
Tel. N: Home	Business:
U.S. Citizen: yes	no
If no, nationality	
Date of birth (month)	
(year)	
Place of birth	
Occupation	
Place of Employment	
Sex : M	F
Marital Status: Married	Single

7. Read and translate the e-mail letters. Find the mistakes:

Dear Green Thumb: My tomatoes are dying. They get plenty of sun and water. What am I doing wrong? – Tom G.

Dear Tom: Check the soil. Tomato roots need the right amount of water and air. They don't do well in sand or clay. Both have the wrong soil structure. Sand particles are too loose to hold enough water. Dense clay prevents aeration. You need a soil texture in between those extremes. Loam with high silt is usually good. The other issue is nutrients. A soil's parent material determines what nutrients are in it. You can improve the nutrients by adding humus.

8. Read and role-play the dialogues.

JOB INTERVIEW CONVERSATIONS

-1-

Mike: Good Morning, John. I am Mike.

John: Good Morning.

Mike: How are you doing?

John: I am doing fine. Thank you.

Mike: How was the traffic coming over here?

John: I am so glad that the traffic was light this morning. No traffic jam and no accidents.

Mike: That is good. John, let's start the interview. Are you ready?

John: Yes. I am.

Mike: First of all, let me properly introduce myself. I am the Finance Department Manager. As you know there is an open position in my department, and I need to fill this position as soon as possible.

John: Please, tell me a little bit about the position.

Mike: It is an entry-level position. The new employee will have to work closely with the

Accounting department. He will also have to deal with the bank on a daily basis.

John: What type of qualifications do you require?

Mike: I require a four-year college degree in Finance. Some working experience would be helpful.

John: What kind of experience are you looking for?

Mike: Doing office work is good. However, since this is an entry-level position, I do not require a lot of experience. I am willing to train the new person.

John: That is great!

Mike: John, tell me a little bit about yourself.

John: I was a student at West Coast University, and I just graduated with a Bachelor degree in

Finance. I have been working part-time as a payroll clerk for the last two years.

Mike: What are you looking for in a job?

John: The job should help me see what Finance is all about. I have learned a lot of Finance theories at school, and now it is time for me to put them into practice.

Mike: Anything else?

John: I also hope that it will help me grow in my field.

Mike: What are your strengths? Why should I hire you?

John: I am a hard-working person and a fast learner. I am very eager to learn, and I get along fine with people.

Mike: OK. Now, let me ask you a few quick questions. You do not mind working long hours, do you?

John: No, I do not.

Mike: Can you handle pressure?

John: Yes, I can. When I was going to school, I took quite a few courses each semester while working at least twenty hours every week. And, I handled that situation very well.

Mike: Do you still have any questions for me?

John: No, I think I have a pretty good understanding of the job. I believe that I can handle it with ease, and I hope to have the opportunity to work for you.

Mike: John, nice meeting you. Thank you for coming.

John: Nice meeting you too. Thank you for seeing me.

-2-

Interviewer: Welcome to ABC Controls, David. I am Tom.

Interviewee: Hello, it's nice to meet you.

Interviewer: Nice to meet you too, how are you doing today?

Interviewee: I am doing well, and yourself?

Interviewer: Great, thanks. I hope we didn't keep you waiting for long?

Interviewee: No, I had the chance to talk to one of your engineers while

waiting.

Interviewer: That's good. David, shall we start?

Interviewee: Yeah, sure.

Interviewer: First of all, let me introduce myself. I am the manager of our engineering department here and we have an open position, so we have been interviewing applicants to fill the position as quickly as possible.

Interviewee: Yes sir, I read about the position on your website, and I think I am a good fit.

Interviewer: We currently have several ongoing projects and the team is working hard. We are hoping to keep busy for a long time.

Interviewee: What are the essential qualifications required for the position?

Interviewer: This is an entry-level engineering position, we do provide a lot of training here. But we do require that you have at least a bachelors degree in computer engineering. Previous experience in the field is a plus.

Interviewee: What kind of experience would you count as a work in the field? **Interviewer:** Even though we provide training, it would be great if you had some hands-on programming experience, knowledge of database systems or skills on developing applications.

Interviewee: My final school project was actually developing a mobile application, so I am fairly competent in developing mobile and web

applications.

Interviewer: That's good to hear, which school did you graduate from?

Interviewee: I was a student at DEF University, and I graduated with a bachelor degree in computer science. I worked as a computer lab tutor in school for about 2 years. Guiding students through their projects helped me get experience in several programming languages.

Interviewer: What are you looking for in a job?

Interviewee: The job should definitely help me grow in my career. I will be happy to learn and grow as I work in a passionate company like yours.

Interviewer: You are right. There is plenty of room for advancement in our company. What are your strengths? Why should I hire you?

Interviewee: I am a diligent person and a fast learner. I am very eager to learn. My friends also find me very easy to work with.

Interviewer: Very well. Now, do you mind working overtime?

Interviewee: No, I do not.

Interviewer: Because, sometimes we get overwhelmed with heavy workload.

Interviewee: I understand that's the nature of the job. When I was going to school, I took quite a few courses each semester while working at least twenty hours every week. And, I handled that situation very well.

Interviewer: Do you have any questions for me?

Interviewee: No, I think I have a pretty good understanding of the requirements. I believe that I can handle it with ease, and the fact that you provide all the training sounds excellent. I hope to have the opportunity to work for you.

Interviewer: David, It is nice to meet you. I can tell that you are a good

candidate. Expect to hear from us within a week or so about the job.

Interviewee: Nice meeting you too. Thank you for your time.

Interviewer: Thank you for coming.

Expressions used in the conversations

I am so glad

Let's start the interview

First of all:

As soon as possible

Entry-level position

On a daily basis

I am willing to

That is great!

Work part-time

What are you looking for in a job?

Put into practice

Hard-working person

Fast learner

I get along fine with everybody

I do not mind

Work long hours

I can handle the situation

Have an opportunity

9. Read and answer the following Job Interview questions.

- 1. Tell me something about yourself.
- 2. How did you hear about this position?
- 3. Why do you want to work here?
- 4. Why did you decide to apply for this position?
- 5. What is your greatest strength?
- 6. What are your strengths and weaknesses?
- 7. What do you know about this company/organization?
- 8. Why should we hire you?
- 9. What is your greatest accomplishment?
- 10. What are your salary requirements?
- 11. Do you have any questions for us?
- 12. What are you looking for from a new position?
- 13. Are you considering other positions in other companies?
- 14. What is the professional achievement you're most proud of?
- 15. What kind of working environment do you work best in?
- 16. Where do you see yourself in 5 years?
- 17. Why haven't you gotten your Bachelor's Degree/Master's Degree/Ph.D.?
- 18. Why have you switched jobs so many times?
- 19. Why did you change your career path?
- 20. Why did you decide to leave your previous/current job?
- 21. Why is there a gap in your work experience?
- 22. Why were you fired?
- 23. How do you feel about working weekends or late hours?
- 24. How would your boss describe you?
- 25. Do you have any serious medical conditions?
- 26. What would your first 30, 60, or 90 days look like in this role?
- 27. Are you a team player?
- 28. Are you a risk-taker?
- 29. How do you deal with pressure or stressful situation?
- 30. Do you think there is a difference between hard work and smart work?
- 31. How quickly do you adapt to new technology?
- 32. Do you have any interests outside of work?
- 33. What do you think our company/organization could do better?

10. Comment on the following situations.

1. Give an example of how you have handled a challenge in the workplace before.

- 2. Give an example of when you performed well under pressure.
- 3. Give an example of when you showed leadership qualities.

11. Read the information and make up your resume following the advice.

Like "Tell me about yourself," this question is a common interview opener. But instead of framing your answer around what qualities and skills make you best for the position, your answer should group your qualifications by your past jobs and tell your career story. You might choose to tell this story chronologically, especially if there's a great anecdote about what set you on this path. Or, as with "Tell me about yourself," you can begin with your present job then talk about what brought you here and where you're going next. But regardless, when you speak about your "past" and "present," highlight your most relevant experiences and accomplishments for this job and wrap up by talking about the future, i.e. connect your past and present together to show why this job should be the next one you add to your resume.

Possible answer to "Walk me through your resume."

"Well, as you can see from my resume, I took a bit of a winding road to get to where I am today. In college, I double majored in chemistry and communications. I found early on that working in a lab all day wasn't for me and at some point I realized I looked forward to the lab class I TA'ed the most.

"So when I graduated, I found a job in sales for a consumer healthcare products company, where I drew on my teaching experience and learned even more about tailoring your message and explaining complex health concepts to people without a science background. Then, I moved into a sales training role at a massive company where I was responsible for teaching recent graduates the basics of selling. My trainees on average had more deals closed in their first quarter than any of the other trainers' cohorts. Plus, I got so much satisfaction from finding the right way to train each new hire and watching them progress and succeed. It reminded me of my time as a TA in college. That's when I started taking night classes to earn my chemistry teaching certificate.

"I left my full-time job last year to complete my student teaching at P.S. 118 in Manhattan, and over the summer, I worked for a science camp, teaching kids from the ages of 10 to 12 about basic chemistry concepts and best practices for safe experiments. Now, I'm excited to find my first full-time teaching job, and your district is my top choice. The low student-to-teacher ratio will let me take the time to teach each student in the best way for them—which is my favorite part of the job."

How to make a resume:

- 1. Pick the Right Resume Format & Layout
- 2. Mention Your Personal Details & Contact Information
- 3. Use a Resume Summary or Objective
- 4. List Your Work Experience & Achievements
- 5. Mention Your Top Soft & Hard Skills
- 6. Include Additional Resume Sections (Languages, Hobbies, etc.)
- 7. Tailor Your Information For the Job Ad
- 8. Craft a Convincing Cover Letter
- 9. Proofread Your Resume and Cover Letter



HOME-READING TEXTS

The Role of Science in Society

In broad terms, there are two possible goals for engaging the policy process and two primary strategies for achieving those goals. The goals are either to improve policies that affect science (policy for science) or to improve policies that can benefit from scientific understanding (science for policy). Scientists attempt to achieve their goals by either providing information (i.e., educating policy makers about science) or by championing particular policy outcomes (e.g., by using persuasive arguments, political pressure, or positive incentives to achieve particular policy goals).

These goals and strategies for policy engagement can be combined in different ways and they aren't necessarily exclusive: some combine both goals and strategies simultaneously. However, the different goals and strategies confer different risks and opportunities and tensions can arise among those whose goals and strategies differ.

Most scientists recognize that the pursuit of objectivity in research, though perhaps impossible for any human to fully achieve, is a cornerstone of science. Science generates knowledge and understanding by attempting to eliminate potential sources of bias, often through controlled experiments. This pursuit of objectivity increases the credibility of scientific advances and expands society's willingness to take up and use the new knowledge and understanding science provides.

However, societal choices necessarily involve both objective information (e.g., what the potential response options are, what benefits and risks may be associated with those options, and how benefits and risks may be distributed among different groups or individuals) and subjective value judgments (what are the most desirable outcomes, how do we balance competing interests, or what we "should" do). This means that people can agree on a common set of facts relating to a societal challenge but disagree on appropriate policy responses.

The need for societal decision making to go beyond objective information contributes to a long-running and often contentious disagreement within the scientific community on the appropriate role of scientists in civic discussions. Some argue that scientists should maintain their objectivity by avoiding civic engagement altogether or by focusing exclusively on providing information relevant to civic discussions. This helps, the argument goes, to ensure that scientific insights are as free from external influences as possible and are perceived as unbiased, accurate, and legitimate.

Other scientists argue that membership in society confers a right or even a responsibility to engage more actively in civic discussions. Scientists possess specialized knowledge relating to societally relevant topics and best understand how to integrate that knowledge into decision making, this argument goes. Direct participation increases the likelihood that society will make choices that help manage risks and realize opportunities.

Even among scientists disposed to civic engagement, differences arise based on the range of ways that scientists can choose to participate in policy discussions. The difference between scientific debates and courtroom advocacy is particularly illustrative.

In the courtroom, advocates make the strongest case on behalf of their client that they possibly can. It isn't the lawyer's job to make the counter case. That falls on the other side. This can be a powerful approach for winning a public debate or influencing a decision. Science, in contrast, relies on a full and objective assessment of the evidence. Scientists have an obligation to identify conflicting evidence, expose weaknesses in their analysis, and offer plausible alternative

interpretations. This is a powerful approach for expanding knowledge and understanding and for building credibility as a source of information.

The policy process includes elements of both courtroom advocacy (e.g., the two party system in the United States) and scientific assessments of information (e.g., the role of scientific advisory boards, or the Congressional Budget Office and the Congressional Research Service). Scientists who engage with the policy process must decide whether to engage in a manner that is consistent with science but that is sometimes at odds with the norms of the policy process or vice versa.

Notably, the difference between those who favor one approach or another is based on value judgments. It is a philosophical difference of opinion relating to the appropriate role of scientists in society for which there is no clear scientific answer. However, the different approaches do have potentially significant implications for how effectively science can contribute to the broader society and how others in society will view science. There are opportunities and risks associated with each approach.

10 TIPS FOR COMMUNICATION ETIQUETTE:

1. Maintain Reasonable Eye-Contact

Focus on the person you are talking to, don't look at your phone or watch. The person is expecting your complete attention, your actions speak way louder than words.

2. Let Them Talk

Listen to what the other person is saying and refrain from interrupting or completing their sentences for them. Simply listen and then respond after they've finished speaking.

3. Repeat What Was Said

Show the other person that you are listening attentively and understand what they are saying. For example, "so what your saying is...". This will show the other person that you are truly trying to understand them.

4. Be Concise

Be mindful and respectful of others' time. Try to keep your message to the point, simple and specific. Try not to go off on random tangents.

5. Express Yourself Kindly

Don't be scared to voice your concerns or opinions. But always be polite and open-minded to the differing viewpoints others may express.

6. Think it Through

Choose the right delivery method for communicating. Decide on the most appropriate medium for your message whether that is a text message, an email, or a face-to-face conversation.

7. Avoid Touchy Topics

Keep it professional, depending on the setting, and gear your talking points to respond to the flow of the conversation. People don't generally want to be put into uncomfortable positions or face awkward talking encounters. Overall, know your place and know your crowd.

8. Ask Questions

Effective communication involves reciprocal open-ended questions as a way to gain understanding, promote new ideas, resolve any confusion and maintain collaboration.

9. Keep Yourself Updated

Be honest and responsive when communicating. Take ownership of your work and responsibility for your actions as well. Try to stay informed and if there is ever a delay- simply talk about it or ask for assistance.

10. Be Upfront

Use your voice (respectfully) and let others know what you think. Offer your insight, experiences, and suggestions, and also be willing to listen and expand on ideas.



What countries speak English?

English is the third most spoken native language in the world, behind only Mandarin (Chinese) and Spanish, and is spoken by more people overall than any other language in the world. English gained traction around the world during the 17th century—largely due to the influence of the British Empire and the United States—and has become the leading language of international discourse and business.

A brief history of the English Language

English is a West Germanic language, part of a group of languages that developed in the area of Europe's North Sea, which includes modern-day countries such as Germany, Norway, Denmark, and the United Kingdom (among others). There are six West Germanic languages in all: English, Dutch/Flemish, German, Afrikaans, Yiddish, and the lesser-known Frisian.

English as we know it has its origin in Germanic tribes who migrated to the UK around 400-500 CE. The language they developed is typically classified as Old English, and looks very little like the English of today—particularly thanks to its different word order, now-peculiar spellings, and use of characters such as ash (æ) and eth (ð), both of which have fallen out of common use today. This language evolved into Middle English during the twelfth-fifteenth centuries, influenced by Latin, Old Norse, and French. Middle English is much more readable to the modern eye, though the spelling is often still unusual and the th-sounding letter thorn, now written as þ (not to be confused with p) had not yet been replaced by Y (as in "Ye Olde Shoppe" and which, in turn, was later replaced by th).

Sometime around the 1500s, Middle English gave way to Modern English, which continues to evolve and change. For example, today's writing is filled with acronyms, abbreviations, creative use of punctuation and capitalization, and emojis that simply did not exist a century ago.

Top 10 Countries that Speak English as a Primary Language (by total population 2021)

United States — 332,915,073

United Kingdom — 68,207,116

Canada (except for Quebec) — 38,067,903

Australia — 25,788,215

Liberia — 5,180,203

Ireland — 4,982,907

New Zealand — 4,860,643

Jamaica — 2,973,463 Trinidad and Tobago — 1,403,375 Guyana — 790,326

It's important to note that this list includes only countries in which English is the primary language. This has a massive impact on which countries appear on the list. If the list were expanded to include countries in which English is not the primary language but is widely used as a "lingua franca," or common language, the list would change considerably.

$\label{thm:countries} \textbf{Top 10 English-Speaking Countries in the World (as primary or lingua} \\ \textbf{franca 2021)}$

India — 1,393,409,038

United States — 332,915,073

Pakistan — 225,199,937

Nigeria — 211,400,708

Philippines — 111,046,913

United Kingdom — 68,207,116

Tanzania — 61,498,437

South Africa — 60,041,994

Kenya — 54,985,698

Canada — 38,067,903

The role of English in the modern world

English is the preeminent language of business, diplomacy, and international communication around the world. It is one of six official languages used by the United Nations and is used by organizations including the International Olympic Committee, the European Free Trade Association, and the Asia-Pacific Economic Cooperation. It is the most widely taught foreign language around the world and the most-used language in scientific studies, with roughly 50% of English-language science writing created by researchers whose native language is something other than English.

Where To Start With Intuitive Thinking?

Opening the chapter of a new year is a good time to develop a new skill and the first thing we need to admit about intuition is that is a skill indeed. As a professional, I often use my gut feeling to say 'yes' or 'no' to an opportunity and it usually proves right. The way I apply it is the way most of us would and it is called claircognizance, the ability for a person to acquire psychic knowledge without knowing how or why they know it. You drive to work and you should turn right but for some reason, you continue straight, and later, while listening to the news on the radio, you learn that there was high traffic on the route you miraculously avoided. The miracle, however, has a name and it is called intuition.

As a coach and NLP practitioner, I see that the most supportive way for people to find their own healthy dose of intuitive thinking is by guided imagination, visualization, and full presence. What it creates for them is a shortcut to inner wisdom. Symbolic imagination is a limitless source of insight and knowledge, and I am happy to have seen plenty of times how it can help people experience a profound mind-shift. Hence they see new perspectives for themselves. It may sound suspicious to the conventional mind but a rising level of acceptance is nudging towards this way of thinking. One prerequisite for applying intuition is to veer from probability theory and investigate smart heuristics or rule of thumb, as prof. Gigerenzer calls it. Simply put, this is our ability to know things. Heuristics is an unconscious form of intelligence based on our stored experiences and is a human tool we all possess to deal with an uncertain world.

How Startup Leaders Use Intuition?

President of the Association of Young Entrepreneurs of Serbia, founder and COO of Buildcon a software development company, Ilija Dragisic has over 10 years of business experience in his pocket. He employs this experience when it comes to intuitive thinking.

"Recognizing previous patterns and understanding the circumstances is something that can give you a sense and edge in making a decision. Experience taught me that we don't need to jump on every opportunity, but the ones that are truly inspiring shine bright and are easily recognizable. Sometimes I can let go and go with the flow and usually in that case I put a lot of trustworthiness in my team."

Modern Forms of Communication

No one should suggest that you embrace every modern technique of communication simply because it's available. Nor is it wise to be conned into thinking you should invest in a communication tactic simply because "everyone" is doing so. Believe it: They're not.

While you should always keep an eye trained on your competitors, your marketing plan should be your most reliable and trustworthy guide. It should lead you to select the right modes of business communication to enable you to achieve your objectives.

Still, it's worth checking to ensure you're not overlooking one of the many modern techniques of communication. You may even want to add them to the library of pictures on your smartphone, which you may decide some day wasn't so smart after all:

Blogging

Direct messaging through social media Instant messaging Live web chats Text messaging Video chats

Video marketing* Virtual reality

It Could Be Time to Modernize

No matter when your marketing plan was created, or the circumstances under which it was created, it's worth remembering that it is intended to be a fluid document, subject to change as conditions warrant. It could be time for such a change, especially if your communication objectives align with some of the strengths of these modern techniques of communication.

Develop a Treasure Trove of Information on your Customers

From customers' personal information to their purchasing habits, customer relationship management systems streamline consumer information and underscore what people are likely to purchase next. Many small-business owners have decided they shouldn't be without the benefits CRM software can provide.

Be More Responsive to your Customers

Modern forms of communication are inherently faster and more comprehensive than in the past. Real-time communication allows you to interact with customers and answer their questions, solve their problems and become their go-to resource – all in the moment.

Give Your Customers Plenty of Communication Options

Your solid market research ought to lead you directly to the right channels, which will undoubtedly include phone calls, emails and web chats, but also may include the social media platforms they gravitate to.

Provide Customers With Personalized Attention and Service

They crave it, and it will help your business stand out from the crowd. The benefits of CRM systems and lightning speed may sound grand enough, but you can capitalize on them by addressing your customers by name, referring to their interests and preferences (yes, you already know what they are) and making sure they know what you have in store for them next.

One of the ironies of these modern forms of communication is that they allow people to communicate digitally, which sounds distant and impersonal. But market research continually shows that today's consumers want to do business with companies they know, like and trust.

Expand the Reach of Your Business

Doing business internationally may not be one of your goals, but it's a rare small-business owner who doesn't stay attuned to ways to generate new business. Websites helped shatter traditional business boundaries, and modern means of business communication make it possible to see and converse with people as if they were sitting right at your conference table.

As you mull your next move, don't forget to press your marketing team into duty. Some "modern-day" members might go by the name of Siri, Alexa and Cortana – who consider today's modern means of business communication no laughing matter.

ТРЕНУВАЛЬНІ ВПРАВИ З ГРАМАТИКИ

1. Put into the singular.

- 1. Horses are animals.
- 2. Novels are books.
- 3. Boots are shoes.
- 4. Watches are small clocks.
- 5. Tables are pieces of furniture.
- 6. Frenchmen are Europeans.
- 7. Girls wear dresses.
- 8. Children are not always good.
- 9. Hungry boys eat large dinners.
- 10. Stockings are long stocks.
- 11. Oranges are good to eat.
- 12. Classrooms have blackboards.
- 13. Schools are large buildings.

2. Add "a", "an", "the" where necessary.

- 1...chair on which you are sitting is not very comfortable.
- 2 There is...pencil on the desk.
- 3. There is...man waiting to see Mr. Smith.
- 4...man whom Mr. Smith telephoned this morning is here now.
- 5. I should like to find...good book to read tonight.
- 6...book which I am reading now is a very interesting one.
- 7...novel which gave me the greatest pleasure was "War and Peace".
- 8. Have you... cigarette?
- 9. John threw away...cigarette he was smoking.
- 10.I must buy... new brief-case.
- 11...new brief-case which I bought yesterday is made of leather.
- 12.Peter bought ...new hat yesterday.
- 13...hat which Peter bought yesterday is ...expensive one.
- 14.I also bought ...new hat yesterday.
- 15. William says that his uncle is going to give him...dog.
- 16...dog which William's uncle gave him is named Nida.
- 17.I must write... letter.
- 18.Peter put... letter which he had just received into his pocket.
- 19....cigarette is made of...tobacco and...paper.
- 20...milk comes from...cow.
- 21. We make ... butter and ... cheese from ... milk.
- 22. We eat... soup with ... spoon.
- 23.I like... jam on...piece of... bread.
- 24...sugar is nice in...cup of...tea.
- 25...fish swims in ...water.

- 26. We write ...letter on...paper.
- 27...cat has ...tail.

3. Supply "a", "an", "some", "the" where necessary.

- 1. There is...fly in...lemonade.
- 2...youngest brother is at ...school now.
- 3. She is at...school. If you go to... school by ...tram, you will be just in ...time to meet her.
- 4... birds can fly very high in ...sky.
- 5.... Book on that shelf is... interesting one about... history.
- 6...ship you are speaking about has just come into... port. She has been at... sea for ... long time. Look... captain has just come on... deck.
- 7. It is pleasant to play... games of... tennis on... summer afternoon.
- 8. He makes... toys in ... evening.
- 9... butcher opposite ...library always sells... good meat.
- 10.I am fond of... apples with ...cheese.
- 11... honesty is ...best of all... virtues.
- 12. I should like to have... house in ... country.
- 13. We had ... dinner at ... new restaurant... last night.
- 14... car is ready.
- 15.Do you prefer ... book of ... poetry or ... stories of ... adventure.
- 16. Peter traveled in ... third-class carriage with ... Americans.

4. Make the following sentences (a) negative, (b) questions.

- 1.He can read English.
- 2. She has a brother.
- 2. She has a brother.
- 4. He is very late.
- 5. They have time to do it.
- 6. You can wait here.
- 7. Mary is right.
- 8. He takes English lessons.
- 9. They try to understand.
- 10. She feels well.
- 11. You write to them every day.
- 12. He lives in this house.
- 13. I keep it in my pocket.
- 14.I work on the tenth floor.
- 15.John speaks English well.
- 16. Mary speaks better than John.
- 17.Peter came to class ten minutes late.
- 18. We use many books during our lesson.

19. She gave me the newspaper.

5. Make the following sentences (a) questions, (b) negative.

- 1. I understood everything he said.
- 2. They speak clearly.
- 3. She wants to learn English.
- 4. Mary will come to class tomorrow.
- 5. Mr. Smith is out of town.
- 6. John has left for London.
- 7. She can speak French well.
- 8. January is the first month in a year.
- 9. There are twelve months in a year.
- 10. Henry is standing outside the door.
- 11. The desk is heavier than the chair.
- 12. The book was very expensive.
- 13. This letters were sent to a wrong address.
- 14. The hat is John's.
- 15. The lesson is over.
- 16. The time is up.
- 17. Peter left his book at home.
- 18. She seems to be busy.

6.Add a question word to the following questions.

- 1... do you want ? I want a book.
- 2... is John late?
- 3... is your name?
- 4... book is this? It is mine.
- 5... is that pretty girl?
- 6... is your telephone number?
- 7. Here are the books... is yours?
- 8... is coming to dinner?
- 9... trees grow in Egypt?
- 10... colour is it?
- 11...piece of bread is yours?
- 12... do you live?
- 13... did you see John? I saw him yesterday.
- 14... days are there in a week? There are seven.
- 15... did you pay for a book?
- 16... is the table made of? It is made of wood.
- 17... old is Pete? He is seven.
- 18... hat is this? It is Ann's.
- 19... is Andrew tired? He is tired because he has worked so hard.
- 20... teaches you?

21... is your birthday?

7.Re-word the following sentences in two ways suggested below.

He is less stupid than I thought he was. He is not so stupid as I thought he was. He is cleverer than I thought he was.

- 1. Your house is less modern than I thought.
- 2. This book is less big than yours.
- 3. This exercise is less good than your last one.
- 4.My mother is less old than you think she is.
- 5.We are less bad than you think you are.
- 6.She is less ugly than you said she was.
- 7.My brother is less hard-working than me.
- 8. This street is less wide than the next one.
- 9.My bag is less heavy than my friend's.
- 10.A donkey is less beautiful than a horse.

8.Re-make this sentences, using "too", as shown below.

This mountain is very high. We can't climb it. This mountain is very high (for us) to climb.

- 1.It's very cold. We can't go out.
- 2. This book is very difficult. I can't read it.
- 3. This hat is very big. He is only a little boy.
- 4.It's very far. We can't walk.
- **5.**He's very stupid. He can't understand.
- 6.It's very small. This is a big room.
- 7.It'svery good. It can't be true.
- 8.It's very dark .I can't see anything.
- 9. This dress is very old . I can't wear it any more.
- 10.It's very hot .I can't go out.

9.Re-word the following, using "enough to".

You are quite clever. You understand perfectly. You are clever enough to understand perfectly.

- 1. You are quite old now. You ought to know better.
- 2. I am very tired. I can sleep all night.
- 3. Are you very tall? Can you rich that picture?
- 4. The story is short. We can read it in one lesson.
- 5. The moon is very bright. I can read the book by it.

6.I have enough money. I can buy the dictionary now.

10.Insert the missing possessives.

- 1. That does not look like ... book. It must be...
- 2.Tell him not to forget... ticket. She mustn't forget..., either.
- 3.It was very good chocolate, but I have eaten all...; can you give me a little piece of ...?
- 4.I see that he has lost... pencil. Perhaps you can lend him...
- 5. John has come to see me; ... father and... were school friends.
- 6.We've taken... papers; has she taken...?
- 7.I saw a cousin of... this morning.
- 8.He wants you to return a book of ... you borrowed last week.
- 9. Peter met a friend of ... at the party.

11. Choose the correct pronoun.

- 1. (We, us) all went with (themselves, them).
- 2. They knew all about my friend and (I, me).
- 3. Mary and (he, him, himself) came last night.
- 4.I came here with Peter and (her, she).
- 5. He told Mary and (me, my) to go with (he, him) and his mother.
- 6.An old man asked my friend and (I, me) what the time was.
- 7.Go and see (he, him) and his friend.
- 8. There are some letters for (me, I).
- 9.Go with John and (her, she) to visit (them, they).
- 10.Look at the picture: This is (I, me).
- 11. That's (he, him) over there.

12. Supply correct Present tense of the given verb.

- 1.She (go) to school every day.
- 2. We (learn) English now.
- 3. The sun always (shine) in Egypt.
- 4.I (sit) on a chair and (eat) banana.
- 5.It (rain) in autumn.
- 6.Bad students never (work) hard.
- 7.I (wake up) at seven and (have) breakfast at half past eight.
- 8.He generally (sing) in English but today he (sing) in French.
- 9. The teacher (point) to the blackboard when he (want) to explain something.
- 10. The sun (rise) in the East.
- 11. That man in the white coat who (walk) past the window (live) next door.
- 12. Architects (make) the plans of new buildings.

- 13.A baby (cry) when it is hungry.
- 14.I always (meet) you at the corner of the street.

13. Put the verb into correct tense.

- 1. Colombus (discover) America more than 400 years ago.
- 2.I (not see) you for more than a week.
- 3.I (not eat) brown bread since I was in Ukraine
- 4.I (study) Chapter 1, before I began to study Chapter 2.
- 5.My brother (not write) to me for months.
- 6.We finished our supper an hour ago.
- 7. When (you arrive) here?
- 8.I (not see) you since we met a year ago.
- 9.He (write) the report by the First of December.
- 10. The student (translate) this text for two hours.

14. Write the following sentences, using Present Indefinite, Present Continuous, Present Perfect.

- 1.I (like) to read English books.
- 2. You (read) scientific literature now.
- 3.It often (rain) in autumn.
- 4. They already (pass) the exams.
- 5. What (you do) now? I (write)the English test.
- 6. She just (translated) the article.
- 7.We (work) in the library every day.
- 8. Wait a minute, please, he (speak) with his colleague.
- 9. They just (invite) us to the party.
- 10.She (have) a large family.

15. Complete the Past Continuous form in the following sentences.

- 1.I (read) a book when he came in.
- 2. The sun (shine) when we went out.
- 3. When you came in I (write).
- 4.It (rain) this morning when I got up.
- 5.He (work) all day yesterday.
- 6.We (live) in France when the war began.
- 7. When I arrived at this house he still (sleep).
- 8. The boy jumped off the train while it (move).
- 9.He (walk) across the bridge when I saw him.
- 10. The bus started when I (get) on.
- 11. When I (listen) the radio last night I heard a new song.
- 12.I took another cake when you (not look).!

- 13. She cut her finger while she (cut) the bread and butter.
- 14.I (learn) English when I heard a loud knock.

16. Put the verb in brackets into the correct tense.

- 1. We shall go as soon as you (be) ready.
- 2. He will tell you when you (get) home.
- 3. We'll go out when the rain (stop).
- 4. I (stay) here until he answers me.
- 5. Wait until I (catch) you.
- 6. I'll be ready until you (count) ten.
- 7. John must eat his breakfast before he (go) out.
- 8. Please sit there until my husband (come).
- 9. See that it is clean before you (touch) it.
- 10. I'll help her look for it until she (find) it.
- 11. The house will stay empty till we (return).
- 12. As soon as you buy the book I (borrow) it from you.
- 13.I'll believe it when I (see) it.
- 14.He'll tell you when you (ask) him.
- 15.I (get) a new one before tonight.

17. Complete the following sentences.

- 1.Come and visit us when...
- 2. I shall not move from here until...
- 3. You will have to explain everything before...
- 4. I'll come as soon as I...
- 5. He won't stop running until...
- 6. She will be terribly angry when...
- 7. When he writes to me again, I...
- 8. She will never understand until...
- 9. Will you stay and talk to me until...
- 10.I'llcome and see you again when...
- 11. Your marc will be bad if you...

18. Supply the correct past tense (Past Indefinite or Past Perfect).

- 1. She told me his name after he (leave).
- 2. He (do) nothing before he saw me.
- 3. My friend enjoyed the food as soon as he (taste) it.
- 4. He thanked me for what I (do).
- 5. I (be) sorry that I had hurt him.
- 6. After they (go) I (sit) down and (rest).
- 7. As soon as you (go) I wanted to se you again.
- 8. They dressed after they (wash).

- 9. After I (hear) the news I hurried to see him.
- 10. She told me her name after I (ask) her twice.
- 11.Before we (go) very for we (find) that we (lose) our way.

19. Supply the correct tenses.

- 1. They just (decide) that they (undertake) the job.
- 2 We (go) to the theatre last night.
- 3 He usually (write) his reports in the evening.
- 4. She (play) the piano when our guests (arrive) last night.
- 5.Last lesson we (do) many English exercises.
- 6. He (come) and see you in five minutes.
- 7. I (come) as soon as my work (be finished).
- 8. Where you (go) for your holidays last year?
- 9. My mother (be) with us next week-end.
- 10.I never (see) snow.
- 11. Violets (bloom) in spring.
- 12We (not live) in England for the last two years.
- 13.I (lose) my keys; I cannot remember where I last (see) them.
- 14. When he (write) his last letter to you?
- 15. Whenever he (go) to the town nowadays he (spend) a lot of money.
- 16. I never (forget) what you just (tell) me.

20. Complete the following sentences with "do" or "make".

- 1.He... a lot of money last year.
- 2. I always...my best.
- 3. It has nothing to ...with you.
- 4. He... a good speech yesterday.
- 5. This is all I have, will it...?
- 6. She ...him eat his dinner.
- 7. I will have nothing to... with such people.
- 8. He always ...fun of me.
- 9. A soldier must...his duty.
- 10.It's my birthday;...come to tea.
- 11. I have nothing to... this afternoon.
- 12.It won't... you any harm to take another week's holiday.
- 13. Have you...your homework?

21. Make the following sentences negative.

- 1. You must answer in English.
- 2. He will have to give it back to me before Christmas.
- 3. They must brush their own shoes.
- 4. You'll have to buy some more food.

- 5. She can ring him up before tomorrow.
- 6. He'll have to carry both of them
- 7. You may change your clothes for dinner.
- 8. We must cut it in three pieces.
- 9. She had to drink it without sugar.

22. Translate the following sentences and remember the verbs followed by gerund.

- 1.I couldn't deny that he'd made a reasonable excuse.
- 2.He denied knowing anything about the missing jewels.
- 3.It went on raining for days.
- 4.Do you remember my speaking to john about the new house?
- 5.I insist on your taking the money.
- 6.I've put off writing to him till today.
- 7.I don't think anyone mentioned Mary being there.
- 8.I couldn't resist buying such lovely apples.
- 9. Avoid drinking too much water with your meals.
- 10.We all appreciate your wanting to help us in our difficulties.
- 11. We've escaped being asked another grammar question.
- 12. I considered painting the ceiling blue.
- 13.I gave up smoking when I was a young man.
- 14 .Please excuse my disturbing you.

23. Change the following sentences into the Passive Voice.

- 1.People always admire this picture.
- 2.He hurt his leg in an accident.
- 3.No one has opened this box for the last hundred years.
- 4.People formerly used the Tower of London as a prison
- 5. They fought a big battle here two hundred years ago.
- 6.People will forget this play in a few years' time.
- 7. Somebody built this bridge last year.
- 8. Nobody has ever beaten my brother at tennis.
- 9. People speak English all over the world.
- 10.Did anyone ask any questions about me?
- 11. You must write the answers on one side of the paper only.
- 12.People mustn't take this books away.
- 13. They punished me for something I didn't know.
- 14She praises a pupil when he works hard.
- 15. Nobody heard a sound.
- 16. Somebody can easily mend this door.
- 17. The author will write the book in June.
- 18. They gave my little sister a ticket too.
- 19.People will show the visitors the new buildings.
- 20. The teacher will explain the new rule at the lesson.

- 21.Our students staged an English play.
- 22. Somebody must send for the doctor.
- 23. She is planting the flowers near the house.
- 24.I have sent a letter of thanks to my friend.
- 25. The secretary was typing the text on page ten all the evening.
- 26.I think you must clear out the garage.

24. Put in suitable preposition.

- 1. We don't go... school... Sundays.
- 2. Wait...me...the bus-stop.
- 3.He arrived...London...six o'clock.
- 4.Come...ten...Friday morning.
- 5.I bought this hat... ten shillings.
- 6.Our cat was bitten...a dog.
- 7. Put your books ... the table.
- 8. You may write ...pencil.
- 9. There's no bus. We'll have to go...foot.
- 10.We went...the seaside...car.
- 11.Get...the tram here and get off...the third stop.
- 12. Many planes fly...the Atlantic nowadays.
- 13.I couldn't hear what they are talking...
- 14. She was looking... the window ... the busy street.
- 15. You can use my knife to cut it ...
- 16. The stream ran... a little tunnel... the road.
- 17.He spoke...me...his hands...his pockets.

25. Complete the following sentences using "since" or "for".

- 1.I haven't seen you...
 - a) Christmas;
 - b) Three days.
- 2.She hasn't spoken to me...
 - a) an hour and a half;
 - b) January.
- 3. They have lived in the street...
 - a) 1919;
 - b) the last ten years;
 - c) a long time.
- 4. We've been here...
 - a) more than two years;
 - b)last week.
- 5. I haven't had time to do it...
 - a)I was ill;
 - b)last Monday.

- 6. We haven't bought any new ones...
 - a)a week;
 - b)ages;
 - c)then.
- 7. I haven't eaten any meat...
 - a)over a year;
 - b) I was a boy.

26. Translate the following sentences into English.

- 1.- Коли він прийшов ?- Він прийшов, коли ми вже поснідали.
- 2.- Я чекаю містера Сміта вже півтори години. Містер Сміт поїхав у відрядження.
- 3.- Мати приготувала смачний обід. Ми будемо обідати через десять хвилин.
- 4. Фільм був такий нудний, що до того часу, як він закінчився, деякі люди заснули.
- 5.- Джейн добре знає англійську. Як довго вона її вчила ? П'ять років.
- 6.- Ти вивчив французьку до того часу .як переїхав жити до Парижа?
- 7.- Хто полив квіти ?- Ольга полила їх вранці .- Вона сьогодні чергова? Так, вона завжди чергує в середу.
- 8. Ти промокнеш наскрізь, якщо не візьмеш плащ.
- 9. Скоро настане осінь. У лісі пожовкне і почне опадати листя.
- 10.- В яких зарубіжних країнах ти побував ?- Минулого року я відвідав Польщу.

27. Translate the following sentences.

- 1. Їх запросили взяти участь у цьому фестивалі.
- 2. Він запитав ,які проблеми обговорювали вчора на зборах.
- 3. Він сказав мені ,що картина буде виставлена в місцевому музеї.
- 4. Я тут сиджу вже кілька годин, але ще ніхто не прийшов.
- 5.- Листи було відправлено вчора ?- Ні, вони не були надруковані.
- 6..- Літні канікули почнуться в кінці червня .- Ти поїдеш зі мною до Львова
- ?- Поїду ,якщо складу всі екзамени .
- 7.- Містер Браун знає англійську, французьку, німецьку. Він викладає англійську?- Ні, він викладає німецьку.
- 8.- Чому ти не дивишся за своїми дітьми? Вони плачуть.
- 9.- Чи йшов сніг, коли ви вийшли з дому? Ні, сніг до того часу вже припинився.
- 10. Мене запитали, скільки років я вже живу в цьому місті.

28. Translate the following sentences.

- 1. Ми не можемо купатись в цій річці. Вода тут занадто холодна.
- 2.- Ти можеш переходити вулицю лише при зеленому світлі. Можна мені перейти вулицю в цьому місті ?- Так, можна.

- 3. Зараз сьома година ранку. Іде дощ. Людей на вулиці мало. Вони одягнені в плащі. У них похмурі обличчя.
- 4. Він був дуже зайнятий цілий день, і я сам мусив виконувати цю роботу.
- 5. Вона привітала мене і запитала ,куди я йду.
- 6. Ти не бачила Мері ?- Ні, я її не бачила з травня. Вона зараз за кордоном.
- 7.- Що ти робиш ? Я пишу твір про свою академію. Викладач сказав ,що кращий твір буде опубліковано в нашій міській газеті.
- 8. Ганна була впевнена, що її друзі прийдуть на її день народження. Була вже шоста година ,але ніхто не прийшов.

29. Translate the following into English, using Present Tenses:

Я навчаюсь в академії. Я вчусь в цьому вищому навчальному закладі з вересня 2002 року. Я вивчаю англійську мову з 5 класу. Я добре розмовляю англійською. Я люблю читати англійські книжки та намагаюсь робити переклади на українську мову. Зараз на уроці ми повторюємо англійські часи. Ми повторюємо їх вже другий тиждень.

Професор М. читає курс психології на нашому факультеті. Він знає 4 мови – французьку, англійську, німецьку, італійську. Він займається науковою роботою і публікує статті у відомих зарубіжних журналах. Він вільно говорить і вільно читає на трьох мовах. Зараз професор вивчає японську мову. Він вчить її вже декілька місяців.

30. Translate the following into English, using Past Indefinite and Present Perfect:

Я щойно отримав листа від свого друга Миколая. Він зараз в Києві. Минулого місяця мій друг вступив до університету. Рік тому він не знав англійської мови, але працював наполегливо і займався мовою кожного дня. Зараз він добре розмовляє англійською. Він вже пройшов тестування для навчання в Америці.

31. Translate the following into English, using Past Tenses:

Вчора ми писали контрольну роботу по математиці. Я запізнився на заняття. Коли я зайшов в аудиторію, студенти нашої групи писали контрольну роботу. Вони писали її вже півгодини. Багато з них вже закінчили роботу і здали її викладачу.

32. Translate the following into English, using Future Tenses:

- 1. Я буду дуже зайнятий на початку липня. Я буду здавати екзамени. Думаю, що ти напишеш мені листа.
- 2. До семи годин він закінчить цю роботу.
- 3. Через рік вони приїдуть до мене.
- 4. Я напишу курсову роботу до 5 січня.
- 5. Буде вже рік, як вона вчиться в академії.
- 6. Я все ще буду працювати, коли ти повернешся.
- 7. Він буде зайнятий завтра?
- 8. Не приходьте до мене в 5 годин. В мене буде урок англійської.
- 9. Що ми будемо робити завтра в цей час? Ми будемо продивлятись нові газети і журнали.
- 10. Потяг вже поїде, до того часу, як ми прийдемо на станцію.
- 11. На наступному тижні ми до вас приїдемо.
- 12. Він пообідає через декілька хвилин.
- 13. До 15 травня вони здадуть всі заліки.
- 14. Я напишу йому листа до того часу, як вона прийде до мене.
- 15. Рівно о шостій я буду чекати тебе на зупинці.
- 16. Завтра в цей час ми будемо під'їжджати до Лондону.

33. Make sentences in the passive in the given tense:

- 1. BMW's –make –in Germany (PRESENT SIMPLE)
- 2. English –speak –in this shop (PRESENT SIMPLE)
- 3. The oldest house build –in 1575 (PAST SIMPLE)
- 4. The bridge –repair –at the moment (PRESENT CONTINUOUS)
- 5. The trees –cut down –last winter (PAST SIMPLE)
- 6. The picture –paint –tomorrow (FUTURE SIMPLE)
- 7. When I came in –the TV –fix (PAST CONTINUOUS)
- 8. The cupboard –repair –recently (PRESENT PERFECT SIMPLE)
- 9. The car –find –in the garage (PAST SIMPLE)
- 10. Breakfast –serve –between7 and 9 (PRESENT SIMPLE)
- 11. The dog –call-Rover (PRESENT SIMPLE)
- 12. The meeting -hold -in my office (PAST CONTINUOUS)
- 13. The street –close –because of snow (PRESENT PERFECT)
- 14. The banks —close —in two days(FUTURE SIMPLE)
- 15. Hundreds of books -write -every year (PRESENT SIMPLE)
- 16. After the accident –Joe –take –to the hospital (PAST SIMPLE)
- 17. The cap –find –in the corner (PAST SIMPLE)
- 18. The robber –not find –by the police –yet (PRESENT PERFECT)
- 19. The search –stop –this evening(FUTURE SIMPLE)
- 20. Different types of cameras –use (PRESENT CONTINUOUS)

34. Change the sentences to passive voice.

- 1. Many people begin new projects in January
- 2. You must wash that shirt for tonight's party.
- 3. Mum is going to prepare the food.
- 4. They make shoes in that factory.
- 5. We will have to examine you again.
- 6. They had finished preparations by the time the guests arrived.
- 7. The delegation will meet the visitors at the airport.
- 8. We have produced skis here since 1964.
- 9. All workers will read the memo.
- 10. Nobody can beat Tiger Woods at golf.
- 11. They also speak German at EU meetings.

ТРЕНУВАЛЬНІ ТЕСТИ

ГРАМАТИКА

Test 1.

Nouns

1. Chinese	are rather unsafe.
• A coal mines	
• B coal miners	
• C coal miner's	
• D coal's mines	
2. Joan is exhausted after	a trip.
 A ten days 	
 B ten day's 	
 C ten-day 	
D ten days'	
3. Your wa	ashing.
• A pajama needs	
 B pajamas needs 	
 C pajamas need 	
 D pajama need 	
4. How do I get to the	station?
 A police 	
 B police's 	
 C policemen's 	
• D policeman's	
5. The police	for Ted Turner.
 A is looking 	
 B has looked 	
 C was looking 	
 D are looking 	
6. The ord	er was fulfilled immediately.
• A commander-in-c	chief's

• D commanders-in-chief
7. The department of clothing is downstairs.
 A child B children C child's D children's
8. Pete and Andy are away on holiday flat is empty now.
 A Pete and Andy's B Pete's and Andy's C Pete and Andy D Pete's and Andy
9. Her clothes smart.
 A was B is C have D were
10. Mumps rather dangerous for adults.
 A are B has C have D is
11 very popular in this country.
 A Dominoes are B Dominoes is C Domino is D Domino are 12. I am lucky to have three daughters and two A sons-in-law's
• B sons-in-law
C son-in-law'sD son-in-law

B commander's-in-chief'sC commander's-in-chief

Test 2.

Pronouns

1. Stan and Mike have fixed the bicycle _____.

• A them
• B their
• C they
• D themselves
2. I'll go home if there is urgent to do now.
A anything
• B something
 C everything
• D nothing
3 of my parents likes porridge.
• A No one
• B None
 C Nobody
• D Neither
4. I've got two friends of them are sportsmen.
• A each
• B every
• C both
• Dall
5 has come. We can start the meeting.
• A Both
• B All
• C Nobody
• D Everybody
6. I want to tell you about my neighbor, dog is constantly barking.
• A whose
• B who
• C whom
• D which

7. I ha	aven't decided yet to ask for help.		
•	A whom B which C whose D what		
8. Tha	at's she told me about.		
•	A none B nothing C all D which		
9. I'v	e got time to waste.		
•	A none B no C nothing D nothing		
10. It's my phone. Where's?			
•	A your B your C yours D you		
11. C	hildren, you must do your room		
•	A both B everybody C yourself D yourselves		
12. H	ave you seen my notebook?		
	A anywhere B everywhere C somewhere D nowhere		

Test 3.

Verbs.

Active Voice.

1. W	We'll meet as soon as Adela from the from the first the firs	om Chicago.
•	 A will return B returns C return D will have returned 	
2. Th	The tourists felt that the wind	harder and harder.
•	A had been blowingB was blowingC blewD had blown	
3. I _	to school today, I've got a col	d.
•	A not goB don't goC am not goingD not going	
4. I h	hope it raining by the evening	
•	 A stops B is going to stop C will stop D will have stopped 	
5. Da	Dad looked into the room and saw that the bnes.	oys computer
•	A were playingB playedC had been playingD has been playing	
6. Ve	Veronica a pie since the very m	orning.

• A is making

•	D has made		
7. Pamela already 16, when her family moved to Leeds.			
•	A have been B had been C was D has been		
8. I'v	e got a splitting h	eadache. – I	_ you an aspirin.
•	A am giving B am going to give C give Dwill give	ive	
9. WI	nile Mum was wa	shing the windows, Dad	in the garden.
•	A had pottered B was pottering C had been potted D pottered	ering	
10. R	achel was surpris	ed because she	anything like that before.
•	A hasn't seen B haven't seen C hadn't seen D didn't see		
11. S	heila has just told	me her parents	back tomorrow
•	A come B are coming C will come D would come		
12. P	enny says she	Louise for age	s.
•	A has known B knows C had known D knew		

• B makes

• C has been making

Test 4.

Verbs.

Passive Voice.

1.Romeoand Juliet	by Shakespeare.
 A has written 	
• B writes	
 C was written 	
• D wrote	
2. The books	yet.
 A has not been publis 	hed
 B has been publish 	
 C had published 	
 D were not publishing 	7
-	realized that my wallet
•	•
 A has stolen 	
 B had been stolen 	
 C been stolen 	
• D stolen	
4. Dinner	between 5 and 10 p.m. every day.
 A was served 	
 B served 	
 C had served 	
• D is served	
5. No letters	since the start of the strike.
 A has delivered 	
 B were not delivered 	
 C have been delivered 	1
 D delivered 	-
	torn down when we got there.
• A was being	
 B were being 	

• C being
• D was
7. Progress in many fields of science in the last decade.
• A has made
• B made
• C has been made
• D been made
8. Since last week 5 of the 7 terrorists
A has been caught
B are catching
C have been catched
D have been caught
2 maye occin caught
9. Taxes by the new government next month.
A will be incresed
B will increse
• C be incresed
 D have been incresed
b have been meresed
10. The classroom next week.
A being redecorated
 B is being redecorated
C is redecorated
• D redecorated
o D Tedecorated
11. The church by a famous architectin the 18th century.
 A has designed
 B has been designed
 C was designed
D designed
b designed
12. The tunnel at the moment,so it's closed for all traffic.
A is being repaired
 B is repairing
 C being repaired
 D has being repaired
- mas come repaired

Test 5.

Verbs.

Passive Voice.

1. My phone I can't find it anywhere.
 A has taken B taken C has been taken D been taken
2. The application by Friday.
 A has send B must be sent C have been sent D been send
3. When we first met, I had a job at the bank.
 A offered B been offered C had been offered D been made
4. Olives in Mediterranean countries.
 A has made B made C has been grown D are grown
5. He French when he spent his childhood there.
 A was taught B was teached C has been teached D being taught
5. "A Hard Days Night" by the Beatles.
• A was written

• B were

7. W	e about the hurricane for the last few days.
•	A warned B have been warned C has been warned D been warned
8. Be	fore the meeting was over all the food
•	A ate B has been ate C has been eaten D had been eaten
9.	I extra pay this month.
•	A have already been given B already have been given C has been given D been given
10. I	by the music so I couldn't concentrate.
•	A has disturbed B disturbed C were disturbed D was disturbed
11. A	duminium out of bauxite.
	A has made B made
•	C has been made D is made
•	

• C have been made

• D been made

ТРЕНУВАЛЬНІ ТЕСТИ

ЛЕКСИКА

Test 1. GARDENS

Most British people prefer to live in a house rather than a flat and one of the (1)
for this is that houses usually have gardens. The garden is (2)by a
fence or hedge and is a place where people can be outside and yet private. It is
somewhere to sit when the weather is sunny, and somewhere for children to play.
If a house has a front and back garden, the front is likely to be formal and
decorative, with a lawn or fancy paving and flower borders. In Britain people
normally (3)to sit in the back garden, out of (4) of other people. The
back garden usually also has a lawn and flower beds, and sometimes a vegetable
plot or fruit trees. There is often a bird table and a shed in which garden tools are
(5)Some houses have only a very small back garden, (6) of
concrete, called a backyard or, in more fashionable areas, a patio. People often (7)
it with plants in tubs, or in pots or baskets (8)to the wall. For British
people a garden is an extension of their home. They buy garden furniture —
chairs, tables and sun loungers — so that they can sit outside in summer and relax.
In the US the area of grass in front of and behind most houses is (9) a yard.
The word garden is used only for the areas where flowers and vegetables (10)
Yards usually consist of a lawn and trees, flowers and bushes. They may
have fences around them and, at the front of the house, a path going from the door
of the house to the street. Many backyards have swings, slides or climbing frames
for children. During warm weather, Americans spend a lot of time in their yards,
especially the backyard. Children play there and often have small pools of water
or sand boxes. All the children living in an area go (11) into each other's
backyards. People like to eat outside, often (12)meals on a barbecue.

	A	В	С	D
1	aims	senses	ideas	reasons
2	closed	surrounded	located	situated
3	choose	pick	select	decide
4	outlook	scene	notion	view
5	kept	remained	protected	possessed
6	principally	greatly	nearly	mostly
7	decorate	do	make	arrange
8	directed	focused	fixed	established
9	known	built	surrounded	called
10	grow	locate	spread	cultivate
11	freely	idly	individually	naturally
12	producing	doing	preparing	getting

Test 2. JOBS

Jack thought it would be quite easy to find a job when he left school, but it was					
really difficult. He looked through the job (1) in the local paper					
every week, but everybody seemed to want people with lots of (2)					
and Jack didn't do very well at school. He sent his (3) to dozens of					
companies in the local area but nobody got back to him. He must have filled in at					
least thirty (4) forms and he only had one reply. He went for (a) an					
(5)last week but it didn't go very well — they said they wanted					
someone more (6)					
His father, Martin, also lost his job. He was (7) when he was					
discovered using the internet to (8) his holiday during work time.					
Martin was amazed by his employer's (9) He said, "Everybody uses					
the internet at work – the company can't sack us all!" Around 250 workers (10)					
unemployment after the company announced that it plans to					
close the factory next year. 65 men will be made (11) at the					
end of November and a further 130 in June. The closure will have a devastating					
effect in an area where 10% of the adult population is already (12)					
·					

	A	В	С	D
1	magazine	piece	section	division
2	habits	power	qualifications	ability
3	records	resume	forms	letters
4	request	appeal	application	work
5	discussion	consultation	meeting	interview
6	experienced	polite	mature	sensitive
7	released	thrown	dismissed	sent
8	gain	acquire	obtain	book
9	decision	point	conclusion	opinion
10	observe	see	face	watch
11	redundant	expelled	fired	poor
12	free	liberated	available	unemployed

Test 3. COUNTRIES

The Netherlands is one of the Low Cour	itries, so named because much of its (1)
is below sea (2)	or is comprised of wetlands. (They say
the Netherlands is so flat, that if you stand	
(3) country!).	
The Netherlanders have reclaimed muc	
(5)since the early sixteenth cen	
into canals and (6) more lan	
the sea at bay and prevent fl	ooding.
Since much of the Netherlands' coastal to work the fields. Rubber	land was soggy, special shoes were (8) boots weren't (9), so the
Dutch took to wearing "sabots" or wood	
from beech or chestnut wood, are water wetlands.	
(11) wooden shoes and wind	dmills are not used much anymore, they
will always be a (12) of the	•
great tourist attractions.	

	A	В	С	D
1	district	land	earth	soil
2	height	level	horizon	altitude
3	all	full	whole	total
4	construction	composition	fabrication	constitution
5	treated	consumed	used	exercised
6	discover	create	invent	make
7	preserve	support	keep	protect
8	lacked	called	missed	needed
9	ready	done	convenient	available
10	done	fulfilled	made	executed
11	While	For	If	Until
12	sign	logo	symbol	character

Test 4. FOOD

Visitors to the US think either that there is no real American food, only (1) borrowed from other countries, or else that the Americans eat only "fast food". While there is some truth in both these impressions, real American food exist. The British also have a poor (2) ______ for food. Visitors to Britain often (3) that food in restaurants is badly presented, overdone and has no taste. But the best English food is not generally found in restaurants but in people's homes. Certain foods are considered essential to traditional British cooking and form the basis of most meals. These (4) ______ bread, pastry and (5) _____ products such as milk, cheese and eggs. Potatoes, especially chips, are eaten at lunch or dinner. A (6) potato (a potato baked whole in its skin) with cheese is a popular "pub lunch". Good (7) _____ home cooking, i.e. food prepared without spicy or creamy sauces, is something the British are proud of. People's interest in trying new recipes is encouraged by the many cookery programs on TV. Famous TV (8)_____include Della Smith and Ainsley Harriott. They give advice about healthy eating. The main idea is to (9) _____ the amount of fatty foods and sugar and to (10) _____ people to eat more fruit and vegetables. When British and American people (11) _____ they can choose from a wide range of eating places: burger bars, pizzerias, fast food outlets. They seem to be (12) _____ a battle between what they want to eat and what is good for them. Α В C D stuff dishes 1 meals courses 2 taste experience reputation status 3 discuss complain argue persuade include 4 consist mean have 5 dairy vegetarian organic fatty 6 jacket peeled coat dressed 7 ordinary simple plain easy 8 bosses chiefs directors chefs 9 reduce miss ignore neglect 10 convince encourage assure help 11 stay out take out get out eat out 12 playing struggling fighting combating

Test 5. ETIQUETTE

Some gestures are used by all British and American people. Many are appropriate in informal situations; others are considered rude. Some people make many gestures when they speak, so they are said to talk with their (1) ______.

People nod (move their (2) gently up and down) to indicate "yes".
(3) the headfrom side to side means "no". When somebody
(4) this gesture with the eyes wide open it indicates disbelief. If there is
a (5) smile then the person is also amused.
Pointing with the (6)(first finger) at somebody or something shows which person or thing you want or are talking about. If you stick your fingers in your (7) you cannot stand the noise of something. People often shake (8) when they are introduced to each other or when they make agreement.
Sometimes people (9) their feet (usually one foot) on the floor in
time to music, but more often the gesture shows that they feel impatient.
Raising (10) with the eyes wide open or blinking (closing and
opening both eyes very quickly) expresses surprise, shock or sometimes
disapproval. Wrinkling the (11) (moving it up and to one side)
suggests that there is a bad smell. Some gestures have several meanings, (12)
the context.

	A	В	С	D
1	faces	arms	appearances	hands
2	forehead	head	skull	face
3	Shrugging	Placing	Putting	Shaking
4	fulfils	makes	acts	produces
5	small	slight	little	light
6	forefinger	nail	thumb	toe
7	mouth	ears	nose	eyes
8	hands	shoulders	fists	palms
9	cross	tap	clap	hit
10	eyeballs	eyelids	eyelashes	eyebrows
11	lip	teeth	nose	tongue
12	dealing with	concentrating	depending on	caring for
		on		

Test 6. HOUSES

When I was a student, I decided to (1)	a house with a
couple of good friends. We didn't have any stuff of o	our own, so we tried to find
a nice (2) house. We found an ac	lvertisement and decided to
speak to the landlord.	
1	
The house was half a mile from the city center. It was	s in a (3)
area and was quite (4)	
per month. But as it turned out the whole place neede	ed repairing. The bathroom
taps were (5), radiators were (6)	
sink was (7), and the bathroom c	
Upstairs there were three bedrooms and a study. All t	
opstans there were times obditions and a stady. This	me carpets were (6)
 •	
The landlord said he couldn't get off a horrible brown	n color. Downstairs there
was a kitchen, a dining room and a spacious living-ro	
terrible mess, it looked like a bomb hit it. But the land	
the cooker and (10)	
bottles.	an the empty
bottles.	
When we wanted to switch on the light, we couldn't,	because the light hulb had
(11) The garden was in a bit of a	•
needed (12) Though it wasn't the decided to move in the next day. The landlord was har	oppy!
uccided to move in the next day. The fandlord was ha	ւրիչ։

	A	В	С	D
1	borrow	rent	loan	hire
2	equipped	decorated	furnished	fitted
3	pleasant	attractive	attracting	pleasing
4	poor	priceless	worthless	cheap
5	dripping	flowing	pouring	running
6	watering	releasing	leaking	fleeting
7	loaded	stuck	blocked	set
8	stained	destroyed	broken	smashed
9	do	make	clean	clear
10	give up	pick out	throw out	tidy up
11	burnt	heated	fired	gone
12	scrubbing	cutting	fixing	sweeping

ТРЕНУВАЛЬНІ ТЕСТИ

ПРОФЕСІЙНА ЛЕКСИКА

Test 1

Test your professional vocabulary

Part 1

- 1. ... is the upper layer of the Earth in which plants, trees etc. grow.
- A) crops
- B) grain
- C) soil
- D) cultivation

2. Which of these variants names only grains?

- A) buckwheat, wheat, rye, flax, oats
- B) buckwheat, wheat, rye, barley, oats
- C) buckwheat, wheat, rye, garlic, oats
- D) buckwheat, wheat, rye, beet, oats

3.... is insect or animal that destroys plants, food etc.

- A) plant
- B) pest
- C) yield
- D) barley

4 .Industrial crops are

- A) canola, potato, rye, beet
- B) flax, sugar beet, sunflower.
- C) onion, flax, sugar beet.
- D) rye, onion, canola.

5..... is an old but still common method of weed killing.

- A) germination
- B) destroying
- C) cultivation
- D) absorbing

6. The use of in proper amount and at the most suitable time may greatly increase yield.

- A) substances
- B) absorbing
- C) fertilizers
- D) numerous pastures

Part 2

Choose the necessary form:
A am
B is
C are
1. It surprising how popular American music is around the world.
2. What your aunt`s name?
3. Tom's parents travel agents.
4. In my opinion, it too soon to mak e a decision.
5. The streets wet.
6 you hungry?
7. The new models less expensive.
8. I worried about it, and he also.
9. She famous not only in the United States, but also abroad.
10. His arms so long that he can't find shirts to fit him.
11.It (not) far from the university, is it?
12.Bob absent, he must be sick again.
13. Where you from?
14.I glad to see you. Howyou?

Test your professional vocabulary

Part 1

- 1. is surrounding where living beings inhabit.
- A) harvesting
- B) environment
- C) cultivation
- D) pastures
- 2. Weeds, pests and plant diseases yields of agricultural crops.
- A) ensure
- B) increase
- C) reduce
- D) maintain
- 3. The science of producing healthy plants and animals for food and other uses.
- A) Genetic engineering
- B) Microbiology
- C) Agriculture
- D) Oncology
- 4. ... is a branch of agricultural science that deals with the study of crops and the soils in which they grow.
- A) Ecology
- B) Botany
- C) Microbiology
- D) Agronomy
- 5. Today, chemical weed killers known as are widely used.
- A) pesticides
- B) herbicides
- C) fertilizers
- D) substances
- 6..... conduct research in crop rotation, irrigation and drainage, plant breeding, soil classification, soil fertility, weed control, and other areas.
- A) Ecologists
- B) Engineers
- C) Chemists
- D) Agronomists

Part 2
Choose the necessary form:
A am
B is
C are
8. The news (not) very bad today.
9. Tom's parents travel agents.
10. Your moneyin your handbag
11. The best seats 10 \$.
12 you hungry?
13. What your parents' address?
14. I glad to see you. Howyou?
15. What your favourite sport?
16. Each piece of furniture in this display on sale for half price.
17. The customer always right.
18. Where you from?
19. One of the students in the classroom.
20. His arms so long that he can't find shirts to fit him.

Test your professional vocabulary in context

PLANTS

Choose the word that best keeps the meaning of the original sentence if it is substituted for the capitalized word or phrase.

- 1. The walnut is a deciduous tree that BEARS valuable nuts.
- a) enriches
- b) hides
- c) replaces
- d) yields
- 2. The orchid is an EXOTIC plant to see blooming in many European gardens
- a) a beautiful
- b) a colourful
- c) a common
- d) an unusual
- 3. The rose may grow as a low bush or as a tree, depending on how it is

PRUNED.

- a) nourished
- b) planted
- c) trimmed
- d) watered
- 4. The flowers will WITHER in a few hours.
- a) bloom
- b) dry up
- c) open
- d) revive
- 5. The needle-like leaves of the giant redwood tree are MINISCULE, each scarcely a quarter of an inch long.
- a) pretty
- b) thorny
- c) tiny
- d) wiry

a) cookedb) driedc) grownd) seen
7. The principal areas inhabited by marine algae are rocky SHORES, salt marshes, and shallow water.
a) cliffsb) coastsc) poolsd) rivers
8. Soot STICKS TO anything it touches.
a) blackensb) clings toc) points tod) streaks
9. The flower is the MOST ATTRACTIVE, most colourful and most fragrant part of many plants.
a) prettiestb) rarestc) softestd) strongest
10. Roses are POPULAR flowers in Polish gardens.
a) accustomedb) favouritec) ordinaryd) vulgar

6. Leeks are CULTIVATED throughout much of the world.

Test 4 Test your professional vocabulary in context

PLANTS TYPES

bacteria

cheese

Put each of the following words and phrases in its correct place in the passage below.

forests plant

breeds

grasses

fungi rocks	kingdom scientists	plants seed-bearing
species	shrubs	varieties
stems	world	
(1)know that the plants.	ere are more than 335,000	0 different (2) of
Actually, if we travelled a kinds of plants than these much as dogs are merely	e, but some of these are	
The simplest plants found i and (8), that are (9)		celled (7) and algae, en growing on bread and
The next group of relatively that are found in (11)elsewhere.	_	ides the mosses and lichens, on rooftops, and
Some of these plants have (13) and leaves, but no roots.		
After that, the next group i of (14) plants.	ncludes ferns and bracken.	Finally, there is the group
Such plants include our common (15)and vegetables, and most trees, (16) and flowers.		

Test your professional vocabulary in context

Choose the right answer.
 The little boy climbed up the tree and sat on a a) branch b) root c) twig d) trunk
2. I think the birds must have eaten all the seeds I last month!a) sawedb) sewedc) showedd) sowed
3. They spent the afternoon blackberries in the wood.a) cuttingb) gainingc) pickingd) taking
4. It was spring, and the flowers werea) coming outb) going outc) growing upd) raising
5. It is difficult to grow good vegetables in the poor in this area.a) crustb) dirtc) soild) strand
6. You will have to those apple trees if you want a good crop of apples next summer.a) cutb) fellc) pruned) wash

7. Ifin March, they should give a host of splendid blooms a few months later. a) dug b) earthed c) installed d) planted
8. You will need a strong if you are going to dig that hard ground. a) hoe b) ladle c) rake d) spade
 9. You should plant in the autumn if you want the flowers to appear in the spring. a) bulbs b) roots c) stalks d) twigs
10. There is aof plant which is found only in this particular area. a) breed b) class c) specimen d) species
11. Sugar is more expensive now because there was a very poor sugarbeetlast year. a) collection b) crop c) gathering d) production
12. The flowers in this vase have a) dimmed b) dulled c) faded d) shaded
13. I want some roses with nice long, please.a) branchesb) feetc) stemsd) trunks

14. Why don't you some flower seeds in that patch of ground by the garden gate? a) bed b) dig c) set d) sow
15. He stood up and leant against the of the tree. a) body b) figure c) root d) trunk
16. You shouldn't hack theoff trees. They might die. a) bark b) crust c) peel d) rind
17 grows only in a hot climate.a) Cottonb) Linenc) Silkd) Wool
18. There are a lot of red on that holly bush.a) acornsb) berriesc) currantsd) nuts
19. The corn was not ready for cutting as the ears were still a) undeveloped b) unprepared c) unripe d) unsteady
20. Some treestheir leaves in winter. a) fell b) leave c) shed d) throw

Test your professional vocabulary in context

PLANTS AS THEY ARE

Put each of the following words into its correct place in the passage below.

a) agriculture	e) environment	i) imaginable	m) small
b) bright	f) horticulture	j) pine	n) snow
c) darkness	g) hot	k) science	o) yeast
d) enormous	h) naked	1) seaweed	

Plants can be almost any colour (1)
They may be (2), or so small that you cannot see them with the (3) eye.
A giant (4)is just as much a plant as a (5)tree, (6)plant, or a bacterium which is too (7) to see.
Some plants flourish in (8) climates, while others live equally successfully on (9) and ice.
Some carry out their life processes in total (10), while others are at their best in (11) sunlight.
A whole (12)known as ecology has grown up to help us understand the relationship between the (13) and living things there.
(14), forestry, and (15)are the sciences of learning how to make living things do what we want them to do in a given place.

Test your professional vocabulary in context

TREES

Give the Ukrainian name of the following tree

1. ash
2. aspen
3. birch
4. chestnut
5. elm
6. fir
7. hazel
8. larch
9. linden
10. maple
11. oak
12. pine
13. poplar
14. walnut
15. willow
Give the English for the following
16. Широколистяні дерева
17. Листопадні дерева18. Хвойні
19. Деревна́ кро́на
20. Сто́вбур
21. Гілки
22. Коріння

Test your professional vocabulary in context

PLANT STEMS

Put each of the following words and phrases into its correct place in the passage below

a) air	d) branching	g) reproduction	j) soft	m) spread
	head			
b)	e) ground	h) shrubs	1) storage	n) woody plants
climb				
c) erect	f) liquids	i) tall	k) tissue	o) trunk

Stems are parts of plants that may be organs of food 1or of 2.	
They may be useful in moving 3from one part of the plant	to
another, or they may merely hold certain parts high in the 4	The
5of stems may be 6 and weak or hard and woo	dy. The
different groups of 7are vines, trees, and shrubs. Vines are rare	ely
8 They 9 wind, or 10over some support. Trees ha	ive a
single trunk, with a 11and are, when mature, normally over	er three
metres 12, on the other hand, do not have	a
14 They usually branch close to the 15 and are no	t very
tall	

Test your professional vocabulary in context

STAGES IN THE PLANT LIFE-CYCLE

Put the following stages of the life-cycle of a plant in the correct order.

1. First	a. flowers appear.
2. Next	b. the fruit forms.
3. Soon	c. germination begins.
4. At this stage	d. leaves also start to sprout.
5. Subsequently	e. the plant decomposes.
6. Meanwhile	f. the plant dies.
7. Later	g. pollination takes place
8. Then	h. roots begin to develop.
9. During this process	i. the seed begins to swell.
10 Afterwards	j the seed is sown.
11 Eventually	k. the seed needs water.
12 Finally	1 the stigma receives pollen.

c) mosses

d) mushrooms

Test your professional vocabulary in context

PLANTS
Choose the right answer.
1. One of the effects of acid rain is that it causes plants to
a) contract
b) shrink
c) thrive
d) wither
2. Owing to the warm weather, there has beenof strawberries this
year.
a) an affluence
b) a glut
c) an overflow
d) a redundancy
3. Our grandpa's sitting over there in the shade in the middle of that of trees.
a) bundle
b) clump
c) scrub
d) stack
4. We thought the plants had all died from lack of rain, and were delighted to
see new appearing.
a) points
b) shapes
c) shoots
d) tops
5. Oak and beech are
a) bushes
b) coniferous trees
c) deciduous trees
d) shrubs
6. Those could be delicious fried in butter for dinner.
a) ferns
b) fungi

7. A green carpet ofcovered the decaying tree trunk.
a) herb b) moss c) shrub d) turf
8. When the wind blows, you can hear the leaves
a) crackingb) creakingc) rattlingd) rustling
9. The indiscriminate use of pesticides hasmany rare species.
a) cancelledb) devastatedc) extinctedd) wiped out
10. Waste paper can beinstead of being burnt.
a) decomposedb) incineratedc) recycledd) revamped
11. Don't eat those berries in case they are
a) contagiousb) infectiousc) poisonousd) venomous
12. Several of the trees in the park were
a) diseasedb) illc) sickd) unhealthy

Test your professional vocabulary in context

HERBS.

Put each of the following words and phrases into its correct place.

- a) passage below
- b) biennials
- c) blades
- d) classified
- e) flavor
- f) fleshy
- g) life-cycle
- h) mature
- i) medicines
- j) perennial
- k) scent
- 1) seasons
- m) seed
- n) value
- o) year

Herbs
Herb is a low-growing plant that has a or juicy stem when it is young.
The word herbcomes from Latin word herba, meaning "grass" or "".
Some herbs are used in cooking. Although they have little food they
make food tasty and full of
Other herbs giveto perfumes.
Others still are used for
Herbs are frequently as annuals,, and perennials.
An annual goes through itsfrom seed toin a year.
A biennial requires twoto complete the cycle.
A may live many seasons, producing seeds after year
once the plant has become

Test your professional vocabulary in context

ENVIRONMENT PROTECTION.Complete the sentences with the corre

Complete the sente	ences with the correct wor	ds from the box				
1. It's amazing ho	w muchyou can f	find in a city garden: f	foxes,			
hedgehogs, frogs and lots of birds and insects						
2. We need stricter laws to protect thefrom the smoke and gases						
released						
by cars and factori	es.					
3. This apple juice	e is That means	the fruit trees weren't	t sprayed with			
chemicals.						
4. Most farmers sp	oray their with	to stop insects eat	ing them.			
5. Bygla	ss, metal and paper, we sa	ive energy				
6. Scientists have	detected holes in the	, which will all	low harmful			
radiation to reach t	he surface of the Earth.					
7. One result of gl	obalis likely to	be a disastrous rise in	n sea levels.			
	causes a great deal of air_					
9. Human activity	has destroyed many anim	al	<u>.</u> .			
10. Damage has b	een caused to forests by _	rain.				
11. A chemical	may destroy harmful	insects, but it often h	as undesirable			
side-effects.						
12. A great deal of	fis used to incre	ease the yield of crops	. But it then			
runs						
off into the water s	supply and causes other pro	oblems.				
13. Your car	may look OK, but in fa	act it is part of the big	gest and			
fastest						
growing global sou	arce of pollution.					
14. It is important to preserve as many species of plant and animal as we can, to						
maintain	•					
15. Most of the wi	Idlife of a country like Br	itain has long been de	stroyed. The			
priority now is the of what remains.						
16. Conservationia	sts are very suspicious of _	crops they	fear genetic			
pollution of other s	species.					
17. In many places the destruction of forest has lead to seriousof the						
soil, and sometimes to flooding						
a) biodiversity	b) fertilizer	c) ozone layer	d) warming			
e) conservation	f) genetically modified	g) pollution	h) crops			
i) pesticides	j) erosion	k) pesticide	1) recycling			
m) environment	n) wildlife	o) exhaust	p) acid			
q) species	r) organic	s) matter	t) soil			

Glossary

A

abundance п. надлишок
achievement п. досягнення
adherent а. близький, суцільно прижатий
agriculture п. сільське господарство
agricultural а. сільськогосподарський
agronomy п. агрономія
akin а. подібний, близький, схожий
aminoacid п. амінокислота
application п. внесення, застосування
apply v. використовувати, вносити
artificially adv. штучно
attach v. прикріпити, приєднати
average п. середина а. середній, звичайний

B

bar n. пруток, стрижень / cutter bar n. різальний апарат barley n. ячмінь

barn n. конюшня, корівник

barrel n. бочка

bear v. переносити

bearing n. підшипник

beater n. бітер

bee-keeper n. пасічник

bee-hife (Pl. -hives) n. вулик

belly n. живіт

belt n. пас, ремінь

branch n. галузь

bread хліб

breathe v. дихати

breed v. виводити

breed n. порода

bone n. кістка

bulk n. основна маса, об'єм

bulky a. об'ємистий (корм)

butter n. / buttermilk n. пахта

 \mathbf{C}

capable а. здатний

cattle n. велика рогата худоба

cell n. клітина

chamber n. камера

chest n. грудина

charge n. заряд

cheesy a. сирний

coil n. котушка

combustion n. горіння

compress v. стискувати, спресовувати

concentrate n. концентрат

consider v. розглядати/вважати

consume v. споживати

consumption n. споживання

convert v. перетворювати

corn n. кукурудза

correspond v. відповідати

coulter n. ніж плуга, сохи

crankshaft n. колінчатий вал

статру а. страждаючий від судорог

cylinder п. циліндр, барабан

D

decrease v. зменшувати

define v. визначати

deposit n. відкладення

digest v. переварювати

digestive a. травний

dressing g. внесення

drill n. сівалка, рядкова сівалка v. сіяти по стерні

double helix n. подвійна спіраль

drought-resistant a. стійкий до посухи

drought n. посуха

drive n. привод v. керувати, приводити в дію

four-wheel drive з приводом на чотири колеса

egg n. яйце

engine n. двигун

endurance n. витривалість

environment n. середовище

engineering n. техніка, машинобудування / agricultural engineering n. механізація сільського господарства

F

farm n. / v. господарство/вести справи

fat n. жир, сало

fattening n. відгодівля

feed v. годувати

fertilize v. удобрення

fibrous a. фіброзний

film n. плівка

firm a. твердий

fit v. точно підняти

furnish v, постачати

flesh n. сире м'ясо, м'язева тканина

flock n. зграя птахів

fodder n. корм для худоби

food n. / foodstaffs n.

forbear n. попередник

frame n. paма

friction n. тертя

fuel n. паливо

fundic glands n. pl. фундальні залози шлунку

frog n. стійка плуга

 \mathbf{G}

gear n. шестерня, зубчата передача

germination n. проростання

grain n. зерно

graze v. пасти, пастися

grind v. молотити, переломувати

grip n. зчеплення, захват

grow v. рости

growth n. pict

H

harmful a. шкідливий, згубний

harrowing n. боронування

harvest n. / v. врожай/збирати врожай

hatchability n. яйценосність

heat v. нагрівати n. тепло

hemp n. конопля

hull n. лушпайка

hydrochloric acid n. соляна кислота

Ι

immunity n. імунітет

implement n. знаряддя

intestine n. кишечник J jug n. банка juice n. ciк K kilowatt (kw) n. кіловат kind n. рід, сорт, розряд, клас knob n. кнопка, ручка \mathbf{L} lack of недостача legume n. бобові культури lettuce n. салат lever n. ричаг limb n. кінцівка linear a. лінійний listless a. апатичний live-stock n. худоба, поголів'я худоби load n. вантаж lung n. легені \mathbf{M} maize кукурудза management n. управління / soil management n. ґрунтознавство mammal n. ссавець

inflammation n. запалювання

manure n. добрива (природні)

maturity n. зрілість

mature v. дозрівати

meat n. м'ясо

mild a. м'який

milk n. молоко

mite n. кліщ

moist a. вогкий, вологий

moisture вологість

muscle n. мускул

N

nitrogen n. азот

nourishing a. поживний

nourishment n. споживання, їжа, харчі

nutritive n. поживний

nutrients n. поживні речовини

0

oats n. oBec

odourless a. непахучий

occur v. траплятися

oil n. масло

P

palatable a. смачний, апетитний, їстівний

plant n. рослина

plough n. плуг / plough v. орати

plough layer орний шар

peracardium n. (pl. -dia) білясерцева сумка

pests n. шкідники

protein n. білок

palatability n. смачність

ритр n. помпа, насос v. нагнітати

posterior a. задній

piston n. поршень potassium n. калій

power n. сила, потужність, енергія / v. приводити в дію

pullet n. курочка, молода індичка

Q

quality n. якість

quantity n. кількість

R

rear a. задній

reciprocating а. зворотно-поступальний

reduce v. скоротити

require v. потребувати

requirement n. потреба

residues n. pl. залишки, відходи

retart v. уповільнювати

retarded a. уповільнений

rigid a. короткий, нерухомо прикріплений

rinse v. полоскати

roll n. каток, ролик $\,/\,$ v. Котитися

root n. корінь

rotate v. обертати

rotation n. обертання

S

Sand пісок

safety n. безпека

safety engineering n. техніка безпеки

scuffling n. лущення

seed n. насіння

seeding g. / seeding rate

share n. леміш

shell n. шкорлупа

shoot n. сходи

shortage n. брак, недолік

silage n. силос

skimmilk n. обрат, зняте молоко

soil n. грунт

sow n. свиня, свиноматка

spark n. іскра

species n. pl. вид

speed n. швидкість

spring n. пружина, джерело

starch n. крохмал

stiff a. негнучкий

stock n. порода, поголів'я

stomach n. шлунок

stubble n. стерня

straw n. солома

stroke n. такт, хід поршня / power stroke n. робочий хід

sunflower n. сонячник

surface n. поверхня

swallow v. ковтати

swath n. смуга прокошеної трави, валок

sweeper n. культиватор, розпушувач

synthesis n. синтез

synthesize v. синтезувати

solution n. вирішення, розв'язання, розчин

 \mathbf{T}

tankage n. відброси боєнь, що йдуть на добрива

tasty a. смачний

tenure n. володіння

thorax n. грудна клітка

thrive v. швидко рости

tillage n. обробіток землі

tillage crop n. просапна культура

tilth n. обробіток / глибина оранки

timothy hay n. тимофіївка лучна tine n. зуб tissue n. тканина trail v. тягнути treatment n. обробка tyre n. шина, покришка U use v. використовувати useful adj. корисний utility v. родючість/корисність \mathbf{V} valuable a. цінний value n. цінність, важливість valve n. клапан variety n. copt vegetables n. овочі vegetation n. рослинність \mathbf{W} walker n. платформовий соломотряс / straw walker n. клавішний соломотряс wear n. зношування weeds n. бур'ян wheat n. пшениця / winter wheat озима пшениця wheel n. колесо windrow n. валок / v. загрібати у валки

whey n. сироватка

write theses v. писати дисертацію

write v. писати

 \mathbf{Y}

year n. pik / last year n. минулого року/ next year n. наступного року yield n. врожай

 \mathbf{Z}

zink n. цинк

zink oxide n. оксид цинку

zink sulphate n. сульфат цинку

PART 2 PROFESSIONAL TRANSLATION TIPS

GRAMMATICAL TRANSFORMATIONS

• Визначення граматичних трансформацій

Під граматичними трансформаціями слід розуміти перетворення структури речення в процесі перекладу для відтворення найточнішої відповідності англійському реченню на матеріалі української мови із зображенням єдності змісту і форми. Це вже буде нова єдність, яка відповідає нормам мови перекладу.

Граматичні трансформації складаються з таких операцій:

- 1) зміна структури речення;
- 2) зміна порядку слів;
- 3) заміна частин мови і членів речення;
- 4) додавання слів;
- 5) опущення слів із граматичних причин.

• Функціональний принцип передачі граматичних форм та синтаксичних конструкцій у перекладі

Аналітична будова англійської мови створює умови для багато фукнціонольності граматичних форм і синтаксичних конструкцій. Тому в процесі перекладу необхідно насамперед врахувати конкретну функцію кожної форми та конструкції, щоб правильно передати її значення.

Смислова функція кожної граматичної форми синтаксичної конструкції може визначатися такими факторами:

- 1) синтаксичною функцією;
- 2) логічною (смисловою) структурою речення;
- 3) особливостями його лексичного наповнення;
- 4) контекстом речення.

1. Read and translate the texts.

Text A The Nature and Nurture of Soils

Some soils are exceptionally good for growing crops and others are inherently unsuitable; most are in between. Many soils also have limitations, such as low organic matter content, texture extremes (coarse sand or heavy clay), poor drainage, and layers that restrict root growth. Iowa's loess-derived prairie soils are naturally blessed with a combination of silt loam texture and high organic matter contents. By every standard for assessing soil health, these soils — in their virgin state — would rate very high. We can compare them with a person who is naturally very healthy and has great athletic abilities. Many of us are not quite so lucky and Nature has given us qualities that may never make us great baseball players, swimmers, or marathon runners, even if we tried very hard.

The way we care for, or nurture, a soil modifies its inherent nature. A good soil can be abused through years of poor management and turn into one with poor health, although it generally takes a lot of mistreatment to reach that point. On the other hand, an innately challenging soil may be very "unforgiving" of poor management and quickly become even worse. For example, a heavy clay loam soil can be easily compacted and turn into a dense mass. Both the naturally good and poor soils can be productive if they are managed well. However, they will probably never reach parity, because some limitations simply cannot be completely overcome. The key idea, however, is the same that we wish for our children — we want our soils to reach their fullest potential.

Some characteristics of healthy soils are relatively easy to achieve — for example, an application of limestone will make a soil less acid and increase availability of many nutrients to plants. But what if the soil is only a few inches deep?

There is little that can be done within economic reason, except on a very small garden-size plot. If the soil is poorly drained because of a restricting subsoil layer of clay, tile drainage can be installed, but at a significant cost.

Text B

We use the term building soils to emphasize that the nurturing process of converting a degraded or low quality soil into a truly high quality one requires understanding, thought, and significant actions. This is also true for maintaining or improving already healthy soils. Soil organic matter influences almost all of the characteristics we've just discussed. For soil tilth, organic matter is one of the main influences. Organic matter is even critical for managing pests — and good management of this resource should be the starting point for a pest management program on every farm. Good organic matter management is, therefore, the foundation for high quality, healthy soils. Practices that promote good soil organic matter management are, thus, the very foundation for a more sustainable and thriving agriculture. It is for this Good soil organic matter management is ... the very foundation for a more sustainable and thriving agriculture.

It is for this reason that so much space is devoted to organic matter in this book. However, we cannot forget other critical aspects of management — such as trying to lessen compaction by heavy field equipment and good nutrient management.

Although the details of how best to create high quality soils differ from farm to farm and even field to field, the general approaches are the same:

- Use a number of practices that add organic materials to the soil.
- Use diverse sources of organic materials.
- Reduce unneeded losses of native soil organic matter.
- Use practices that leave the soil surface protected from raindrops and temperature extremes.
- Whenever traveling on the soil with field equipment, use practices that help develop and maintain good soil structure.
- Manage soil fertility status to maintain optimal pH levels for your crops and a sufficient supply of nutrients for plants without resulting in water pollution.
- In arid regions, a combination of gypsum and leaching may be needed to reduce the amount of sodium or salt in the soil.

Text C

HOW DO SOILS BECOME DEGRADED

Although we want to emphasize healthy, high quality soils, it is also crucial to recognize that many soils in the U.S. and around the world have become degraded — what many used to call "worn out" soils. Degradation most commonly occurs when erosion and decreased soil organic matter levels initiate a downward spiral. Soils become compact, making it hard for water to infiltrate and roots to develop properly. Erosion continues and nutrients decline to levels too low for good crop growth. The development of saline (too salty) soils under irrigation in arid regions is another cause of reduced soil health. (Salts added in the irrigation water need to be leached beneath the root zone to avoid the problem.)

Historically, soil degradation has caused significant harm to many early civilizations, including the drastic loss of productivity resulting from soil erosion in Greece and many locations in the Middle East (such as Israel, Jordan, and Lebanon). This led to either colonial ventures to help feed the citizenry or to the decline of the early cultures.

Tropical rainforest conditions (high temperature and rainfall, with most of the organic matter near the soil surface) may cause significant soil degradation within two or three years of conversion to cropland. This is the reason that the "slash and burn" system, with people moving to a new patch of forest every few years, developed in the tropics. After farmers depleted the soils in a field, they would cut down and burn the trees in the new patch, allowing the forest and soil to regenerate in previously cropped areas.

The westward push of U.S. agriculture was stimulated by rapid soil degradation in the East, originally a zone of temperate forest. Under the conditions of the humid portion of the Great Plains (moderate rainfall and temperature, with organic matter distributed deeper in the soil), it took many decades for the effects of soil degradation to become evident.

1.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all
it seems that
moreover
to the fullest extents
for example
mainly
therefore
furthermore
since
lastly

1.3. Discuss whether the soils on the picture are degraded and why.



• Залежність передачі граматичних форм у перекладі від їх синтаксичної функції

"однойменні" Важливо враховувати, що навіть граматичні форми, тобто такі, які граматики відносять до однієї й тієї ж частини мови в англійській та українській мовах, підпорядковуються цій складній функціональній залежності так само, як форми і конструкції, що не мають формальної відповідальності в українській мові. Наприклад, форма минулого часу дієслова в підрядному з'ясувальному реченні може мати в англійській мові функцію узгодження часів.

2. Read and translate the texts.

Text A Soil Organic Matter

Follow the appropriateness of the season, consider well the nature and conditions of the soil, then and only then least labor will bring best success.

Rely on one's own idea and not on the orders of nature, then every effort will be futile.

—JIASIXIE, 6TH CENTURY, CHINA

Soil consists of four important parts: mineral solids, water, air, and organic matter. Mineral solids are sand, silt, and clay. Sand has the largest particle size; clay has the smallest. The minerals mainly consist of silicon, oxygen, aluminum, potassium, calcium, and magnesium. The soil water, also called the soil solution, contains dissolved nutrients and is the main source of water for plants. Essential nutrients

are made available to the roots of plants through the soil solution. The air in the soil, which is in contact with the air above ground, provides roots with oxygen and helps remove excess carbon dioxide from respiring root cells. The clumping together of mineral and organic particles to form aggregates of various sizes is a very important property of soils. Compared to poorly aggregated soils, those with good aggregation usually have better tilth and contain more spaces, or pores, for storing water and allowing gas exchange.

Organic matter has an overwhelming effect on almost all soil properties, although it is generally present in relatively small amounts. A typical agricultural soil has 1 to 6 percent organic matter. It consists of three distinctly different parts — living organisms, fresh residues, and well-decomposed residues. These three parts of soil organic matter have been described as the living, the dead, and the very dead.

This three-way classification may seem simple and unscientific, but it is very useful. The living part of soil organic matter includes a wide variety of microorganisms, such as bacteria, viruses, fungi, protozoa, and algae. It even

includes plant roots and the insects, earthworms, and larger animals, such as moles, woodchucks, and rabbits, that spend some of their time in the soil. The living portion represents about 15 percent of the total soil organic matter. Microorganisms, earthworms, and insects help break down crop residues and manures and, as they use the energy of these materials, mix them with the minerals in the soil. In the process, they recycle plant nutrients. Sticky substances on the skin of earthworms and those produced by fungi help bind particles together. This helps to stabilize the soil aggregates, clumps of particles that make up good soil structure. Organisms such as earthworms and some fungi also help to stabilize the soil's structure (for example, by producing channels that allow water to infiltrate) and, thereby, improve soil water status and aeration.

A good soil structure increases water filtering into the soil and decreases erosion. Plant roots also interact in significant ways with the various

microorganisms and animals living in the soil. Another important aspect of soil organisms is that they are in a constant struggle with each other.

The fresh residues, or "dead" organic matter, consist of recently deceased microorganisms, insects, earthworms, old plant roots, crop residues, and recently added manures. In some cases, just looking at them is enough to identify the origin of the fresh residues. This part of soil organic matter is the active, or easily decomposed, fraction. This active fraction of soil organic matter is the main supply of food for various organisms living in the soil — microorganisms, insects, and earthworms. As organic materials decompose, they release many of the nutrients needed by plants. Organic chemical compounds produced during the decomposition of fresh residues also help to bind soil particles together and give the soil a good structure.

Organic molecules directly released from cells of fresh residues, such as proteins, amino acids, sugars, and starches, are also considered part of this fresh organic matter. These molecules generally do not last long in the soil because so many microorganisms use them as food.

The well-decomposed organic material in soil, the "very dead," is called humus. Humus is a term sometimes used to describe all soil organic matter. Some use it to describe just the part you can't see without a microscope. We'll use the term to refer only to the well-decomposed part of soil organic matter. The already well-decomposed humus is not a food for organisms, but its very small size and chemical properties make it an important part of the soil. Humus holds on to some essential nutrients, storing them for slow release to plants. Humus also can surround certain potentially harmful chemicals and prevent them from causing damage to plants. Good amounts of soil humus can both lessen drainage or compaction problems that occur in clay soils and improve water retention in sandy soils.

Text B

Organic matter decomposition is a process that is similar to the burning of wood in a stove. When burning wood reaches a certain temperature, the carbon in the wood combines with oxygen from the air and forms carbon dioxide. As this occurs, the energy stored in the carbon containing chemicals in the wood is released as heat in a process called oxidation. The biological world, including humans, animals, and microorganisms, also makes use of energy inside carbon-containing molecules. This process of converting sugars, starches, and other compounds into a directly usable form of energy is also a type of oxidation. We usually call it respiration. Oxygen is used and carbon dioxide and heat are given off in this process.

A multitude of microorganisms, earthworms, and insects get their energy and nutrients by breaking down organic residues in soils. At the same time, much of the energy stored in residues is used by organisms to make new chemicals as well as new cells. How does energy get stored inside organic residues in the first place? Green plants use the energy of sunlight to link carbon atoms together into larger molecules. This process, known as photosynthesis, is used by plants to store energy for respiration and growth.

Soil carbon is sometimes used as a synonym for organic matter. Because carbon is the main building block of all organic molecules, the amount in a soil is very strongly related to the total amount of all the organic matter — the living organisms plus fresh residues plus well decomposed residues. However, under semiarid conditions, it is common to also have another form of carbon in soils — limestone either as round concretions or dispersed evenly throughout the soil. Lime is calcium carbonate, which contains calcium, carbon, and oxygen. This is an inorganic carbon form. Even in humid climates, when limestone is found very close to the surface, some may be present in the soil. So, when people talk about soil carbon instead of organic matter, they are usually referring to organic carbon. The amount of organic matter in soils is about twice the organic carbon level.

Text C

Organic matter functions in a number of key roles to promote crop growth. It also is a critical part of a number of global and regional cycles.

A fertile soil is the basis for healthy plants, animals, and humans. Soil organic matter is the very foundation for healthy and productive soils. Understanding the role of organic matter in maintaining a healthy soil is essential for developing ecologically sound agricultural practices. It's true that you can grow plants on soils with little organic matter. In fact, you don't need any soil at all! [Although gravel or sand hydroponic systems without soil can grow excellent crops, large-scale systems of this type are usually neither economically or ecologically sound.] It's also true that there are other important issues aside from organic matter when considering the quality of a soil. However, as soil organic matter decreases, it becomes increasingly difficult to grow plants, because problems with fertility, water availability, compaction, erosion, parasites, diseases, and insects become more common. Ever higher levels of inputs fertilizers, irrigation water, pesticides, and machinery — are required to maintain yields in the face of organic matter depletion. But if attention is paid to proper organic matter management, the soil can support a good crop without the need for expensive fixes.

The organic matter content of agricultural topsoil is usually in the range of 1 to 6 percent. A study of soils in Michigan demonstrated potential crop-yield increases of about 12 percent for every 1 percent organic matter. In a Maryland experiment, researchers saw an increase of approximately 80 bushels of corn per acre when organic matter increased from 0.8 to 2 percent.

2.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all it seems that	therefore furthermore
moreover	since
to the fullest extents	lastly
for example	as a rule

mainly	as well as
However, a major problem with this	A number of researchers have
kind of application is	reported
	Recently investigators have examined
	the effects of X on Y

• Залежність передачі граматичної форми від її лексичного наповнення.

Інколи переклад фрази ускладнюється трудністю знайти відповідність якомусь одному з її складових слів. У таких випадках потрібно перекладати шляхом зміни форми слова.

3. Read and translate the texts.

Text A Topsoil

Having a good amount of topsoil is important. But what gives topsoil its beneficial characeristics? Is it because it's on TOP? If we bring a bulldozer and scrape off one foot of soil, will the exposed subsoil now be topsoil be

cause it's on the surface? Of course, everyone knows that there's more to topsoil than its location on the soil surface. Most of the properties we associate with topsoil — good nutrient supply, tilth, drainage, aeration, water storage, etc. — are there because topsoils rich in organic matter and contains a huge diversity of life.

You might wonder how something that's only a small part of the soil can be so important for growing healthy and high-yielding crops. The enormous influence of organic matter on so many of the soil's properties — biological, chemical, and physical — makes it of critical importance to healthy soils. Part of the explanation for this influence is the small particle size of the well-decomposed portion of organic matter — the humus. Its large surface area-to-volume ratio means that humus is in contact with a considerable portion of the soil. The

intimate contact of humus with the rest of the soil allows many reactions, such as the release of available nutrients into the soil water, to occur rapidly. However, the many roles of living organisms make soil life an essential part of the organic matter story.

Text B

Plant Nutrition

Plants need 18 chemical elements for their growth — carbon (C), hydrogen (H), oxygen (O), nitrogen (N), phosphorus (P), potassium (K), sulfur (S), calcium (Ca), magnesium (Mg), iron (Fe), manganese (Mn), boron (B), zinc (Zn), molybdenum (Mo), nickel (Ni), copper (Cu), cobalt (Co), and chlorine (Cl). Plants obtain carbon as carbon dioxide (CO2) and oxygen partially as oxygen gas (O2) from the air. The remaining essential elements are obtained mainlyfrom the soil. The availability of these nutrients is influenced either directly or indirectly by the presence of organic matter. The elements needed in large amounts — carbon, hydrogen, oxygen, nitrogen, phosphorus, potassium, calcium, magnesium, sulfur — are called macronutrients. The other elements, called micronutrients, are essential elements needed in small amounts.

Nutrients from decomposing organic matter. Most of the nutrients in soil organic matter can't be used by plants as long as they exist as part of large organic molecules. As soil organisms decompose organic matter, nutrients are converted into simpler, inorganic, or mineral forms that plants can easily use. This process, called mineralization, provides much of the nitrogen that plants need by converting it from organic forms. For example, proteins are converted to ammonium (NH4+) and then to nitrate (NO3-). Most plants will take up the majority of their nitrogen from soils in the form of nitrate. The mineralization of organic matter is also an important mechanism for supplying plants with such nutrients as phosphorus and sulfur, and most of the micronutrients. This release of nutrients from organic matter by mineralization is part of a larger agricultural nutrient cycle.

Addition of nitrogen. Bacteria living in nodules on legume roots convert nitrogen from atmospheric gas (N2) to forms that the plant can use directly. There are a number of free-living bacteria that also fix nitrogen.

Text C

Storage of nutrients on soil organic matter

Decomposing organic matter can feed plants directly, but it also can indirectly benefit the nutrition of the plant. A number of essential nutrients occur in soils as positively charged molecules called cations (pronounced cat-eyeons). The ability of organic matter to hold onto cations in a way that keeps them available to plants is known as cation exchange capacity (CEC). Humus has many negative charges. Because opposite charges attract, humus is able to hold onto positively charged nutrients, such as calcium (Ca++), potassium (K+), and magnesium(Mg++). This keeps them from leaching deep into the subsoil when water moves through the topsoil. Nutrients held in this way can be gradually released into the soil solution and made available to plants throughout the growing season. However, keep in mind that not all plant nutrients occur as cations. For example, the nitrate form of nitrogen is negatively charged (NO3-) and is actually repelled by the negatively charged CEC. Therefore, nitrate leaches easily as water moves down through the soil and beyond the root zone.

Clay particles also have negative charges on their surfaces, but organic matter may be the major source of negative charges for coarse and medium textured soils. Some types of clays, such as those found in the southeastern United States and in the tropics, tend to have low amounts of negative charge. When these clays are present, organic matter may be the major source of negative charges that bind nutrients, even for fine textured (high clay content) soils.

3.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all	mainly
it seems that	therefore
moreover	furthermore
to the fullest extents	since
for example	lastly

•Параграфування.

У багатьох повідомленнях, взятих з англійських та американських наукових матеріалів, майже кожне речення починається з абзацу.

Було б неправильно зберігати цю велику кількість абзаців у перекладі наукового тексту, як це прийнято при перекладі книг та журнальних статей. Потрібно перевірити, чи немає між окремими суміжними абзацами статті логічного зв'язку, і в усіх випадках, коли він існує, ліквідувати непотрібний абзац.

4. Read and translate the texts.

Text A

Soil Tilth

When soil has a favorable physical condition for growing plants, it is said to have good tilth. Such a soil is porous and allows water to enter easily, instead of running off the surface. More water is stored in the soil for plants to use between rains and less soil erosion occurs. Good tilth also means that the soil is well aerated. Roots can easily obtain oxygen and get rid of carbon dioxide. A porous soil does not restrict root development and exploration. When a soil has poor tilth, the soil's structure deteriorates and soil aggregates break down, causing increased compaction and decreased aeration and water storage. A soil layer can

become so compacted that roots can't grow. A soil with excellent physical properties will have numerous channels and pores of many different sizes.

Studies on both undisturbed and agricultural soils show that as organic matter increases, soils tend to be less compact and have more space for air passage and water storage. Sticky substances are produced during the decomposition of plant residues. Along with plant roots and fungal hyphae, they bind mineral particles together into clumps, or aggregates. In addition, the sticky secretions of mycorrhizal fungi — those that infect roots and help plants get more water and nutrients — are important binding material in soils. The development of aggregates is desirable in all types of soils because it promotes better drainage, aeration, and water storage. The one exception is for wetland crops, such as rice, when you want a dense, puddle soil to keep it flooded.

Organic matter, as residue on the soil surface or as a binding agent for aggregates near the surface, plays an important role in decreasing soil erosion. Surface residues intercept raindrops and decrease their potential to detach soil particles.

These surface residues also slow water as it flows across the field, giving it a better chance to infiltrate into the soil. Aggregates and large channels greatly enhance the ability of soil to conduct water from the surface into the subsoil.

Most farmers can tell that one soil is better than another by looking at them, touching them, how they work up when tilled, or even by sensing how they feel when walked on. What they are seeing or sensing is really good tilth. Differences can be created by different management strategies. Farmers and gardeners would certainly rather grow their crops on the more porous soil depicted in the photo on the right. Since erosion tends to remove the most fertile part of the soil, it can cause a significant reduction in crop yields. In some soils, the loss of just a few inches of topsoil may result in a yield reduction of 50 percent. The surface of some soils low in organic matter may seal over, or crust, as rainfall breaks down aggregates, and pores near the surface fill with solids. When this happens, water that can't infiltrate into the soil runs off the field, carrying valuable topsoil. Large

soil pores, or channels, are very important because of their ability to allow a lot of water to flow rapidly into the soil. Larger pores are formed a number of ways. Old root channels may remain open for some time after the root decomposes. Larger soil organisms, such as insects and earthworms, create channels as they move through the soil. The mucus that earthworms secrete to keep their skin from drying out also helps to keep their channels open for a long time.

Text B

Protection of the Soil Against Rapid Changes in Acidity

Acids and bases are released as minerals dissolve and organisms go about their normal functions of decomposing organic materials or fixing nitrogen. Acids or bases are excreted by the roots of plants, and acids form in the soil from the use of nitrogen fertilizers. It is best for plants if the soil acidity status, referred to as pH, does not swing too wildly during the season. The pH scale is a way of expressing the amount of free hydrogen (H+) in the soil water. More acidic conditions, with greater amounts of hydrogen, are indicated by lower numbers. A soil at pH 4 is very acid. Its solution is 10 times more acid than a soil at pH 5. A soil at pH 7 is neutral — there is just as much base in the water as there is acid. Most crops do best when the soil is slightly acid and the pH is around 6 to 7. Essential nutrients are more available to plants in this pH range than when soils are either more acidic or more basic. Soil organic matter is able to slow down, or buffer, changes in pH by taking free hydrogen out of solution as acids are produced or by giving off hydrogen as bases are produced.

4.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all it seems that

moreover to the fullest extents for example mainly therefore furthermore

since lastly as a rule as well as

•Порядок слів і структура речення в перекладі

Дуже важливо враховувати принципову різницю між порядком слів у реченні в українській та англійській мовах. Англійський порядок слів має насамперед граматичну функцію. Для більшостіповідомлень інформаційного характеру в англійських і американських газетах характерне таке розміщення слів, яке вимагає зміни в перекладі на українську мову.

Типова побудова англійської фрази така:

спочатку групи підмета,

потім — група присудка.

Головне — центр повідомлення — ставиться на першому місці.

Подробиці повідомлення — обставина місця та обставина часу — в кінці.

5. Read and translate the texts.

Text A

Amount of Organic Matter in Soils

The amount of organic matter in any particular soil is a result of a wide variety of environmental, soil, and agronomic influences. Some of these, such as climate and soil texture, are naturally occurring. Human activity also influences soil organic matter levels. Tillage, crop rotation, and manuring practices all have profound effects on the amount of soil organic matter. Pioneering work on the

effect of natural influences on soil organic matter levels was carried out in the U.S. more than 50 years ago by Hans Jenny.

The amount of organic matter in soil is a result of all the additions and losses of organic matter that have occurred over the years. In this chapter, we will look at why different soils have different organic matter levels. Anything that adds large amounts of organic residues to a soil may increase organic matter. On the other hand, anything that causes soil organic matter to decompose more rapidly or be lost through erosion may deplete organic matter.

If additions are greater than losses, organic matter increases. When additions are less than losses, there is a depletion of soil organic matter. When the system is in balance, and additions equal losses, the quantity of soil organic matter doesn't change over the years.

Text B

NATURAL FACTORS

Temperature

In the United States, it is easy to see how temperature affects soil organic matter levels. Traveling from north to south, average hotter temperatures lead to less soil organic matter. As the climate gets warmer, two things tend to happen (as long as rainfall is sufficient): more vegetation is produced because the growing season is longer, and the rate of decomposition of organic materials in soils also increases, because soil organisms work more efficiently in warm weather and for longer periods of the year. This increasing decomposition with warmer temperatures becomes the dominant influence determining soil organic matter levels.

Rainfall

Soils in arid climates usually have low amounts of organic matter. In a very dry climate, such as a desert, there is little growth of vegetation. Decomposition may be very low when the soil is dry and microorganisms cannot function well.

When it finally rains, a very rapid burst of decomposition of soil organic matter occurs. Soil organic matter levels generally increase as average annual precipitation increases. With more rainfall, more water is available to plants and more plant growth results. As rainfall increases, more residues return to the soil from grasses or trees. At the same time, soils in high rainfall areas may have less soil organic matter decomposition than well-aerated soils — decomposition is slowed by restricted aeration.

Soil Texture

Fine textured soils, containing high percentages of clay, tend to have naturally higher amounts of soil organic matter than coarse textured sands or sandy loams. The organic matter content of sands may be less than 1 percent; loams may have 2 to 3 percent; and clays from 4 to more than 5 percent. The strong bonds that develop between clay and organic matter seem to protect organic molecules from attack and decomposition by microorganisms. In addition, fine textured soils tend to have smaller pores and have less oxygen than coarser soils. This also causes reduced decomposition of organic matter. The lower rate of decomposition in soils with high clay contents is probably the main reason that their organic matter levels are higher than in sands and loams.

Soil Drainage and Position in the Topography

Some soils have a compact subsoil layer that doesn't allow water to drain well. Decomposition of organic matter occurs more slowly in poorly aerated soils, when oxygen is limited or absent, than in well-aerated soils. For this reason, organic matter accumulates in wet soil environments. In a totally flooded soil, one of the major structural parts of plants, lignin, doesn't decompose at all. The ultimate consequence of extremely wet or swampy conditions is the development of organic (peat or muck) soils, with organic matter contents of over 20 percent. If organic soils are artificially drained for agricultural or other uses, the soil organic matter will decompose very rapidly. When this happens, the elevation of the soil surface actually decreases. Some homeowners in Florida were fortunate to sink corner posts below the organic level. Originally level with the ground, those homes now perch on posts atop a soil surface that has decreased so dramatically the owners park under their homes.

Soils in depressions at the bottom of hills are often wet because they receive runoff, sediments (including organic matter), and seepage from up slope. Organic matter is not decomposed as rapidly in these landscape positions as in drier soils farther up slope. However, soils on a steep slope will tend to have low amounts of organic matter because the topsoil is continually eroded.

Type of Vegetation

The type of plants that grow on a soil over the years affects the soil organic matter level. The most dramatic differences are evident when soils developed under grassland are compared with those developed under forests. On natural grasslands, organic matter tends to accumulate in high amounts and to be well distributed within the soil. This is probably a result of the deep and extensive root systems of native grasses. Their roots have high "turnover" rates, for root death and decomposition constantly occurs as new roots are formed. The high levels of organic matter in soils that were once in grassland explains why these are some of the most productive soils in the world. By contrast, in forests, litter accumulates on top of the soil, and surface organic layers commonly contain over 50 percent organic matter. However, subsurface mineral layers in forest soils typically contain from less than 1 to about 2 percent organic matter.

Acidic Soil Conditions

In general, soil organic matter decomposition is slower under acidic soil conditions than at more neutral pH. In addition, acidic conditions, by inhibiting earthworm activity, encourage organic matter to accumulate at the soil surface, rather than distributed throughout the soil layers.

5.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all
it seems that
moreover
to the fullest extents
for example
mainly
therefore

furthermore since lastly as a rule as well as in addition to

• Перебудова складного речення

Перебудова складного речення інколи необхідна і тому, що в українській мові логічний зв'язок елементів речення вимагає іншого порядку слів, ніж в англійській.

Перебудова речення при перекладі потрібна і в тих випадках, коли підмет виражений великою групою з багатьма означеннями і короткий присудок ритмічно "не витримує" такої громіздкої групи підмета.

6. Read and translate the texts.

Text A

HUMAN INFLUENCES

Soil erosion removes topsoil rich in organic matter so that, eventually, only subsoils remain. Crop production obviously suffers when part or all of the most fertile layer of the soil is removed. Erosion is a natural process and occurs on almost all soils. Some soils naturally erode more easily than others and the problem is also greater in some regions than others. However, agricultural practices accelerate erosion. Nationwide, soil erosion causes huge economic losses.

It is estimated that erosion in the United States is responsible for annual losses of \$500 million in available nutrients and \$18 billion in total soil nutrients.

Unless erosion is very severe, a farmer may not even realize that a problem exists, but that doesn't mean that crop yields are unaffected. In fact, yields may decrease by 5 to 10 percent when only moderate erosion occurs. Yields may suffer a decrease of 10 to 20 percent or more with severe erosion.

Greater amounts of erosion decreased the organic matter contents of these loamy and clayey soils. In addition, eroded soils stored less available water than soils experiencing little erosion.

Organic matter also is lost from soils when organisms decompose more organic materials during the year than are added. This occurs as a result of practices such as intensive tillage and growing crops that produce low amounts of residues (see below).

Tillage Practices

Tillage practices influence both the amount of topsoil erosion and the rate of decomposition of soil organic matter. Conventional plowing and disking of a soil to prepare a smooth seedbed breaks down natural soil aggregates and destroys large, water-conducting channels. The soil is left in a physical condition that allows both wind and water erosion. The more a soil is disturbed by tillage practices, the greater the potential breakdown of organic matter by soil organisms. During the early years of agriculture in the United States, when colonists cleared the forests and planted crops in the East and farmers later moved to the Midwest to plow the grasslands, soil organic matter decreased rapidly. In fact, the soils were literally mined of a valuable resource — organic matter. In the Northeast and Southeast, it was quickly recognized that fertilizers and soil amendments were needed to maintain soil productivity. In the Midwest, the deep, rich soils of the tall-grass prairies were able to maintain their productivity for a long time despite accelerated soil organic matter loss and significant amounts of erosion. The reason for this was their unusually high original levels of soil organic matter.

Rapid soil organic matter decomposition by soil organisms usually occurs when a soil is worked with a moldboard plow. Incorporating residues, breaking aggregates open, and fluffing up the soil allows microorganisms to work more rapidly. It's something like opening up the air intake on a wood stove, which lets in more oxygen and causes the fire to burn hotter. In Vermont, we found a 20-percent decrease in organic matter after five years of growing corn on a clay soil that had previously been in sod for a long time. In the Midwest, 40 years of

cultivation caused a 50-percent decline in soil organic matter. Rapid loss of soil organic matter occurs in the early years, because of the high initial amount of active ("dead") organic matter available to micro-organisms. After much of the active portion is lost, the rate of organic matter loss slows considerably.

With the current interest in reduced (conservation) tillage, growing row crops in the future may not have such a detrimental effect on soil organic matter. Conservation tillage practices leave more residues on the surface and cause less soil disturbance than conventional moldboard plow and disk tillage. In fact, soil organic matter levels usually increase when notill planters place seeds in a narrow band of disturbed soil, while leaving the soil between planting rows undisturbed. The rate of decomposition of soil organic matter is lower because the soil is not drastically disturbed by plowing and disking. Residues accumulate on the surface because the soil is not inverted by plowing. Earthworm populations increase, taking some of the organic matter deeper into the soil and creating channels that help water infiltrate into the soil. Decreased erosion also results from using conservation tillage practices.

Text B Crop Rotations and Cover Crops

At different stages in a rotation, different things may be happening. Soil organic matter may decrease, then increase, then decrease, and so forth. While annual row crops under conventional moldboard plow cultivation usually result in decreased soil organic matter, perennial legumes, grasses, or legume-grass forage crops tend to increase soil organic matter. The turnover of the roots of these hay and pasture crops, plus the lack of soil disturbance, allow organic matter to accumulate in the soil. This effect is seen in the comparison of organic matter increases when growing alfalfa compared to corn silage (figure 5.2) In addition, different types of crops result in different quantities of residues returned to the soil. When corn grain is harvested, more residues are left in the field than after soybeans, wheat, potatoes, or lettuce harvests. Harvesting the same crop in

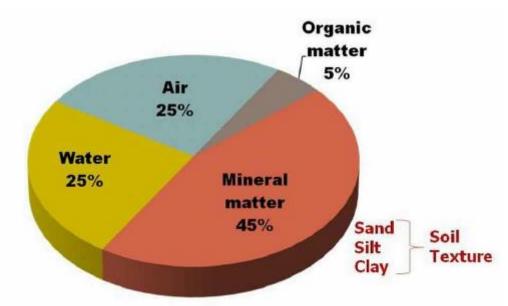
different ways leaves different amounts of residues. When corn grain is harvested, more residues remain in the field than when the entire plant is harvested for silage.

Soil erosion is greatly reduced and topsoil rich in organic matter is conserved when rotation crops, such as grass or legume hay, are grown year-round. The extensive root systems of sod crops account for much of the reduction in erosion. Having sod crops as part of a rotation reduces loss of topsoil, decreases decomposition of residues, and builds up organic matter by the extensive residue addition of plant roots.

6.2. Write a synopsis of the text in five sentences, using the following expressions:

first of all
it seems that
moreover
to the fullest extents
for example
mainly
therefore
furthermore
since
lastly
as a rule
as well as
in addition to

6.3. Look at the scheme and predict the next topic. Discuss it in the group.



• Переклад речень з інверсією

Зворотний порядок слів, тобто інверсія, викликається стилістичними й смисловими вимогами. Завдяки строгому порядку слів в англійському реченні інверсія являє собою дуже виразний емфатичний засіб. В українській мові інверсія не має такої виразної сили через вільніший порядок слів. Тому при передаванні англійської інверсії у перекладі часто доводиться користуватись якимось іншим засобом, щоб зберегти той же ступінь виразності.

7. Read and translate the texts.

Text A

Use of Organic Amendments

An old practice that helps maintain or increase soil organic matter is to apply manures or other organic residues generated off the field. A study in Vermont during the 1960s and 1970s found that between 20 and 30 tons (wet weight, including straw or sawdust bedding) of dairy manure per acre were needed to maintain soil organic matter levels when silage corn was grown each year. This is equivalent to 1 to 1,5 times the amount produced by a large Holstein cow over the whole year. Different manures can have very different effects on soil organic matter and nutrient availability. They differ in their initial composition and also are affected by how they are stored and handled in the field.

In general, more organic matter is present near the surface than deeper in the soil. This is one of the main reasons that topsoils are so productive, compared with subsoils exposed by erosion or mechanical removal of surface soil layers. Much of the plant residues that eventually become part of the soil organic matter are from the above-ground portion of plants. When the plant dies or sheds leaves or branches, it deposits residues on the surface. Although earthworms and insects help incorporate the residues on the surface deeper into the soil and the roots of some plants penetrate deeply, the highest concentrations still remain within 1 foot of the surface.

Litter layers that commonly develop on the surface of forest soils may have very high organic matter contents. Plowing forest soils after removal of the trees incorporates the litter layers into the mineral soil. Soils of the tall-grass prairies have high levels of organic matter deep into the soil profile. After cultivation of these soils for 50 years, far less organic matter exists.

Text B

ACTIVE ORGANIC MATTER

However, we should constantly keep in mind that we are interested in each of the different types of organic matter in soils — the living, the dead (active), and the very dead (humus). We don't just want a lot of humus in soil, we also want a lot of active organic matter to provide nutrients and aggregating glues when it is decomposed. We want the active organic matter because it supplies food to keep a diverse population of organisms present. As mentioned earlier, when forest or prairie soils were first cultivated, there was a drastic decrease in the organic matter content. Almost all of the decline was due to a loss of the active ("dead") part of the organic matter. It is the active fraction that increases relatively quickly when practices, such as reduced tillage, rotations, cover crops, and manures, are used to increase soil organic matter.

Text C

LIVING ORGANIC MATTER

Various types of organisms live in soils. The weight of fungi present in forest soils is much greater than the weight of bacteria. In grasslands, however, there are about equal weights of both. In agricultural soils that are routinely tilled, the weight of fungi is less than the weight of bacteria. As soils become more compact, larger pores are eliminated first. These are the pores in which soil animals, such as earthworms and beetles, live and function, so the number of such organisms in compacted soils decreases.

Different total amounts (weights) of living organisms exist in various cropping systems. In general, high populations of diverse and active soil organisms are found in systems with more complex rotations that regularly leave

high amounts of crop residues and when other organic materials are added to the soil. Organic materials may include crop residues, cover crops, animal manures, and composts. Leaves and grass clippings may be an important source of organic residues for gardeners. When crops are rotated regularly, fewer parasite, disease, weed, and insect problems occur than when the same crop is grown year after year.

On the other hand, frequent cultivation reduces the number of many soil organisms as their food supplies are depleted by decomposition of organic matter. Compaction from heavy equipment causes harmful biological effects in

soils. It decreases the number of medium to large pores, which reduces the volume of soil available for air, water, and populations of organisms — such as mites and springtails — that need the large spaces in which to live.

7.2. Write a synopsis of the text in five sentences, using the following expressions:

to begin with it seems that moreover to the fullest extents for example mainly

therefore furthermore since lastly as a rule as well as over and above

•Переклад багаточленних атрибутивних груп у заголовках

компонентами являють собою найхарактерніше явище англійської мови. Їх значне поширення у пресі та науково-технічній літературі пояснюється насамперед прагненням стислості і більшої економії, яка досягається їх застосуванням. Виняткова різноманітність синтаксичних зв'язків навіть у найпростіших сполученнях / іменник + іменник + іменник / дає змогу досягнути в англійській мові як стислості, так і ясності виразу. Це виявляється і при перекладі українською мовою, для якої подібні конструкції не властиві.

Багаточленні препозитивні групи зі складним синтаксичним зв'язком між

Не випадково багаточленні препозитивні сполучення можна найчастіше зустріти в газетних заголовках, які друкуються крупним шрифтом і тому мають бути по можливості короткими.

8. Read and translate the texts.

Text A

Let's Get Physical

Soil Tilth, Aeration, and Water

Moisture, warmth, and aeration; soil texture; soil fitness; soil organisms; its tillage, drainage and irrigation; all these are quite as important factors in the make up and maintenance of the fertility of the soil as are manures, fertilizers, and soil amendments.

—J.L. HILLS, C.H. JONES, ANDC. CUTLER, 1908

Soil's physical condition has a lot to do with its ability to produce crops. A degraded soil usually has reduced water infiltration and percolation (drainage into the subsoil), aeration, and root growth. This reduces the ability of the soil to supply nutrients, render harmless many hazardous compounds (such as pesticides), and to maintain a wide diversity of soil organisms. Small changes in a soil's physical conditions can have a large impact on these essential processes.

Creating a good physical environment, which is a critical part of building and maintaining a healthy soil, requires a certain amount of attention and care.

Let's first look at the physical nature of a typical agricultural soil. It usually contains about 50 percent solid particles and 50 percent pores on a volume basis (figure 6.1). We discussed earlier how organic matter is only a small, but very important component of the soil. The rest of the soil particles are a mixture of various size minerals, ranging from fine-grained microscopic clay to easily visible large sand grains. The relative amounts of the various particle sizes defines the texture of a soil, such as a clay, clay loam, loam, sandy loam, or sand. Although management practices don't change this basic soil physical property, they may modify the effects of texture on other properties.

The sizes of the spaces (pores) between the particles and between aggregates are much more important than the sizes of the particles themselves. The total amount of pore space and the relative quantity of various size pores (large, medium, small, very small) govern water movement and availability for sustaining soil organisms and plants. We are interested mostly in the pores, because that's where all the important pro-cesses, such as water and air movement, take place. Soil organisms live and function in the pores, which is also where plant roots grow. Most pores in a clay loam are small (generally less than 0.0004 inch), whereas most pores in a loamy sand are large (generally still smaller than 0.1 inch). Although soil texture doesn't change over time, the total amount of pore space and the relative amount of various size pores (called the pore size distribution) are strongly affected by management.

Text B

WATER AND AERATION

The soil pore space can be filled with either water or air, and their relative amounts change as the soil wets and dries. When all pores are filled with water, the soil is saturated and soil gases can't exchange with the atmospheric gases. This means that carbon dioxide from respiring roots and soil organisms can't escape

from the soil and oxygen can't enter, leading to undesirable anaerobic(no oxygen) conditions.

On the other extreme, a soil with little water may have good gas exchange, but it can't supply sufficient water to plants and soil organisms.

The way in which a soil holds and releases water is pretty similar to the way it works with a sponge. When it's fully saturated (you take the sponge out of a bucket of water), a spongeloses water by gravity, but will stop dripping within about 30 seconds. It's only the largest pores that lose water during that rapid drainage because they are unable to hold the water against gravity. The sponge still contains a lot of water when it stops dripping. The remaining water is in the smaller pores, which hold it more tightly.

The sponge's condition following drainage is almost the same as a soil reaching field capacity water content, which occurs after about two days of free drainage following saturation by a lot of rain or irrigation. If a soil contains mainly large pores, like a coarse sand, it loses a lot of water through gravitational drainage. This is good because these pores are now open for aeration, but it's also bad because little water remains for plants to use, leading to frequent drought stress.

Coarse sandy soils have very small amounts of water available to plants before they reach their wilting point. On the other hand, a dense, fine-textured soil, such as a compacted clay loam, has mainly small pores, which hold on tightly to water and don't release it as free drainage (it has little gravitational water). In this case, the soil will have long periods of poor aeration, but more plant-available water than a coarse sand. Leaching of pesticides and nitrates to groundwater is also controlled by the relative amounts of different size pores.

The rapidly draining sands lose these chemicals along with the percolating water, but this is much less of a problem with clays.

Text C

SOIL COMPACTION

A soil becomes more compact, or dense, when aggregates or individual particles of soil are forced closer together. Soil compaction has various causes and different visible effects. Three types of soil compaction may occur:

- surface crusting
- plow layer compaction
- subsoil compaction

Surface crusting occurs when soil is unprotected by surface residue or a plant canopy and the energy of raindrops disperses wet aggregates, pounding them together into a thin, but dense, surface layer. The sealing of the soil reduces water infiltration and the surface forms a hard crust when dried. If the crusting occurs soon after planting, it may delay or, in some cases, prevent seedling emergence. Even when the crust is not severe enough to limit germination, it can reduce water infiltration. Soils with surface crusts are prone to high rates of runoff and erosion. You can reduce surface crusting by leaving more residue on the surface and maintaining strong soil aggregation.

Plow layer compaction — compaction of the entire surface layer — has probably occurred to some extent in all intensively worked agricultural soils. There are three primary causes for such compaction — erosion, reduced organic matter levels, and forces exerted by field equipment. The first two result in a reduced supply of sticky binding materials and a subsequent loss of aggregation.

Compaction of soils by heavy equipment and tillage tools is especially damaging when soils are wet. To understand this, we need to know a little about soil consistence, or how soil reacts to external forces. At very high water content, a soil may behave like a liquid and simply flow as a result of the force of gravity — as with mudslides during excessively wet periods. At slightly lower water contents, soil can be easily molded and is said to be plastic. Upon further drying, the soil will become friable — it will break apart rather than mold under pressure.

The point between plastic and friable soil, the plastic limit, has important agricultural implications. When a soil is wetter than the plastic limit, it is seriously compacted if tilled or traveled on, because soil aggregates are pushed together into a smeared, dense mass. This is why you often see smeared cloddy furrows or deep tire ruts in a field. When the soil is friable (the water content is below the plastic limit) it breaks apart when tilled and aggregates resist compaction by field traffic. This is why the potential for compaction is so strongly influenced by timing of field operations.

8.2. Write a synopsis of the text in five sentences, using the following expressions:

to begin with apparently moreover to the fullest extents for example mainly

therefore furthermore since lastly in general as well as over and above

8.3. Is it soil compaction? Discuss this problem



•Передача пасивного стану в перекладі

Уживання пасиву в українській мові має вирішальне значення при перекладі англійських пасивних конструкцій. У всіх випадках, коли дійова особа не вказана, і в українській мові їм найчастіше відповідають неозначено-особові речення.

9. Read and translate the text.

Text A

SOIL COLOUR (MATRIX)

Soil colour reflects the composition as well as the past and present oxidation-reduction conditions of the soil. It is generally determined by coatings of very fine particles of humified organic matter (dark), iron oxides (yellow, brown, orange and red), manganese oxides (black) and others, or it may be due to the colour of the parent rock.

The colour of the soil matrix 1 of each horizon should be recorded in the moist condition (or both dry and moist conditions where possible) using the notations for hue, value and chroma as given in the Munsell Soil Color Charts. Hue is the dominant spectral colour (red, yellow, green, blue or violet), value is the lightness or darkness of colour ranging from 1 (dark) to 8 (light), and chroma is the purity or strength of colour ranging from 1 (pale) to 8 (bright). Where there is no dominant soil matrix colour, the horizon is described as mottled and two or more colours are given. In addition to the colour notations, the standard Munsell colour names may be given.

For routine descriptions, soil colours should be determined out of direct sunlight and by matching a broken ped with the colour chip of the Munsell Soil Color Charts. For special purposes, such as for soil classification, additional colours from crushed or rubbed material may be required. The occurrence of contrasting colours related to the structural organization of the soil, such as ped surfaces, may be noted.

Where possible, soil colour should be determined under uniform conditions.

Early morning and late evening readings are not accurate. Moreover, the determination of colour by the same or different individuals has often proved to be inconsistent. Because soil colour is significant with respect to various soil properties, including organic matter contents, coatings and state of oxidation or reduction, and for soil classification, cross-checks are recommended and should be established on a routine basis.

9.2. Write a synopsis of the text in five sentences.

9.3. Discuss different soils colors





•Передача інфінітива та інфінітивних конструкцій

В більшості випадків тільки смислова функція інфінітива дає можливість визначити її синтаксичну функцію.

10. Read and translate the texts.

Text A

SOIL MANAGEMENT

The word "manage" is best defined as "to use to the best advantage." When applied to agriculture, it implies using the best available knowledge, techniques, materials, and equipment in crop production.

TILLAGE

Tillage is one of the important management practices used in agriculture. It serves many purposes, including seedbed preparation, weed control, incorporation of crop residues and fertilizer materials, breaking soil crusts and hardpans to improve water penetration and aeration, and shaping the soil for irrigation and erosion control.

Because of the potential damage to soil structure from overworking the soil and for economic and fuel conservation purposes, the modern approach is to use only as much tillage as is required to produce a good crop. The term conservation tillage is applied to this concept.

Conservation tillage is the method of farming which maintains adequate plant cover on the soil surface to conserve soil and water, while reducing energy to till the soil.

The following conservation tillage methods are used:

1. No-Till

Preparation of the seedbed and planting is completed in one operation. Soil disturbance at planting time is limited to the area contacted by the rolling coulter.

A minimum of 90% of the previous crop residue is left on the soil surface immediately after planting.

2.Ridge-Till

Preparation of the seedbed and planting is completed in one operation on ridges.

Ridges are usually 4-8 inches higher in elevation than the row middles. Ridges are maintained and rebuilt through prior year cultivation. A minimum of 66% of the previous crop residue is left on the soil surface immediately after planting.

3.Strip-Till (unridged)

Preparation of the seedbed and planting are completed in one operation, with tillage limited to a narrow band centered on the growing row. The area between rows, exclusive of tillage bands, is undisturbed. A minimum of 50% of the previous crop residue is left on the soil surface immediately after planting.

4.Mulch-Till

Preparation of the seedbed involves loosening and/or mixing the soil and incorporating a portion of the previous crop residue into the soil. Tillage tools include:

chisels,

wide sweeps,

discs,

harrow, etc.

A minimum of 33% of the previous crop residue is left on the soil surface immediately after planting.

5.Reduced-Till

The reduction of conventional tillage trips as a result of vegetative chemical control, combined tillage operations, or multi-function tillage tools. A minimum of 20% of the previous crop residue is left on the soil surface immediately after planting. This type of tillage is determined by the type of crop, the soil's type, and field conditions.

No one set of guiding standards is appropriate for all situations.

Text B

SOIL CONSERVATION

Soil conservation is an important management practice, which deserves close attention.

It is estimated that annually in the U.S. four billion tons of sediment are lost from the land in runoff waters. That is equivalent to the total loss of topsoil (6-inch depth) from four million acres. Wind erosion is also a problem in certain areas, particularly in arid regions. Management practices such as contouring, reduced tillage, strip planting, cover cropping, terracing, and crop residue management help to eliminate or minimize the loss of soil by water and wind erosion. In addition to these practices, a sound fertilizer program promotes optimal growth of crops, which contributes to soil erosion control by protecting the soil against the impact of falling rain and holding the soil in place with extensive plant root systems.

Proper utilization of crop residues can be a key management practice. Crop residues returned to the soil improve soil productivity through the addition of organic matter and plant nutrients. The organic matter also contributes to an improved physical condition of the soil, which increases water infiltration and storage, and aids aeration. This is vital to crop growth, and it improves tilth. In deciding how to best utilize crop residues, the immediate benefits of burning or removal should be weighed against the longer term benefits of soil improvement brought about by incorporation of residues into the soil.

Special consideration should be given to the environmental aspects of soil management. The environmental implications of erosion are extremely important, since sediment is by far the greatest contributor to water pollution. Management practices which minimize soil erosion losses, therefore, contribute to cleaner water.

The judicious use of fertilizers, which includes using the most suitable analyses and rates of plant nutrients, as well as the proper timing of application and placement in the soil, is also important. Fertilizers are a potential pollution

hazard only when improperly used. When used judiciously, they can make a significant contribution to a cleaner, more productive, more enjoyable environment.

Text C

ANION ELEMENTS

NITROGEN - PHOSPHORUS - SULFUR

While many forms of nitrogen, phosphorus, and sulfur exist in the soil, it is principally in the form of nitrate, orthophosphate, and sulfate the plants can utilize these negative charged elements. Nitrate nitrogen with one negative charge is readily available for plant feeding, but at the same time, quite subject to leaching. The sulfate form of sulfur with two negative charges is subject to slower leaching. Phosphorus always occurs as, or converts to, phosphate in the soil. The phosphate form of phosphorus, with three negative charges, is relatively resistant to leaching from the soil. Under normal field conditions only small amounts of phosphorus are in the orthophosphate form at any particular time.

It should be pointed out that the processes by which nitrogen, phosphorus, and sulfur are converted into the nitrate, phosphate, and sulfate forms from other chemical forms is accomplished or facilitated by the action of certain types of soil bacteria. For this reason, the amount of organic matter present in a soil to supply food for the bacteria becomes a matter of significant importance.

10.2. Write a synopsis of the text in five sentences, using the following expressions:

to begin with apparently moreover to the fullest extents for example mainly

therefore furthermore since lastly

•Передача герундія і герундіальних конструкцій

Герундій за формою не відрізняється від дієприкметника і, на відміну від дієприкметника, виражає не просто ознаку предмета або особи, а перебуває з ним у більш складних синтаксичних зв'язках.

Таким чином, при перекладі герундія розкриваються складніші взаємовідношення між ознакою й предметом, ніж при перекладі дієприкметників.

Особливості англійського герундія — поєднання в собі властивостей дієслова та іменника — природно відбиваються і на перекладі речень із герундієм. На відміну від інфінітива, герундій означає дію у процесі протікання в узагальненій формі. Особливо ясно це проявляється в герундії, який виконує функцію підмета.

11. Read and translate the texts.

Text A

NITROGEN

Nitrogen is a major constituent of several of the most important substances which occur in plants.

It is of special importance that among the essential elements nitrogen compounds comprise from 40% to 50% of the dry matter of protoplasm, the living substance of plant cells.

For this reason nitrogen is required in relatively large amounts in connection with all the growth processes in plants. It follows directly from this, that without an adequate supply of nitrogen appreciable growth cannot take place, and that plants must remain stunted and relatively undeveloped when nitrogen is deficient.

Nitrogen does not exist in the soil in a natural mineral form as do other plant nutrients. It must come from the air, which contains approximately 78% nitrogen. This means, that there are about 35,000 tons of nitrogen over every acre of land. However, in order for crops to utilize this nitrogen, it must be combined with hydrogen or oxygen, which results in the formation of ammonia (NH3) or nitrate (NO3). This process is called nitrogen fixation. Inside the plant these substances are converted into amino acids, which are recombined to form proteins. Any unbalanced condition, either too much or too little, in the supply of nutrients will upset this process.

Many reactions involving nitrogen occur in the soil; most of them are the result of microbial activity.

Two distinct types of bacteria are the symbiotic and the non-symbiotic organisms.

The symbiotic bacteria are those associated with leguminous plants. In return for the supply of food and minerals they get from the plant, these bacteria supply the plant with part of its nitrogen needs, generally not more than 50 to 75% of it.

The non-symbiotic bacteria live independently and without the support of higher plants.

There are two different types of non-symbiotic bacteria: the aerobic, which require oxygen, and the anaerobic, which do not need oxygen. These bacteria can supply as much as 50 pounds of nitrogen/acre/year, but generally supply less than 20 pounds.

Nitrogen is also returned to the soil in the form of organic materials, which are derived from former plant and animal life and animal wastes. These materials are largely insoluble in water and are reduced by biological decomposition, oxidation, reduction, and are finally mineralized to nitrate nitrogen for plant use. This recycling of nitrogen from organic matter to soil to growing plants is a part of the nitrogen cycle.

A soil analysis reports organic matter content as a percent of soil weight. Organic matter usually contains about 5 to 6% nitrogen; however, only 2 to 4% of the total nitrogen in this organic fraction in the soil will become available to the plant during the growing season. The actual amount released is very dependent upon climate (temperature and rainfall), soil aeration, pH, type of material undergoing decomposition (different carbon:nitrogen ratio levels), stage of decomposition, and other factors. It is, therefore, quite difficult to calculate the nitrogen release in advance and at best it can be used as an estimated value (ENR).

There are considerable advantages in determining available nitrogen (nitrate N and ammoniacal N). If the test is run several times during the life of the crop, it can guide the basic fertilizer application and need for subsequent applications.

Depth of sampling, needed to evaluate the nitrogen availability of a soil, can vary with soil texture, climate, irrigation, and crops to be grown.

In arid regions, when nitrate and ammonia nitrogen of the full soil root profile have been determined by soil tests, this amount should be added to the estimated nitrogen release (ENR) value. This total is then subtracted from the total nitrogen required by the crop for the yield desired, and the difference or net is the approximate amount of nitrogen to be applied. This does not include possible losses due to leaching and/or volatilization.

Text B

MANURE AS A NITROGEN SOURCE

Manure is an extremely valuable by-product of all livestock farming systems, and whenproperly managed, can supply large amounts of readily available essential plant nutrients.

In addition, most solid manures contain a good supply of organic matter and humus. This of vital importance in the maintenance of a good soil structure. Manure management shouldinclude every effort to utilize as much of its value as possible. All manure management systems involve some degree of storage or treatment before land application. During this storage and handling, nitrogen is lost due to volatilization, leaching, and denitrification.

As a general rule, incorporating manure into a cool, moist soil the same day of application provides the highest nitrogen retention rates.

Animal manure actually provides two forms of nitrogen--organically bound nitrogen and inorganic nitrogen. Inorganic nitrogen is the form which is taken by the plant root system and used for growth. The organically bound nitrogen in the soil breaks down over a period of time to form inorganic nitrogen.

The rate of conversion of organic nitrogen to inorganic nitrogen is called the mineralization or decay rate. Therefore, not all of the nitrogen which has been incorporated into the soil can be used by the plants during the first year after manure application.

11.2. Write a synopsis of the text in five sentences, using the following expressions:

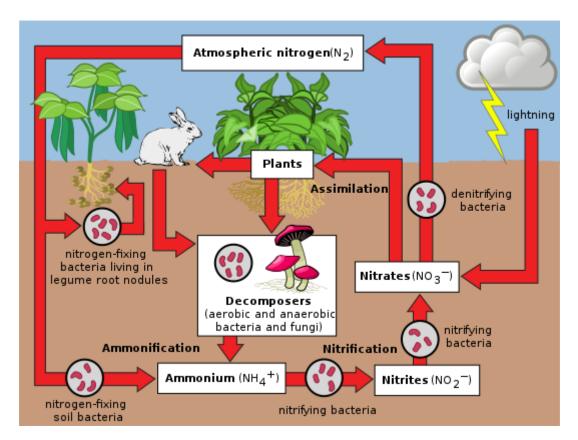
initially apparently moreover

to the fullest extents for example mainly furthermore

since lastly as well as in most cases

11.3. Nytrogen Cycle Terminology

Knowing basic terms, and the types and names of nitrogen cycle, can help you make informed conclusions. You should know the following key terms before discussing the problem in the lesson.



biogeochemical cycle

convert into

multiple chemical forms

circulate among

atmospheric, terrestrial, and marine ecosystems

be carried out through

biological and physical processes

fixation, ammonification, nitrification, and denitrification

source of

limited availability

scarcity of ecosystems

including

primary production

decomposition

Human activities

fossil fuel combustion

•Переклад герундія в тричленній конструкції з об'єктнопредикативним членом

Особливість цієї структури полягає в тому, що дія дієслова-присудка спрямована не на самий об'єкт, а на ту дію, стан або якість якої приписується цьому об'єкту.

12. Read and translate the texts.

Text A

PHOSPHORUS

Phosphorus in the soil and determination of its availability to plants is very complex problems. It is hard to predict the effects of phosphorus fertilizers upon crops for all kinds of soils and for different growing seasons. The satisfactory utilization of phosphorus is dependent not only upon phosphate concentration, but upon the concentration of the other plant food elements, as well as soil temperature, moisture, pH, and the soil microorganisms.

All soils have some phosphorus reserves in compounds of different chemical form, such as phosphates of iron, aluminum, calcium, etc.; and though these reserves may be measured in large amounts in the soil, plants may still suffer from phosphorus deficiency. The natural release of phosphorus from these compounds may be severely limited, due to certain physiological and biological conditions of the soil resulting in the continuation of insoluble and unavailable forms of phosphorus.

Plants adsorb phosphorus primarily in the form of ions of ortho or dihydrogen phosphate(H2P04). The difficulty in supplying enough of this available form of phosphorus is, that thereactions of soils tend to make water soluble phosphates into water insoluble phosphates, thusadding to the phosphorus reserves which are not as available to plants. Acid soils containing excess iron and aluminum, and basic soils containing excess calcium, cause a chemical recombination of acidic available forms or water soluble phosphates into forms less soluble.

Much of the soluble phosphorus is built into bodies of the soil microorganisms and subsequently becomes part of the soil humus. Therefore, the phosphorus needs of plants is partly dependent upon the amount of phosphorus ions released from the phosphorus reserves by the biochemical processes of the soil. To supply enough phosphorus for plant needs, a reserve of phosphorus in excess of soil biological needs must be maintained, as well as proper soil conditions for maximum biological activity. Phosphorus does not leach easily from the soil, and research studies indicate that only on well fertilized sandy or organic soils low in phosphorus fixation capacity would phosphorus leaching be of possible significance. Most soils have the capacity to adsorb and hold large quantities of applied phosphate, and therefore, the greatest loss of fertilizer phosphate from the soil would be by erosion of soil particles rather than by leaching of soluble phosphorus.

Text B

SUPPLYING PHOSPHORUS

The addition of phosphorus to the soil may have a three-fold purpose:

- 1. To furnish an active form of phosphorus, as a starter fertilizer, for immediate stimulation of the seedling plant.
- 2. To provide a continuing supply of available phosphorus for the crop during the entire growing season.
- 3. To ensure a good reserve supply of phosphorus in the inorganic or mineral, the organic, and the adsorbed forms.

It is a well-known fact that most crops get only 10% to 30% of their phosphorus requirements from the current year's fertilizer application. The rest comes from the soil. The other part of the phosphorus application becomes part of the soil's reserves for feeding of subsequent crops. It performs the very necessary and desirable function of building up the phosphorus fertility of soils so that phosphorus will be available in later years. It has been found that phosphorus fixed by the soil from fertilizer is not as tightly held as "native" phosphorus and becomes available to plants over a period of time.

Soil fertility levels, pH, soil condition, crop(s) to be grown, and management practices have to be considered when deciding which application method is most appropriate.

1. Broadcast

Phosphorus fixation possibility due to much fertilizer/soil contact will especially occur in soils with high pH where calcium phosphate is formed, or under acid conditions which could result in the formation of iron and aluminum phosphates. Although these compounds raise the level of soil fertility and are slowly available to successive crops, the immediate result is a decline in the plant availability of soluble phosphate fertilizers.

2. Banding

Banding puts a readily available P source in the root zone. It is superior to broadcasting on cold soils. Banding is also desirable for soils low in available phosphorus due to fertility or fixation.

Soils with high phosphorus test levels require only a maintenance application, which can be made by this method, especially on cold, poorly drained soils, and where short season crops or small grains are to be grown.

Band application can be made at seeding slightly to the side and below the seed, with tillage equipment such as a field cultivator, or surface band application (so-called "strip treatment") before plowing.

The last method has given promising results for corn at Purdue University, where this method was developed.

When applied with nitrogen, phosphorus is more readily available to plants than when applied without nitrogen; zinc fertilization can tend to reduce phosphorus availability.

Text C

CORRECTION OF PHOSPHORUS DEFICIENCIES

Phosphorus fertilizer applications depend on many factors such as crop to be grown, yield desired, balance of other nutrients, cultural practices, available moisture, and others which influence soil conditions.

It is virtually impossible to list suggested phosphate applications for all crops, under all soil conditions, for all test values found; so we must consider only the general factors that should enter into the decision as to how, when, where, and what to apply.

For most crops and soil conditions, crop response to fertilizer phosphorus will nearly always be observed for soils testing "low," frequently for soils testing "medium," and usually will not be observed when testing "high." Although under cold and wet conditions a starter fertilizer containing P could assist in initiating the growth of a seedling.

A maintenance application is advisable for most soil-crop conditions.

Under calcareous (or alkaline) conditions, to prevent fast tie-up, banding of the fertilizer near the side of and slightly below the seed is advisable. Weak starter solutions are also of value.

Broadcast application, adequately incorporated, of recommended amounts of readily available phosphorus can be used to supply long-term needs of the crop. This gives long-term response, even though the material may be converted to relatively insoluble forms after application.

Different crops have different needs for phosphorus. Some require large amounts, while others require small amounts. Application rates which would be adequate in some instances of limited yields of a crop are totally inadequate when high yields of that crop are the goal.

12.2. Write a synopsis of the text in five sentences, using the following expressions:

initially apparently

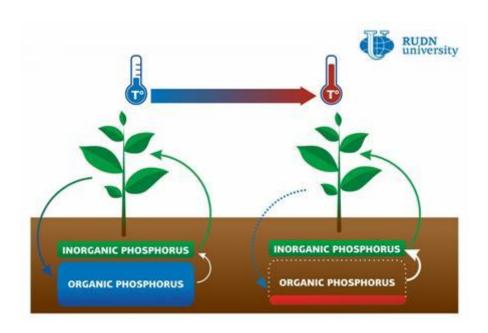
moreover

to the fullest extents for example mainly furthermore

since lastly as well as in most cases

12.3. Group discussion about the Phosphorus impact on the soil.

Global warming threatens soil phosphorus, says a soil scientist from RUDN University



A soil scientist from RUDN University found out that the resources of organic phosphorus in the soils of the Tibetan Plateau could be depleted because of global warming. To do so, he compared phosphorus content in the soils from the Tibetan Plateau that has a cold climate and from the warmer Loess Plateau. The results of the study were published in the Agriculture, Ecosystems and Environment journal. Phosphorus is the second most vital element for plants after nitrogen. In the soil, it is bound into organic or inorganic compounds. The soil cycle of phosphorus has several stages: first, organic substances mineralize; then, phosphorus is transferred to inorganic mineral compounds; after that, it is consumed by plants, and then it returns to the soil with organic plant waste. A soil scientist from RUDN University was the first to find out that global warming can deplete soil phosphorus reserves. To do so, he studied soil

samples from the Tibetan Plateau, a place where temperature grows three times faster than on average across the planet.

12.3. Recollect the vocabulary

FACTORS AFFECTING PHOSPHORUS AVAILABILITY AERATION

Oxygen is necessary for plant growth and nutrient absorption; it is needed for processes that increase the phosphorus supply through the mineralization and breakdown of organic matter.

COMPACTION

Compaction reduces the degree of aeration by decreasing the pore sizes in the root zone of the growth media. This in turn restricts root growth and reduces absorption of phosphorus and other nutrients.

MOISTURE

Increasing moisture in the soil increases the availability of phosphorus to plants and the availability of fertilizer phosphorus. However, excessive moisture reduces aeration, root extension and nutrient absorption.

SOIL PARTICLE SIZE

Small soil particles, such as clay, usually tie up more phosphorus than larger soil particles, such as sand.

TEMPERATURE

Temperature may increase or decrease phosphorus availability. In many soils increasing temperature increases the rate of organic matter decomposition, which releases phosphorus to plants. Temperatures excessive for optimum plant growth interfere with active phosphorus absorption. The utilization of phosphorus within the plant is greatly reduced under low temperatures. Each plant has a threshold temperature value below which phosphorus is not absorbed. The problem may be connected with a vitamin deficiency caused by low temperatures.

SOIL pH

Soil pH regulates the form in which soil phosphorus is found. (fig.). Acid soils may contain a large amount of iron, aluminum, and manganese in solution.

Alkaline and calcareous soils contain calcium, magnesium, and in some cases sodium. All of these elements combine with phosphorus to form compounds of varying solubilities and degrees of availability to the plant.

OTHER NUTRIENTS

Other nutrients may stimulate root development, thus increase phosphorus uptake. The ammonium form of nitrogen may stimulate the uptake of phosphorus, possibly because of the resulting acidity, as ammonium-N is nitrified to nitrate-N.

ORGANIC MATTER

The presence of organic matter, and especially the influence of microbial activity, increases the amount and availability of phosphorus from this source of the soil.

SULFUR

Sulfur is rapidly becoming the fourth major plant food nutrient for crop production. It rivals nitrogen in protein synthesis and phosphorus in uptake by crops. The largest portion of total sulfur in the soil is contained in the soil organic matter (O.M.). Sulfate sulfur becomes available to the plant through bacterial oxidation of organic matter, elemental sulfur, atmospheric sulfur compounds, and other reduced forms of sulfur. Plants usually absorb sulfur as the sulfate (SO4) ion, which generally is not retained in the soil in any great extent, as the sulfates, being soluble, tend to move with soil water and are readily leached from the soil under conditions of high rainfall or irrigation. This is especially true in low capacity (sandy) soils. The oxidized forms of sulfur may be reduced under waterlogged conditions and enter the atmosphere as HS or other sulfur gases.

Intensification of agriculture, use of improved crop varieties, the use of sulfur-free fertilizers, aerial pollution control, less use of manure, and the introduction of insecticides and fungicides which replace sulfur based dusts, are factors which aggravate the sulfur deficiency problem.

•Передача дієприкметників і дієприкметникових конструкцій.

Залежністьперекладу від синтаксичної функції.

Головне ускладнення при перекладі являє собою Participle I у предикативній функції. Якщо його функція збігається з функцією українського дієприслівника, то останній входить до складу речення.

13. Read and translate the texts.

Text A

SOIL REACTION (pH)

The soil reaction is important as it affects nutrient availability, solubility of toxic substances like aluminum, the rates of microbial activities and reactions, soil structure and tilth, and pesticide performances.

Soil pH is expressed as a numerical figure and can range from 0 - 14. A value of seven is neutral; a value below 7.0 is acid, and above 7.0 is alkaline.

The pH value reflects the relative number of hydrogen ions (H+) in the soil solution. Themore hydrogen ions present, compared to the hydroxyl ions (OH-), the more acidic the solutionwill be and the lower the pH value. A decrease in hydrogen ions and increase in hydroxyl ionswill result in more alkaline or basic conditions.

The ratio between hydrogen ions and hydroxyl ions changes tenfold for each unit change in pH. Therefore, a soil with a pH of 5.0 is ten times as acidic as a soil with a pH of 6.0.

Soils are becoming more acid as a result of the removal of the cations calcium, magnesium, potassium, and sodium through leaching or by growing crops. As the cations are removed from the soil particles, they are replaced with acid-forming hydrogen and aluminum.

Most common nitrogen fertilizers also contribute to soil acidity, since their reactions increase the concentration of hydrogen ions in the soil solution.

Many agricultural soils are in the pH range 5.5 - 8.0. The growth of crops on these soils are influenced by the favorable effects of near-neutral reaction on

nitrification, symbiotic nitrogen fixation and the availability of plant nutrients.* The optimum pH range for most crops is 6.0 - 7.5 and for leguminous and other alkaline preferring crops 6.5 - 8.0. A desirable pH range for organic soils is 5.0 - 5.5.

Hydrogen ions in the soil solution are increased when the salts increase. This results in a more acid condition or lower pH. The salts may be a result of fertilizer residues, irrigation water, natural conditions, or microbial decomposition of organic matter.

Infertile, sandy, highly leached soils usually contain very little soluble salts.

The activity of hydrogen ions as measured with the soil in distilled or deionized water is designated by the symbol pHw.

The soil analysis report uses pH as a symbol for this analysis method of determining the alkalinity or acidity of soils.

The pHs symbol signifies that it has been measured by using 0.01 molar calcium chloride instead of distilled water. It may be interpreted in terms of degree of soil saturation by cations other than hydrogen. In special cases, where fertilizer or other salts are known to be present, attention to the salt effect on pH is warranted and the use of this method is advisable.

The difference between pHsand pHw can range from 0 to 1.1 pH units depending on the soil's own salt content.

Text B

LIMING OF THE SOIL

While pH is related to soil acidity, it is not a direct measurement of the amount of acidity or the amount of hydrogen ions which must be replaced and neutralized by liming.

A pH reading measures the active acidity, while the buffer pH indicates the potential acidity. The amount of potential acidity for any given soil pH will depend upon the amount and type of clay and the level of organic matter in that soil. Therefore, it is possible to have two soils with the same soil pH but with

different buffer pH's. A lower buffer pH represents a larger amount of potential acidity and thus more limestone is needed to increase the soil pH to a given level.

Due to the great variety of soil typeswith which we work,we use two different

methods to determine the buffer.

A. SMP Buffer Test (pHSMP).

This buffer solution was developed in Ohio and measures the total soluble and exchangeable hydrogen and aluminum. It is reliable for soils with a greater than 1 ton/acre lime requirement and it is also well adapted for acid soils with a pH below 5.8 containing less than 10% organic matter and having appreciable amounts of aluminum.

If the soil pH is greater than 6.5, the SMP buffer test is not made, since lime is not needed for most crops.

Crops raised on organic soils usually do not benefit from liming unless the soil pH is lower than 5.3.

B. Adams-Evans Buffer Test

This buffer method is primarily an adaptation of the SMP buffer, but it is specifically designed for low organic matter, sandy soils of the coastal plains where amounts of lime are needed in small quantities and the possibility of overliming exists. The chemistry of the Adams-Evans buffer solution works in the same manner as the SMP buffer solution.

The pH of the Adams-Evans buffer solution is 8.0. When the buffer solution is added to an acid soil, the original pH of the buffer will be lowered. Since it is known how much acid is required to lower the buffer solution pH to any given level, the total acidity of the soil can be determined.

Text C

Liming materials and amendments

Calcium nitrate and both normal and triple superphosphate also contain significant amounts of calcium.

Liming is generally done through a broadcast application; however, the economics of many crops grown on high organic soils with a low pH may not justify blanket applications of lime to raise the pH. Banding is advisable under such conditions. The lime must be finely ground and thoroughly mixed with the band layer.

The importance of highly reactive limestone is more evident whenever heavy nitrogen treatments are used. Under such conditions the grower should consider making up his calcium shortage even if it takes less than 2 tons of limestone.

Where calcium is needed for reclamation of soils high in sodium, gypsum (calcium sulfate) generally is used rather than limestone.

FLUID LIME SUSPENSIONS

It appears that fluid lime suspensions are an effective means to raise the pH and make it possible to get a uniform application while it also may have some economic advantage in areas where regular limestone is not available.

These suspensions contain only fine particle sizes--usually 100 to 200 mesh material--suspended in water or liquid fertilizer. Most mixtures being applied contain 50 to 75 percent lime, 0.5 to 5.0 percent attapulgite clay as a suspending agent, and may contain a small quantity of dispersing agent. The remainder of the solution is either water or fertilizer. Most agronomists agree that a phosphorus containing fertilizer should not be used. Lime-nitrogen solutions should be immediately incorporated to prevent nitrogen loss by volatilization.

PELLETIZED LIME

Pellet lime is available as a source of lime which is easier to spread and blend with dry fertilizer ingredients. This product can be spread annually at lower rates for maintenance of proper soil pH values. Pellet lime is ground limestone formulated with a special binder which produces a sized, hard pellet that breaks down when applied to moist soil.

Besides limestone there are other materials which can be used as suspension materials to increase soil pH.Calcium carbonate sludges, flue dust from cement plants, sludges from paper mills, and certain other by-products or waste materials with high calcium and/or magnesium carbonate content. Be sure to test these materials before making a suspension as to their calcium, magnesium, and possibly impurities contents.

There are several advantages and disadvantages with respect to fluid lime which should be considered before making a decision to use it.

Advantages compared to dry material:

- 1. Reacts faster than coarser materials.
- 2. Less required for a given pH change, at least initially.
- 3. Can combine with N, K, S fertilizer solutions and herbicides.
- 4. No dust problem during application.
- 5. Uniformity of application may be easier.
- 6. Flotation equipment can be used.
- 7. Fast reaction on rented land.
- 8. May be more economical in areas where no lime is available.
- 9. Useful for no-till situations where surface soil has become acid.
- 10. Can be used where annual applications to maintain soil pH are desired.

Disadvantages compared to dry materials:

- 1. Cost may be greater, especially long-term.
- 2. Cannot be used with phosphorus fertilizer.
- 3. Large pH changes not possible with small quantities.
- 4. Fluid lime containing calcium oxide or hydroxide should not be mixed with N solutions containing free ammonia. If used, lime-nitrogen suspensions should be incorporated immediately after application to prevent volatilization of nitrogen.

5. Caution should be taken when herbicides are used in the lime mixture, as pH increases herbicide activity, which could cause crop injury.

Conclusion

Fluid lime suspensions are an effective method of lime application. The assessment of the feasibility for a given area will be dictated by the cost of the material applied compared to an equal ECC rate of ag-lime, taking into account the application advantage or disadvantage that might be present.

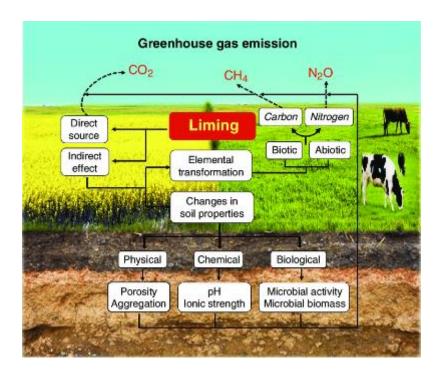
13.2. Write a synopsis of the text in five sentences, using the following expressions:

initially apparently moreover

to the fullest extents for example mainly furthermore

since lastly as well as in most cases

13.3. Discuss the scheme in the group-project



•Залежність перекладу від смислової структури дієприкметника

При перекладі важливо враховувати, що англійський дієприкметник часто виражає головну думку в реченні, що не властиво українській мові. Вирішальне значення для вибору засобів передачі дієприкметника нерідко має його лексичне наповнення.

Слід мати на увазі, що в сучасній англійській мові простий дієприкметник Participle I часто вживається замість перфектного, особливо тоді, коли підкреслюється результат тривалого процесу або дії.

Інколи навіть при наявності відповідного дієприкметника в українській мові його смислова функція заважає використати його в перекладі. Дієприкметник у таких випадках доводиться заміняти прислівником.

14. Read and translate the texts.

Text A

MICRONUTRIENTS

Importance of Micronutrients

Cropland acres are frequently found deficient in one or more of the micronutrients--boron, copper, manganese, iron, zinc and molybdenum. In many situations a deficiency of certain micronutrients is the factor responsible for ineffective utilization of the major and secondary nutrients supplied in fertilizer programs and liming programs.

Although only required in small amounts by plants, their deficiency or toxicity can have just as much effect on crop production as any of the major elements.

There are a number of reasons for the growing importance of ensuring adequate levels of micronutrients in the soil.

- 1. Increased fertilizer rates resulting in increased yields means a higher removal of micronutrients from the soil.
- 2. Some micronutrients are no longer contained as impurities in high analysis fertilizers and fertilizer materials.
- 3. Improved crop varieties are capable of producing higher yields per acre and consequently remove more micronutrients from the soil.
- 4. Land forming or land leveling with the removal of several inches of topsoil many times results in a deficiency of certain micronutrients on the cut areas.
- 5. High phosphorus levels, either natural or from fertilizer application, have been found in some areas to induce micronutrient deficiencies.

Micronutrient deficiencies have as drastic an effect on crop yields and quality as do the primary and secondary nutrients (N, P, K, Ca, Mg, and S). In addition when they are present in toxic amounts, certain of the micronutrients can also cause large reductions in yield. Conditions of extreme deficiency can result in a complete loss on the affected acreage.

"Deficiency Symptoms" and "Hidden Hunger"

Deficiency symptoms are the visual signs that occur when a plant is experiencing a shortage of one or more of the nutrients. These signs vary according to crop and the element which is deficient. For example, an iron deficiency normally manifests itself through a "chlorosis" or yellowing of a part of the leaf.

Deficiency symptoms appear only after the plant is critically short in a nutrient. By the time these symptoms appear, the crop has already suffered some loss in yield potential.

"Hidden hunger" is a term used to describe a lack of a nutrient which will affect the final yield. It occurs when the nutrient supply falls below the critical level and becomes increasingly worse until finally, deficiency symptoms appear. This is why it is important to monitor the supply of micronutrients through soil and plant analysis to reduce the incidence of "hidden hunger."

Text B

Plant Food Balance

Maximum results are obtained from the addition of micronutrients only when the major and secondary nutrients are present in adequate amounts and in a balance required by the crop.

An imbalance of micronutrients often results in as much loss in yield as when the other nutrients are not in balance.

Importance of Applying Micronutrients Early

A high percent of the micronutrient requirements are taken up during the first one third of the growing period. Therefore, it is important to apply these micronutrients before or at planting to get maximum utilization.

If they are applied later, the crop may experience hidden hunger, and yield and quality will be affected.

FACTORS AFFECTING AVAILABILITY

Conditions Conducive to Deficiency

There are a number of conditions which are conducive to micronutrient deficiencies:

- 1. Removal of large amounts by high yielding crops.
- 2. Leaching from sandy soils.
- 3. Naturally high pH soils.
- 4. Overlimed soils resulting in a high pH.
- 5. Land leveling.
- 6. Additions of high rates of phosphorus.
- 7. Soil compaction.
- 8. Cool, wet growing conditions.
- 9. Tie-up by the soil.
- 10. Use of sensitive crop varieties.

Text C

MICRONUTRIENTS AND THEIR AVAILABILITY TO CROPS

Although soil pH is probably one of the most important factors governing the availability of micronutrients, there are also other soil conditions that can affect their availability.

In the following section availability of each of the micronutrients is discussed individually.

Boron availability decreases on fine-textured, heavy clay and high pH soils.

Fine-textured soils with a high pH or which have just been heavily limed may have a limited amount of boron available for plant growth. Boron will leach from the soil; it will be the greatest in light-textured, acid, sandy soils which are low in organic matter.

Copper becomes less available as the pH increases. However, in soils with high organic matter, the availability of copper may be more closely associated with the organic matter content than with the pH. Soils high in organic matter; i.e., peaty, muck soils, maintain a tight hold on copper and availability is

decreased. Crops frequently respond to copper applications on soils high in organic matter.

However, Canadian studies have shown that in organic soils threre is an interdependency between copper and manganese, as both elements are held similarly in complex form by the soil organic matter. Heavy copper application might result in manganese deficiency, while the addition of manganese can "release" copper from being complexed, thus causing more copper absorption by the plant roots.

Iron availability decreases as the pH increases. Iron chlorosis often develops on field crops and ornamentals as a result of high pH. High levels of phosphorus in conjunction with iron will form insoluble iron-phosphate compounds and may induce iron deficiency. Iron is not easily leached from the soil under normal conditions.

However, poorly drained soils or soils containing excess water with poor aeration which restricts root growth, may cause unfavorable conditions for iron uptake.

Manganese availability decreases as the soil pH increases. Soil pH appears to be the most important factor governing the availability of manganese. In acid soils manganese becomes soluble and is available to plants. If the soil becomes very acid, pH 4.5, toxicity may occur. As the pH increases, solubility and availability decreases.

At pH 6.3 and above manganese may not be readily available to plants.

In peats or muck soils manganese may be held in unavailable organic complexes.

Manganese deficiency in these soils may be further aggravated by high pH. Susceptible crops sometimes express severe manganese deficiency symptoms under these soil conditions.

Manganese deficiencies are frequently observed in poorly drained soils. Soils developed under poor drainage conditions are likely to contain less total manganese than those developed under good drainage. Poor drainage also limits root growth and uptake of manganese.

Molybdenum deficiencies are usually associated with acid sandy soils. Soil pH is the most influential factor affecting availability. Unlike other micronutrients, the availability of molybdenum increases as the soil pH approaches neutrality (pH 7.0) or goes higher. Most deficiencies can be corrected by liming.

Zinc availability decreases as soil pH increases. At pH 5.0 the availability of zinc is low and the availability decreases as the pH increases to 9.0 where the zinc becomes unavailable to plants. Zinc deficiencies may also be found on acid sandy soils low in total zinc, soils high in phosphorus, some organic soils and on soils where subsoils have been exposed by landleveling practices. In some areas, zinc deficiencies are also prevalent with cool, wet weather during the spring.

Crop and Varietal Response

Table 15 illustrates the difference in response to the application of the different micronutrients. Some crops may show a high degree of response to one element and alow response to others.

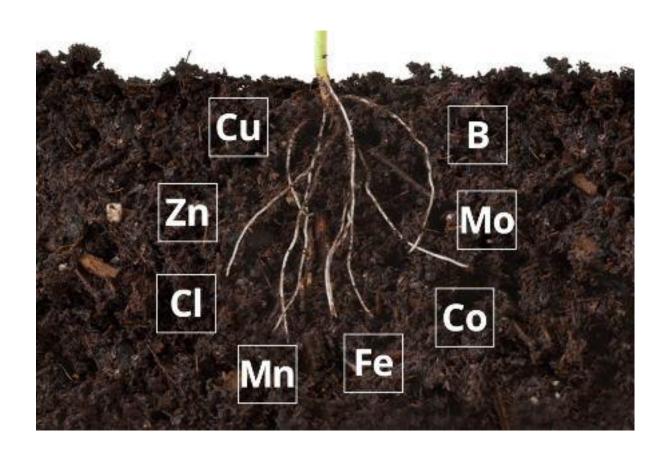
Different varieties of a given crop differ in their ability to extract micronutrients from the soil. For example, one corn hybrid may not exhibit any zinc deficiencies on a given soil, while another hybrid may show severe zinc deficiency symptoms.

In the case of iron, soybean varieties vary considerably in their iron requirement and their ability to take up iron from the soil. One variety may make lush green growth, while another variety on the same soil will appear completely yellow because of iron chlorosis.

Care should be taken to select those varieties that are not as sensitive to a given micronutrient on those soils where a deficiency is apt to exist.

14.2. Write a synopsis of the text in five sentences, using the following expressions:

On one hand apparently moreover to the fullest extents for instance mainly furthermore as finaly in addition to on the whole



•Переклад однорідних членів речення

з різним керуванням

Англійській мові властива економна побудова синтаксичних конструкцій з однорідними членами речення, чого немає в українській мові. Коли однорідні члени, виражені будь-якою повнозначною частиною мови в англійській мові, мають один і той самий додаток, то різне керування цим додатком (прийменникове чи безприйменникове) не викликає необхідності в його повторенні.

При перекладі однорідних членів речення важливо враховувати особливості вживання деяких сполучників і насамперед сполучника or.

15. Read and translate the texts.

Text A FUNCTIONS OF MICRONUTRIENTS IN CROP GROWTH

Boron is needed in protein synthesis and is associated with increased cellular activitythat promotes maturity with increased set of flowers, fruit, yield and quality. It also affectsnitrogen and carbohydrate metabolism and water relations in the plant.

Copper plays an important role in plant growth as an enzyme activator and as a part of certain enzymes which function in plant restoration. It is very important in the plant's reproductive stage of growth and plays an indirect role in chlorophyll production.

Iron is essential for the formation of chlorophyll and for photosynthesis. Iron is the activating element in several enzyme systems. It is also important in respiration and other oxidation systems of plants and is a vital part of the oxygen-carrying system.

Manganese plays a role in many of the vital processes in a growing plant. It usually functions with enzyme systems of the plant involved in breakdown of carbohydrates, nitrogen metabolism and many other plant processes.

Molybdenum is needed for the symbiotic fixation of nitrogen by legumes. It is vital for the reduction of nitrates and in the synthesis of protein by all plants.

Zinc is essential for the transformation of carbohydrates and regulation of the consumption of sugar in the plant. It forms part of the enzyme systems which regulate plant growth.

Text B

DETERMINING DEFICIENCIES VISUAL SYMPTOMS

An obvious way to determine whether a micronutrient deficiency exists is to keep a look out for deficiency symptoms. However, before these symptoms appear, reduction in potential yield and in some cases a reduction in crop quality, will usually have occurred.

COMPLETE SOIL ANALYSIS

A representative soil sample can give a good indication as to whether a micronutrient deficiency may occur. Measuring micronutrients in the soil is made more difficult by the small quantities of elements being dealt with, usually in the parts per million range but sometimes in parts per billion. Because of this, sampling and analysis should be done with the utmost care and precision. (See section on Soil Sampling Techniques.)

Micronutrient soil test ratings are shown in different materials. Because of the many factors affecting the availability of micronutrients and the levels needed by plants, the ratings given are general. As mentioned previously, the balance of the major elements and the pH can have a great effect on minor element utilization. To better interpret the test results, the major element test should accompany the minor element analysis. The ratings apply only to our test reports.

Micronutrient recommendations are affected by crop, yield goal, soil pH, and other soil conditions and cultural practices. The recommendations shown in Table 16 are general and may not necessarily apply to individual situations where more crop production inputs are known.

COMPLETE PLANT ANALYSIS

In addition to soil analysis, a complete plant analysis will assist in isolating areas where micronutrient deficiencies may exist. Be sure to collect the correct plant part at the proper stage of growth to obtain realistic analytical results. See the "Sampling Guide for Plant

Tissue Analysis" for sampling instruction. Refer to the index for critical values of various crops.

TEST STRIPS OR PLOTS

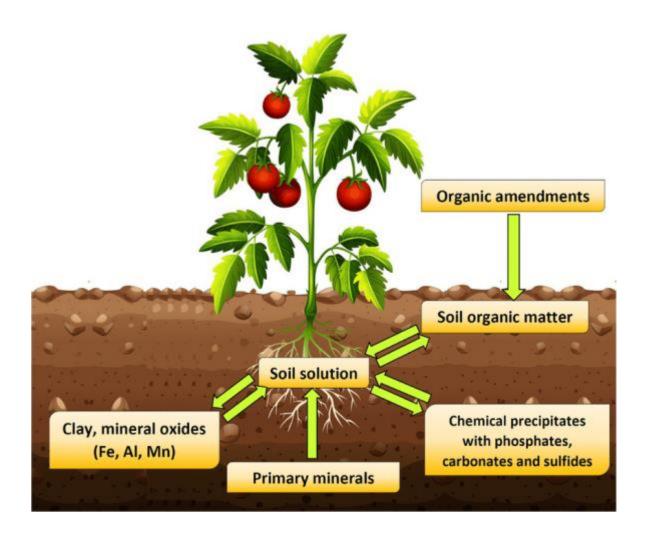
Test strips in fields where a micronutrient deficiency is suspected is an excellent way to verify a deficiency. Foliar applications or soil applications can be made on rather small areas to determine which of these elements or combination of elements may be needed.

Text C

Intensive agriculture has covered the way for "Green Revolution" with the use of high yielding varieties, chemical fertilizers and pesticides with sole objective of yield maximization. But in the same time, it deteriorated the soil health, macro and micronutrient deficiencies, low yields, poor quality and environmental hazards which resulted in serious health problems and disorders in animals and human beings. Globally, deficiencies of micronutrients in soils have emerged as a major limiting factor to higher crop yields and lowers the concentration of micronutrient in crops. One of the ways to cope with the problems of micronutrient deficiencies is to improve the soil micronutrient availability or uptake efficiency of plants. Micronutrient availability in soil is determined by the parent materials which is influenced by the edaphic and biological factors in soil such as pH, redox potential, soil minerals, organic matter and soil microbial activity. The improved agricultural practices such as soil organic amendments and soil water management play vital role in soil micronutrient availability. Under organic farming, soil health and nutrient availability is sustained by the addition of local organic inputs, i.e., waste, dungs, biofertilizers, crop residues, green manures followed by crop rotation system. Effective management and recycling of available on-farm wastes helps to reduce the dependency on external chemical inputs and limits the environmental pollution arising out with burning of farm wastes. In this chapter, we summarize behavior, availability and factors affecting of micronutrients availability in soils as well as detail about the different organic sources of micronutrients to improve the availability in soil.

15.2. Write a synopsis of the text in five sentences, using the following expressions:

On one hand	to the fullest extents
On the other hand	for instance
apparently	mainly
moreover	furthermore
in addition to	as
on the whole	finaly
	summarizing



•Передача абсолютних конструкцій

Основна трудність перекладу абсолютних конструкцій, особливо в науковій літературі, полягає у виборі способу передачі комплексного зв'язку і відношень між явищами дійсності, наприклад:

The effect being proved, the new record was scored. Навіть цей найпростіший приклад допускає різний підхід до його перекладу: диференційовану або недиференційовану передачу комплексного зв'язку (у цьому прикладі часового і причинно-наслідкового). Диференціюючи, доведеться вибрати або часову залежність: "Після того як дія (приладу) була перевірена, були записані нові показники", або причинно-наслідкову: "Оскільки дія приладу була перевірена ..." Однак точнішою в загальному контексті буде недиференційована передача:

"Дія приладу була перевірена, і записані нові показники".

16. Read and translate the texts.

Text A

TIMING AND APPLICATION METHODS FOR SOIL FERTILITY MATERIALS

Fertilizer efficiency may be expressed in terms of availability and utilization of the fertilizer by crops, as measured by yield.

This efficiency may not be high unless proper timing and placement of the fertilizer makes it remain in the soil and available for plant uptake when needed by the crop.

BROADCAST APPLICATION

Liming

The application of lime or other pH correcting material is usually broadcast well in advance of planting so there is sufficient time for the material to react with the soil solution before the crops are planted.

Nitrogen

Timing is of great importance with the application of nitrogen, as there is a potential loss through leaching, denitrification, and volatilization.

Materials like urea should not be surface applied without incorporation, except by banding of UAN solutions (dribbling), which reduces volatilization. Under alkaline conditions and high humidity loss of ammonia can occur within a relatively short time.

Phosphorus and Potassium

The immobile nature of these elements, except in sandy soils, has resulted in fall application of them, although there is the possibility of fixation under certain soil conditions.

This, of course, reduces the immediate efficiency of broadcasting.

However, broadcast/plowdown applications have several advantages:

- 1. High rates can be applied without injury to the plant.
- 2. Nutrient distribution throughout the root zone encourages deeper rooting, while placement causes root concentration around a band.
- 3. Deeper rooting permits more root-soil contact providing a larger reservoir of moisture and nutrients.
- 4. Broadcasting is an economical way to apply certain nutrients on established pastures and meadows.
- 5. Broadcasting can insure full-feed fertility to help the crop take full advantage of favorable conditions throughout the growing season.

Many times row and broadcast applications are teamed for best effect; especially under low fertility conditions.

Factors that must be considered in assessing potential nutrient loss include soil type, climatic conditions, nutrient mobility, and method, source, rate, timing of application, and cultural practices such as tillage and irrigation.

Text B ROW AND BAND APPLICATION

Row applications concentrate nutrients for rapid growth and insure nutrient availability when the root emerges; this is an efficient method to supply nutrients for plants with limited root systems.

However, too much fertilizer too close to the seed can decrease germination and injure root hairs due to the existence of a temporary region of high salt concentration near the seed.

This is the reason that a row application of fertilizer containing potash should be placed approximately 2 inches to the side and 2 inches below the seed.

The maximum safe amount of starter fertilizer that can be placed in bands depends on the crop to be grown, distance of the band from the seed, the kind of fertilizer, the row width, type of soil, and soil moisture. Generally, greater amounts can be tolerated as distance from the seed increases, soluble salts in the fertilizer are reduced, soil moisture is increased, and the soil is of a medium (silt loam) to heavy (clay) texture.

Zone placement sometimes is better than banding or broadcast/plowdown. An example of this method is the so-called strip application, which involves the application of fertilizer bands on the soil surface, which are then incorporated (see fig. 10).

Research at Purdue University by Dr. S. A. Barber, who developed this method, indicates that phosphate and also potash fertilizer mixed with only part of the soil (10-30) percent could be profitable, especially when maintenance applications are made.

Concentrated fertilizer solutions are frequently the most economic buy and usually these are liquids. Application by injection is in many cases the best method, as it places relatively insoluble materials into the root zone and prevents or minimizes loss by volatilization of nitrogen.

An advantage of injection is also that it gives minimum surface disturbance which is advantageous in dryland under decreased tillage conditions.

In the application of fertilizers for crop production the local soil and environmental conditions influence the method of application which is used.

Band near Row;

Strip;

Broadcast.

The strip and broadcast methods of fertilizer application are made on the surface before incorporation. The areas shown are for two rows.

Text C

GLOSSARY OF FERTILIZER PLACEMENT METHODS

Band- term used loosely to refer to any method in which fertilizer is applied in narrow strips. This term is also referred to as row application.

Broadcast- uniform application across the entire soil surface.

Deep- ill defined method of localized application at least 4 inches below the soil surface, usually injected with a knife or following subsoiler.

Dribble- surface application of fertilizer, usually in fluid form, in narrow band.

Dual- simultaneous knifed application of N and P or other fertilizer; typically involves anhydrous ammonia or N solution injected with fluid fertilizer at the same point of application.

Knifed- injected below the surface behind a knife to cut through the soil and make an opening for the application.

Plowdown- broadcast fertilizer incorported by plowing.

Pop-Up- placement of fertilizer directly with the seed; same as "seed placed."

Row- placement of fertilizer in bands on one or both sides of the row; typically applied 2 inches to the side and 2 inches below the seed of row crops; sometimes used synonymously with band application.

Starter- band, row, or seed-placed application at time of planting.

Strip- placement of fluid or dry fertilizer directly with the seed; same as pop-up for row crops or in the row for small grains.

16.2. Write a synopsis of the text in five sentences, using the following expressions:

On one hand	to the fullest extents
On the other hand	for instance
apparently	mainly
moreover	furthermore
in addition to	as
on the whole	finaly
in conclusion	summarizing

16.3. Write about soil fertility. Discuss in the group.



•Заміна частин мови і членів речення в перекладі

Ця категорія граматичних трансформацій здійснюється в рамках вузького й широкого контекстів. Коли заміняються в процесі перекладу другорядні члени речення, реконструкція речення може бутичастковою. При заміні головних членів відбувається повна перебудова речення.

17. Read and translate the texts.

Text A

SOIL SAMPLING

Chemical analysis of soils or soil testing, is a means to determine the nutrient supplying power of the soil.

The sample should be a true representation of the area sampled, as the laboratory results will reflect only the nutrient status of the sample which is received.

To obtain such a sample, the following items should be taken into consideration.

SAMPLING TOOLS

Several different tools, such as an auger, soil sampling tube, or spade may be used. Sample tubes or augers should be either of stainless steel or be chrome plated. If using a pail to collect the soil, it should be plastic to avoid contamination from traceelements (i.e., zinc).

SAMPLE AREA

Area to be sampled generally should not be more than forty acres. Smaller acreages may be samples when the soil is not uniform throughout the field.

Soils that differ in soil type, appearance, crop growth or past treatment should be sampled separately provided the area can be treated in that manner. Avoid small areas that are dead furrows, end rows, and which are poorly drained. Stay away from barns, roads, lanes and fence rows.

Tillage Method

a. Conventional.....plow down

- b. Reduced Tillage......3/4 of tillage depth
- if nutritional problems......0-4" and 4-8"
- c. Continuous Ridging.....(.0-6" in ridge 0-4" in valley)
- d. No Till......0-8" to check pH......0-2"
- e. Deep Placement.....plow depth and below
- f. Band Placement.....plow depth

Text B

Crop

In general, samples are taken at depth where the main root system exists.

a) Established lawns and turfs

Sample depth of 3-4 inches, which is the actual rooting depth. The sample should not include roots and accumulated organic material from the surface.

b) Orchards

The greatest root activity occurs at a epthj of 8-12 inches. The sampling depth in orchard soils, therefore, should be up to 12 to 14 inches, taken at the edge of the dripline. Take one core sample from each 15 to 16 trees selected at random in the orchard. Mix the cores to obtain a composite sample which should be from an area no larger than 20 acres.

c) Flower Beds

One sample per 100 sq. ft. consisting of a composite of three cores taken up to 6-inches depth.

d) Vegetable Garden

Sample up to 6-inch depth at various locations and prepare a composite sample.

e) Shrubs and Small Trees

Take samples at the edge of the limbspread to a depth of 8 to 10 inches.

3. Herbicide Residue Sampling

The depth of the soil sample depends on the herbicide in question and the soil. Most herbicides do not move much in fine textured soil, although there are exceptions (Amiben, Banvel, 2,4-D and Tordon). All herbicides have more

movement in coarse textured soils. Correct sampling depth is normally the incorporation depth (commonly 3 - 4 inches).

4. Sampling for Nematodes

During the summer months is the best time to sample for most nematodes, as the crop growth can indicate the presense of nematodes by having stunted appearance. Take the samples, one per each 5 acres, to a depth of 8 inches in the row from 20-25 locations. Mix the samples as soon as possible and put a composite sample of one to two pints into a soil bag. Do not let the soil dry out or get hot. The best method for nematode identification sampling is by taking root tips and feeder root samples. Remember that nematodes can be present in large numbers without any visual symptoms showing on the plant roots.

5. Sampling for Nitrate and Ammonia Nitrogen and Soluble Salts

Rapid changes in nitrate and ammonia levels can occur when after taking a soil sample, the sample is stored moist and warm. It is advisable to dry the sample at 40 - 50 C (100 - 110 F) to ship, unless under refrigeration.

Because nitrate nitrogen leaches easily, deeper sampling is required to effectively determine the total available nitrogen in the soil. Sample to a 2-3 foot depth with samples taken at 7-inch to 1-foot increments to form possible composite samples.

Sampling for soluble salts should be in accordance with instructions for nitrate sampling. Soil should be air-dried before shipping or storage for any length of time.

6. Subsoil Sampling

Subsurface or subsoil sampling is frequently of value, and samples can be collected to explain unexpected crop growth patterns resulting from either chemical or physical characteristics of subsoil layers.

Such sampling is also of importance in areas where deep-rooted crops are grown, which obtain the majority of their nutrient requirements at such depths.

To estimate the available soil nitrogen for crop use, the determination of nitratenitrogen levels in the soil profile is made.

Separate samples from plow depth and subsurface can be taken if sodium or salinity problems are anticipated.

Text C

TIMING OF TAKING SOIL SAMPLES

Generally, soil tests should be taken on all fields at least once every 2 to 4 years, but soils on which vegetables or other high cash crops are grown may need to be tested annually.

It really does not make much difference whether one is sampling cotton, corn, wheat, or soybean fields, the ideal time to sample is right after harvest. At that time of the year the fields are generally very accessible and good representative soil samples are easy to obtain.

More time is also available for the evaluation of the soil test data and setting up a good soil fertilization program.

Due to the variation in nutrient availability that may be associated with time of sampling, it is suggested that any given area be sampled about the same time each year.

However, samples taken for diagnostic purposes (fertilization response, poor crop growth, evaluation of soil conditions) are best obtained while the problem areas are delineated by crop or other visual differences.

17.2. Write a synopsis of the text in five sentences, using the following expressions:

On one hand
On the other hand
apparently
moreover
in addition to
on the whole
to the fullest extents
for instance
in conclusion
mainly

•Заміна дієслів

Тенденція до заміни дієслів найчастіше спостерігається при перекладі науково-технічних, публіцистичних і документальних текстів. Особові й безособові форми англійського дієслова замінюються українськими іменниками. Заміни можуть бути обов'язковими, коли в українській мові не існує аналогічного дієслова; факультативна заміна дієслова звичайно пов'язана зі стилістичними міркуваннями.

18. Read and translate the texts.

Text A PLANT ANALYSIS REASONS FOR USING PLANT ANALYSIS

For growth, development and production plants require a continuous, welladjusted supply of essential mineral nutrients. If any of these nutrients are in limited supply, crop performance decreases and ultimately results in nutritional disorders.

Shortages of mineral nutrients manifest themselves in terms of reduced crop yields and/or poor quality of the crop.

Soil testing generally precedes plant testing for routine fertilizer advisory purposes; however, plant analysis in combination with soil testing is an excellent way to develop a strong fertility program for crop production. As soil analysis indicates the relative availability of nutrients in the soil for crop use, plant analysis provides anindication of which nutrients have been or are absorbed by the plants.

Leaves are considered as the focus of physiological activities and changes in mineral nutrition appear to reflect in the concentrations of leaf nutrients.

Motivation for the determination of nutrient concentration in leaves for diagnostic purposes arises from the assumption, that a significant relationship exists between nutrient supply and levels of elements, and that increases or decreases in concentrations relate to higher or lower yields, respectively.

SOURCES OF VARIATION

During the early vegetation period, the rate of nutrient uptake is high and this consequently leads to high nutrient contents in the plant tissues. Thus, physiological age is an important factor of variability and young, metabolically active leaves generally contain higher amounts of nutrient elements.

Different parts or tissues of the plants also contain and accumulate varying amonts of elements and this, of course, is important with regard to the choice of the plant part to be sampled and analyzed. This part is called the "index part."

Other major sources of variability in nutrient concentrations are plant species, cultivars or varieties, morphological position on the plants, internutrient effects as well as seasonal variation, time of sampling, time of day, weather conditions, and climate.

Often neglected sources of variation include handling of samples, cleaning methods, drying and grinding procedures, and analytical methodology.

A meaningful interpretation of plant analysis data depends upon the care taken in all of the above-mentioned items.

Text B

PLANT ANALYSIS INTERPRETATION

As previously discussed, plant analysis can be used as a guide for the fertilization of crops; to evaluate the fertilization programs; to monitor crop nutrient balance or imbalance; as a general diagnostic tool with or without soil analysis; and the diagnosis of abnormal growth.

To make the results of analyses useful, proper interpretation guidelines have to be established, which can be based on comparing the nutrient concentrations observed to standard values and classifying the levels found as deficient, low, adequate, high, or excessive with respect to each nutrient; or by employing a system based on the use of nutrient concentration ratios (i.e., DRIS).

Consideration should be given to the following items when interpreting plant analysis data:

- 1. The time of sampling as related to the stage of growth and character of growth should be known and considered. The nutrient content of a particular plant part can change considerably through the life cycle of most plants.
- 2. Environmental factors, like moisture (deficiency or excessive), temperature (high or low), and light (period and intensity), can develop unusual nutrient element contents and ratios.
- 3. Crop variety also can have a significant influence on nutrient levels within the same crop. To obtain a reliable interpretation of the analysis data, it might be necessary to compare nutrient contents of a healthy crop with a crop which has a poor appearance.
- 4. The uptake by roots and the mobility of plant food elements between plant parts in association with the rate of plant growth will affect the concentration of these elements in plant tissue. This is the reason that the time of sampling and plant part sampled are important information which should be included when plant samples are to be analyzed and data interpretation is needed.
- 5. Information about the application of fertilizers or limestone to soils can significantly alter the concentration of more than one element in the plant tissues.

This may lead to deficiencies or toxicities of certain elements, and an incorrect interpretation of the analysis data.

Text C

DIAGNOSIS OF FIELD PROBLEMS

If fields are checked regularly, there is often time to correct problems if action can be taken immediately. The cause could be obvious; however, a guideline could be very helpful in making a diagnosis.

The objective is to use all resources to identify and correct any conditions restricting the plant's potential for producing seed, fruit, fiber, and/or forage.

Visual Plant Symptoms

Check each part of the plant thoroughly and record unusual growth, color, deficiency symptoms, delayed maturity, quality of crop, mechanical damage, and injury by insects. Also examine the root system for injury or specific growth patterns.

Soil Conditions

Soil analysis measures only the chemical factors, which influence plant health. However, the physical make-up of the soil affects water holding capacity, water penetration, aeration, and root growth. When the soil's physical characteristics are such that plant roots cannot supply plants with sufficient water and nutrients, or plants suffer from lack of oxygen, the soil has a physical problem.

Such problems could be caused by compaction layering or stratification of different soil textures or hardpans (natural or man-made).

Crop rotation, reduced tillage practices, change in irrigation practices or drainage methods and deep tillage can provide a better environment for root development.

Field History

Obtain information about the previous crop grown in the field, weed, insect/disease problems, fertilization and liming programs, soil and plant analysis data, and yield potential of the soil type. Also, know the crop variety, tillage method, and pesticide and herbicide used.

Weather Observations

Rainfall and temperature have a great influence on nutrient uptake and they can be indirect contributors to fertility problems.

Soil and Plant Analysis

The most effective use of these analyses consists of comparing soil and plant analysis data from good and bad areas.

If the sampling has been done in time, measures can be employed to correct the problem.

18.2. Write a synopsis of the text in five sentences, using the following expressions:

assume
apparently
moreover
in addition to
on the whole
think
to the fullest extents
for instance
making the conclusion
mainly

18.3. This is your project-based work. Study the problem. Make the presentation



18.4. Glossary

fertilization of crops;

to evaluate the fertilization programs;

to monitor crop nutrient balance or imbalance;

as a general diagnostic tool

abnormal growth

to make the results of analyses useful

proper interpretation

be based on comparing

•Заміна іменників

Із заміною іменників іншими частинами мови доводиться зустрічатись порівняно рідше, ніж із заміною дієслів. Найчастіше замінюються іменники, які не мають прямої відповідності в українській мові. Далеко не всі англійські іменники, утворені за допомогою суфікса ет (от), мають відповідні еквіваленти в українській мові. Наприклад: "He was an early riser". "Він рано вставав" або "Він любив рано вставати". В українській мові немає аналогічного іменника, і тому слово riserперекладається особовою формою або інфінітивом дієслова, а прикметник early—прислівником.

19. Read and translate the texts.

Text A ENVIRONMENTAL SAFETY

Everyone shares responsibility for protecting the natural environment. Pesticide applicators must protect land and water resources from contamination.

The pest control measures and pesticides you choose will impact the environment.

To make the best choices, you will need toknow the short- and long-term effects of pesticides on the environment. Pesticides need to remain active after application if they are to work. The chemical and physical properties of pesticides affect the length of time that they remain active. These properties also determine the risk that a product can pose to the environment.

Pesticide applicators should select and apply pesticides that will cause the least harm to the environment. To do this, you need to know the key factors that determine environmental risk.

Environmental damage costs associated with improper pesticide use can be long-term and widespread. For the applicator, these can include loss of money,

loss of reputation, and legal issues. Longer-term impacts can show up as damaged land and water. Loss of public support for farming can also result.

Any pesticide use poses a risk to the environment. The degree of risk depends on:

- Volume of product used
- Persistence of the pesticide in the environment
- Product movement
- Toxicity to non-target organisms

Volume

Volume is the total amount of pesticide used. The larger the volume of product applied, the greater the risk of environmental damage.

The type of crop will often dictate the volume of pesticide applied. For example, potatoes require more pesticide than cereal crops. This increases the environmental risk due to potato production.

Persistence

Persistence is the length of time a pesticide remains active in the environment.

Persistent pesticides remain active for a long time. They can remain on the target site, or be carried elsewhere by wind or water. The more persistent the pesticide, the greater the risk it poses to the environment.

Atrazine and Treflan (trifluralin) are persistent pesticides.

Mobility

Pesticides will not always stay where they are applied. Mobility refers to the ability of a pesticide to move away from the application site. A product may beable to travel through soil, in water, or through the air. This depends on its structure.

Mobile pesticides are more likely to damage the environment.

Temik (aldacarb) and Atrazine are pesticides that often move (leach) through the soil.

Non-target Toxicity

Pesticides are applied to control a single pest or group of pests. Non-target toxicity is the risk of a pesticide causing damage to non-target organisms.

For example, an insecticide might be applied to target one insect that is damaging a crop. However, it might also harm beneficial insects in the area.

Birds that feed on the treated crop or insects can also be poisoned.

Text B

Chemical Processes

Chemical processes that affect pesticide fate include:

- Degradation the breakdown of a product
- Bioaccumulation the buildup of a product in animal tissue
- Biomagnification the buildup of a product in the food chain, or in the natural environment (e.g., in water)
 - Adsorption the binding of a product to soil particles
 - Desorption the release of a product from soil particles
- Absorption the movement of a product into plants, animals, soil, or structures
 - Volatilization the evaporation of a product

Degradation

Degradation is the breakdown of a pesticide into simpler parts. The rate of pesticide breakdown is affected by environmental factors such as temperature, moisture, and pH. Degradation can be:

- Microbial
- Chemical
- Photodegradation

Microbial degradation is the most common type of pesticide breakdown. It occurs when soil microorganisms use the pesticide as a food source. The pesticide is broken into basic compounds such as water and carbon dioxide.

Microbial breakdown is affected by:

- Temperature

- Soil pH
- Soil moisture
- Soil fertility
- The presence of oxygen
- Chemical or physical properties of the pesticide

Chemical degradation a chemical reaction between a pesticide and the environment. It often breaks a pesticide into less hazardous compounds. Rate of chemical degradation depends on temperature, pH, moisture, and the pesticide itself.

Photodegradationis the breakdown of a pesticide by sunlight.

Photodegradable products have to be mixed into the soil shortly after they are applied to work effectively.

Bioaccumulation

Bioaccumulation is the buildup of a pesticide in the body tissues of animals.

Pesticides build up when they enter tissues faster than they are excreted (passed through the tissue) or metabolized (changed into energy).

The more pesticide in animal tissue, the more harmful it is. If enough pesticide builds up, it can cause long-term damage or death.

Biomagnification

Biomagnification is the buildup of a pesticide in the food chain. Persistent pesticides can build up to hazardous levels in some plants and animals. When other animals eat these plants and animals, the pesticide moves up the food chain. Biomagnification can even happen when a product is applied according to label directions.

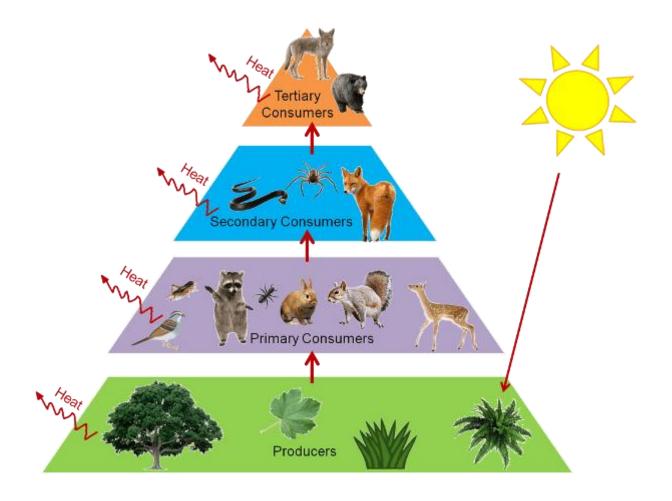
For example, a pesticide is applied to a field at the label-recommended rate for a given insect. Thousands of insects eat the insecticide. Frogs eat hundreds of these contaminated insects in a few days. The pesticide then builds up in the tissues of the frogs.

A snake eats a number of contaminated frogs. The insecticide is now further concentrated in the snake's body. If a hawk eats a number of contaminated snakes, the hawk will consume a high quantity of pesticide.

Biomagnification can also occur in water. Water and food sources for waterbased organisms can be contaminated.

Biomagnification of persistent pesticides led to the ban of chlorinated hydrocarbon pesticides such as DDT.

Fig.1. Understanding of Biomagnification



Adsorption

Adsorption is the binding of chemicals to soil particles or other materials. Clay and soils high in organic matter are the most adsorptive. Soil-bound pesticides are less likely to leach or be broken down by microbes. However, pesticides can be easily moved by wind or water erosion when bound to soil particles.

Desorption

Desorption occurs when bound pesticides are released from the soil or other materials. Desorbed chemicals can move over great distances. The risk they pose to the environment should be carefully considered.

Absorption

Absorption is the movement of a pesticide into organisms (e.g., plants and animals) or structures (e.g., wood and soil). Absorption of a pesticide can harm an organism.

Pesticide absorption may not be harmful if the organism can break the pesticide down into non-toxic compounds.

Volatilization

Volatilization is the process by which solids or liquids evaporate (become gases). The rate of volatilization depends on the pesticide formulation. Weather conditions (temperature, relative humidity, and wind speed) will also affect the rate of volatilization.

Text C

Physical Processes

Physical processes that impactpesticide fate include:

- 1. Leaching the movement of a pesticide in water through soil
- 2. Soil erosion and surface runoff the movement of a pesticide with soil particles or in water over the soil
 - 3. Drift the movement of a pesticide by wind

Leaching

Leaching is the movement of a pesticide in water through the soil. Water can leach downward, upward, or sideways. The risk of leaching increases when:

- Pesticide solubility is high; this results in more product in the water
- -Adsorption is low; this makes more pesticide available
- Desorption is high; this also makes more pesticide available

- Soil has little organic matter; less pesticide is trapped and held
- Water (e.g., rain or irrigation) isadded to the application site

The soil has a coarse structure (e.g., sandy soils); the pesticide can travel freely and quickly inwater through coarse soil.

When you know the likelihood for a pesticide to leach, you can reduce the risk of environmental contamination. Pesticide labels often give information on ways to reduce leaching. A product may be suitable for use only with certain soil types. It might be suitable for use under a number of soil conditions. Check the label for directions.

Soil Erosion and Surface Runoff

Surface runoff occurs when water flows over a sloped surface. This water often picks up (erodes) some of the soil as it moves. Pesticides can become mixed with the runoff water or be carried in the water as soil-bound particles.

Pesticide characteristics (e.g., formulation and solubility) affect the amount of pesticide in runoff. The amount of runoff is determined by:

- 1. Degree of slope on the soil surface
- 2. Soil texture and type of surface (bare soil, grass buffer, etc.)
- 3. Ability of the soil to absorb water
- 4. Moisture content of the soil
- 5. Volume of moisture added (rainfall or irrigation)
- 6. Type and amount of surface vegetation

Pesticide runoff can occur when it rains before an application of liquid product has had time to dry. Heavy rain can also carry persistent granular or liquid pesticides and those bound to soil particles. This can result in pesticide-laden runoff days or weeks after product application.

Even a year after application, melting snow or spring rains can carry a moderately persistent pesticide such as atrazinein runoff water.

Wind can erode or wear away surface soil. Eroded soil particles can then end up in wetlands, waterways, and ditches. Pesticides bound to these soil particles will also be carried with wind erosion. This can move pesticides far from their target site.

You must follow label directions to reduce the risk of pesticide movement from runoff and soil erosion. You should also consider:

- The slope of the application area
- The type and adsorptiveability of the soil
- Near-by plant life
- Any additional water (e.g., rain) that might be expected

19.2. Write a synopsis of the text in five sentences, using the following expressions:

A key aspect of X is

A primary concern of X is

assume

apparently

moreover

in addition to

One of the most significant current discussions

is

X is a classic problem in

I think

to the fullest extents

for instance

making the conclusion

mainly

on the whole

•Переклад слів, утворених конверсією

Переклад слів, утворених шляхом конверсії, викликає інколи значні труднощі. Справа в тому, що цей спосіб словотворення застосовується автором індивідуально: завдяки йому досягається стислість, виразність і нерідко образність. Слова, утворені шляхом конверсії в англійській

мові, рідко мають відповідники в українській мові, виражені тією ж самою частиною мови. Тому при перекладі слів, утворених шляхом конверсії, часто необхідна перебудова речення й заміна частин мови.

20. Read and translate the texts.

Text A

Managing Environmental Risk Farm applicators are responsible for the impact of pesticide use on the

environment. You will have to consider and manage risk to the environment any time you use a pesticide.

Environmental risk can be managed. Todo this, you must consider pesticide selection, application, and storage.

Pesticide Contamination

There are two kinds of pesticide contamination. Both can occur in water, soil, or air.

They are often caused by product drift or runoff. Contamination can be:

- = Point source
- = Non-point source

Point source contaminationis the release of a large amount of pesticide into a small area. ExamNon-point source contaminationis the release or use of pesticide over a large area. Examples include drift to a non-target location or runoff from a treated area.

Protecting Water Resources

Water is a valuable natural resource. Today, water is increasingly threatened around the world. Pesticide contamination of water is a growing concern. Care must be taken to prevent damage to drinking water, waterways, and aquatic life. Pesticides can get into water a number of ways. They can contaminate groundwater (water in saturated zones below the soil surface). Pesticides can also contaminate surface water (open bodies of water such as streams, ponds, lakes, and oceans). Contaminated water can affect fish, wildlife, domestic animals, and humans. Contaminated irrigation water or runoff can damage sensitive crops some distance away. It is both difficult and costly to clean contaminated water.

Text B

POINTS OF PESTICIDE ENTRY

Pesticides can enter surface water and groundwater through:

- 1. Physical processes such as runoff, leaching, and erosion
- 2. Spray or vapour drift during application
- 3. Pesticide spills during moving, mixing, loading, storage, application, or disposal
 - 4. Atmospheric fallout (e.g., rain orsnowfall containing pesticides)
- 5. Overflowing spray tanks or back siphoning of pesticides from spray tanks into wells and other water sources when filling equipment

PREVENTATIVE PRACTISES

Applicators can help to avoid water contamination by:

- = Following all product label directions
- = Properly disposing of wastewater from equipment cleanup
- = Properly disposing of excess spray mix, unwanted pesticides, or pesticide containers
 - = Storing all pesticides in approved facilities
- = Creating buffer zones ples include pesticide fires, spills, or poor product disposal.

Buffer zones are untreated areas left around fields that have been treated with a pesticide. Buffer zones can protect nearby areas and waterways from pesticide hazards. Theycan also slow runoff and reduce surface water contamination.

APPLICATION PRACTICES

To avoid water contamination when using pesticides:

- -Mix and apply pesticides asdirected on the label.
- Prepare tank mixes and fill application equipment far from water sources.
- -Travel on roads only when application equipment is empty (if possible).
- Maintain application equipment. Check regularly for leaks in tanks, hoses, and nozzles.

- Apply product only under suitable weather conditions.
- Use a nurse tank to fill application equipment.
- Use an anti-backflow device when filling application equipment (if the use of a nurse tank is not possible).
- Wash application equipment and protective clothing where they will not contaminate water sources.
 - Dispose of extra pesticide mixture away from wells and waterways.
- Keep people, farm animals, pets, and wildlife away from puddles of wash water.

Protecting Soil Resources

Pesticides can contaminate soil when:

- 1. The recommended product application rate is exceeded
- 2. Product is spilled during mixing and loading
- 3. Application equipment overflows
- 4. Containers or surplus spray mixtures are poorly disposed of

Soil characteristics play a major role in pesticide contamination. Spills on sand or sandy loam soils can contaminate groundwater through leaching. Spills on clay soil can remain on the soil surface before being absorbed. This allows them to spread to other areas by surface runoff.

PERSISTENCE

The length of time a pesticide remains active (persistence) also plays a role in soil contamination.

Pesticide persistence in soil is affected by:

- 1. The chemical class or family of the pesticide
- 3. The type of pesticide formulation
- 4. The ability of the pesticide to formpersistent by-products in the soil
- 5. Weather conditions
- 6. The soil conditions (e.g., organic matter, pH, texture)

Examples of persistent pesticides include the herbicides metribuzin, atrazine, simazine, and metolachlor. There is a risk of water contamination as long as a pesticide remains in the soil. This can happen through leaching or surface runoff. Persistent pesticides can even damage susceptible crops planted the next season.

Guidelines to prevent soil contamination are similar to those discussed earlier to prevent water contamination.

Text C

Managing Non-target Exposure

Beneficial organisms are important to the environment and must be protected. Some pesticides can harm beneficial species. A small amount of a very toxic pesticide can present an extreme danger if it reaches the environment.

To manage exposure of non-target plants, animals, and water, keep the following in mind:

- 1. Birds, bees, and wildlife are at risk from pesticides. They move freely and can enter treated areas.
- 2. Knowing common beneficial species (plants, animals, insects) in the area will help you take steps to protect them.
- 3. Knowing the movements and lifecyclesof non-target species will help you to reduce their exposure during key life stages.
- 3. Prevention is the best protection. Follow label directions and precautions. Know where, when, and how non-target life can be harmed.

BENEFICIAL INSECTS

There are a number of beneficial insects. For example, bees are important to some crops. They pollinate tree fruits, small fruits, legumes, and vegetables.

Pesticides can affect bees:

- Directly- exposure during product application

- Indirectly- pollen contaminated with pesticide is gathered and stored in the hive.

The impact of pesticides on bee populations is influenced by product toxicity and persistence. Symptoms of possible poisonings include:

- Large numbers of dead bees in front of hives
- Aggressive or slow-moving bees
- -A sudden drop in the number of bees

There are a number of ways to reduce pesticide exposure to bees. These include the following:

- = Do not apply insecticides while tree fruits and other crops are in bloom or when bee activity is high.
 - = Use pesticides that pose little risk to bees (if possible).
- =Apply pesticides early in the morning or in the evening, when bees are not active (if possible).
 - = Inform nearby beekeepers of planned pesticide applications.
- = Reduce drift and avoid spraying insecticide on non-crop field edges or borders.

Beneficial insects, such as the praying mantis, ladybird beetle (ladybug), and assassin bug, prey on pests. They are natural pest controls.

Widespread use of pesticides cuts down on the number of beneficial insects. This upsets the natural balance and can lead to greater pest problems. Beneficial insects often play a major rolein integrated pest management (IPM). Maintain the health and safety of beneficial insects to reduce the need for chemical pesticides.

PLANTS

Phytotoxic chemicals damage or injure plants. When these are used, injury can occur to both target and non-target plants. Herbicides cause most pesticide plant damage. However, damage to non-target plants can also result from insecticides or fungicides.

Pesticide applicators should be aware of non-target sensitivities given on the product label. You can protect non-target plants by taking steps to prevent spray or vapour drift.

Wildlife and fish use streamside vegetation. These plants:

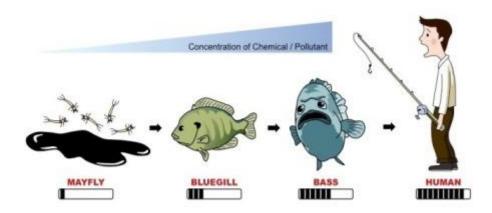
- Serve as food
- Provide shelter
- Stabilize stream beds or banks
- Retain moisture

Damage to plants along a stream will harm food and habitat for wildlife.

Herbicide damage to streamside plants can affect:

- -Stream bank stability
- -Water temperature (by removing shade)
- Food sources for fish

This damage can have a long-term effecteven outside the treatment area.



20.2. Write a synopsis of the text in five sentences, using the following expressions:

A key aspect of X is X is a classic problem in A primary concern of X is I think In recent years, there has been an increasing to the fullest extents interest in for instance Previous studies have reported making the conclusion Recent evidence suggests that mainly Several attempts have been made to on the whole Studies of X show the importance of A number of researchers have reported ... One of the most significant current discussions

20.3. Self-study Questions

- 1. Select three processes from the following list that can affect the fate of pesticides after they are released into the environment.
- a) adsorption
- b) transfer
- c) weather conditions
- d) degradation
- e) buffer zones
- 2. Degree of environmental risk depends on four factors. They are:
- a) volume
- b) weather
- c) buffer zones
- d) persistence of the product
- e) mobility
- 3. Which one of the following scenarios presents the greatest degree of environmental risk?
- a) An applicator sprays a potato crop with two applications of a fungicide. Following one of the applications, a small amount of spray drifts to a nearby field.
- b) An applicator sprays a potato crop with two applications of a fungicide and two applications of an insecticide. After each application the

weather is sunny and warm.

- c) An applicator sprays a potato crop with two applications of a fungicide and two applications of an insecticide. Following one of the applications, pesticide residue is noticeable on plants several hundred metres from the field that was sprayed.
- d) An applicator sprays a potato crop with two applications of a fungicide and two applications of an insecticide. Crows are often spotted close to the sprayed field.
- 4. If pesticides are applied very near to a river, pond, or lake, the pesticide can damage food, aquatic organisms, and streamside vegetation. What are the expected effects on the fish populations in these watercourses?
- a) There will be no effecton the fish populations.
- b) Fish populations will suffer due to loss of food and oxygen sources.
- c) The loss of streamside vegetation removes shelter and plant root systems, increasing the possibility of runoff and soil erosion.
- d) There will be no effect on streamside vegetation.
- e) b and c
- 5. You are applying a liquid herbicide formulation to a field in July. The temperature is 25 degrees Celsius, and the forecast is calling for three sunny days. Which of the following practices can help you decrease the potential for environmental risk?
- a) Apply the pesticide atlabel-recommended rates.
- b) Calibrate your equipment properly.
- c) Use a pesticide having a high toxicity to maximize pest control results.
- d) All of the above
- e) a and b only

•Розбіжність числа іменників

Вживання іменників в однині і множині в англійській та українській мовах не завжди збігається. Абстрактні іменники в англійській мові часто вживаються й у множині, однак в українській мові вони не мають множини. Наприклад: A finely written novel about the lives and struggles of the people of Ukraine. - Прекрасно написаний роман про життя й боротьбу народу України.

Якщо для правильного висловлювання думки потрібна множина, перекладачу доведеться ввести додаткове слово в множині. Наприклад:

industries— галузі промисловості; polices— різні політичні напрями.

21. Read and translate the texts.

Text A INTEGRATED PEST MANAGEMENT (IPM)

Integrated pest management (IPM) is a decision-making tool. It involves planning and acting to control pests. To follow IPM, you will have to think about a variety of control measures. These should be effective, affordable, and environmentally safe.

The prevention of pest problems is the first step in IPM. If pestcontrol is needed, IPM can involve physical (mechanical), cultural, biological, genetic, or chemical measures. These can be performed alone or in combination. The goal is to maximize pest control, while minimizing environmental and health risks.

With IPM, pest control is only used when it is called for after careful monitoring.

With planning, IPM will avoid the use of pesticides whenthey are not needed. This keeps crop production costs down.

Economic measures can be used to judge the success of IPM. Evaluate your IPM program each year. This will allow you to achieve the long-term economic and environmental benefits of IPM.

An individual must answer many key questions before putting a pest management program in place.

- = Are there pests in the crop?
- = What types of pests (e.g., insects, weeds, diseases, or animals) are present?
- = How many pests are there per plant or per area?
- = How much damage are the pests doing?
- = Are conditions suitable for pest problems to grow?
- = Is the pest at a stage where it can be controlled?

A good IPM program will first try to prevent pest problems. Changing the management of plants and crops can limit pest problems. Pest management should be effective, safe, and not too expensive. It often involves keeping pest numbers down to acceptable levels. It does not result in the total elimination of a pest population.

Text B

Identify Pests

Step 1 – Find out what pests are present. Identify beneficial species in the same area.

Identifying pests and beneficial species important to IPM. Correct pest identification is needed to understand pest biology. To protect beneficial species that live in the same area, they must not be mistaken for pests.

Identification can show that active treatment is not required. For example, enough of a beneficial species may be present to naturally control the pest.

If pest identification cannot be made easily, there are information sources to help. Information on pest and beneficial species can be obtained from government fact sheets and scientific publications.

Diagnostic services include crop scouting firms and pest control representatives. Government pest management experts can also be contacted.

The Internet and other electronic references can help. Once the pest is identified, the applicator must find the development stage where pest control will best work.

Pests are often easier to control during a certain life stage. For example, annual weeds are best managed with herbicides when they are seedlings. Insects are often best controlled during early life stages.

Monitor Pests

 $Step\ 2-Closely\ monitor\ pest\ and\ beneficial\ species\ populations.\ Look\ for\ pest\ damage\ and\ monitor\ the\ environment.$

Good pest monitoring (scouting) will provide information for pest control.

Visual Inspection

Watch for signs of pest problems. This involves looking for conditions that favour pests. Inspections should be regular. Clear notes should be kept. The value of observations depends on the knowledge of the inspector. Visual inspections are good to check for the presence of pests, damage symptoms, and beneficial species.

Inspections can show growing conditions, plant health, and environmental conditions that attract pests or provide them with shelter, food, or water.

Injury Level and Action Thresholds

Step 3 – Use injury and action thresholds to find the best time to treat pests.

The aim of integrated pest management isto keep the pest population at a level that avoids economic loss. A certain amount of pest damage may not pose a problem. Thresholds help the applicator decide the level of damage that requires pest control, and when to begin treatment. Keep track of the amount of damage that occurs. Information from monitoring can be used to decide if pests require control measures. Control often does not involve elimination of the pest.

Economic Injury Level

The economic injury level is the point at which the cost of pest damage equals the cost of pest control. IPM should begin before the economic injury level is reached. Economic injury may include lost crop yield or quality, extra labour costs, or increased pest control costs. Some pest species cause more economic injury than others.

Action Threshold

This is the point at which you must take action to control pests to avoid reaching the economic injury level. You should control the pest when the action threshold is reached. Each pest has its own action threshold. This depends on the control measure to be used and the biology of the pest.

Once you know the action threshold for a particular pest, the pest population must be monitored so that you will knowwhen that threshold is reached. Thresholds are only guidelines. They can be changed to reflect local conditions and market demands.

Step 4 – Choose the pest control measures that you will need. Use a combination of measures when possible.

Text C

Control measures

IPM involves using a number of monitoring and control measures. These include the following:

Physical (Mechanical) Controls

Physical controls involve either removing a pest that isin place, or preventing it from getting into a crop.

Physical controls include:

- -Using screens to keep out insects
- Using mulches to suppress weeds
- -Cultivating fields to control weeds

Cultural Controls

Cultural controls are practices common to good soil, seed, crop, and environmental management. Cultural controls include crop rotation and the use of certified seed (e.g., low in weed seeds and disease).

Biological Controls

Biological controls use other organisms to control or kill the pest. Measures include releasing sterile insects, beneficial parasites, or predators (e.g., parasites to control whitefly in a greenhouse).

Genetic Controls

Genetic controls involve planting modified seeds and crops. These can resist pests. Genetic controls include using genetically engineered crops (e.g., Bt-corn and Bt-potatoes), or choosing plant varieties that resist disease.

Chemical Controls

Chemical controls involve using pesticides such as herbicides, insecticides, fungicides, or repellents. These control, suppress, or repel pests. Chemical controls include using an insecticide on potato plants to control aphids, or using herbicides to control weeds.

Using a number of these measures promotes good pest control. It also minimizes environmental and health risks. Pest controls should only be used when monitoring shows that they are needed.

With planning, applicators should avoid using pesticides when they are not needed.

This will help to lower the cost of pest control.

Chemical control is not always needed or economical. Consider using pest control measures that do not requirechemicals. Good IPM includes using number of controlmeasures, alone or in combination.

Evaluate Management Strategies

Step 5 – Evaluate the effectiveness of the pest management plan.

It is important to evaluate the effects of IPM. The only way to do this is to keep good records. Detailed records of pest management strategies you have used in the

past will help you know if theywere effective or not.

This information can be used to:

- = Evaluate current pest management programs
- = Adjust the program for future years
- = Forecast pest problems
- = Defend against legal suits

Integrated pest management is only partof a crop management program. Other parts of an IPM program include seed quality, varieties, soil health, nutrition, water and soil management, climatic effects, post-harvest handling, and marketing.

21.2. Write a synopsis of the text in five sentences, using the following expressions:

Although		=no single study exists which
While	some research has been	=no studies have been found which
Whilst	carried out on	=no controlled studies have been
		reported.
		=only two studies have attempted to
		investigate
		=the mechanism by which has not
		been established.
		=there have been few empirical
		investigations into
		=there is very little scientific
		understanding of

21.3. Project - based work



The major objective of this study was to investigate

The aim of this study was to clarify several aspects of

The objectives of this research are to determine whether

The main purpose of this study is to develop an understanding of

This paper investigates the usefulness of

Таблиця неправильних дієслів

Α			
Infinitive	Past Simple	Past Participle	Переклад
to abide	abode/abided	abode/abided	дотримуватися
to arise	arose	arisen	виникати
to awake	awoke/awakened	awoken/awakened	прокидатися
В			
to backslide	backslid	backslid / backslidden	відступати
to abide	abode/abided	abode/abided	дотримуватися
to be	was / were	been	бути
to bear	bore	born / borne	нести
to beat	beat	beaten	бити
to become	became	become	ставати
to begin	began	begun	починати
to bend	bent	bent	згинатися
to bet	bet	bet / betted	ставити
to bid	bid / bade	bid / bidden	ставити ставку
to bind	bound	bound	пов'язувати
to bite	bit	bitten	вкусити
to bleed	bled	bled	кровоточити
to blow	blew	blown	дути
to break	broke	broken	ламати
to breed	bred	bred	вирощувати
to bring	brought	brought	приносити
to broadcast	broadcast / broadcasted	broadcast / broadcasted	передавати
to browbeat	browbeat	browbeaten / browbeat	залякувати
to build	built	built	будувати
to burn	burnt / burned	burnt / burned	горіти
to burst	burst	burst	вибухати
to bust	bust / busted	bust / busted	розорювати
to buy	bought	bought	купляти
С			
to cast	cast	cast	кидати
to catch	caught	caught	хапати
to choose	chose	chosen	вибирати
to cling	clung	clung	чіплятися

to clothe	clad / clothed	clad / clothed	одягати
to come	came	come	приходити
to cost	cost	cost	коштувати
to creep	crept	crept	повзти
to crossbreed	crossbreed	crossbreed	схрещувати
to cut	cut	cut	різати

D

to daydream	daydreamt / daydreamed	daydreamt / daydreamed	мріяти
to dare	durst	dared	відважуватися
to deal	dealt	dealt	вирішувати
to dig	dug	dug	копати
to disprove	disproved	disproved / disproven	спростовувати
to dive	dove / dived	dived	ниряти
to do	did	done	робити
to draw	drew	drawn	малювати
to dream	dreamed / dreamt	dreamed / dreamt	мріяти
to drink	drank	drunk	пити
to drive	drove	driven	керувати
to dwell	dwelt / dwelled	dwelt / dwelled	итиж

Ε

to eat	ate	eaten	1СТИ

F

t	o fall	fell	fallen	падати
t	o feed	fed	fed	годувати
t	o feel	felt	felt	відчувати
t	o fight	fought	fought	боротися
t	o fit	fit / fitted	fit / fitted	підходити
t	o flee	fled	fled	уникати
t	o fling	flung	flung	кидати
t	o fly	flew	flown	літати
t	o forbid	forbade	forbidden	забороняти
t	o forecast	forecast	forecast	передбачати
t	o forego / forgo	forewent	foregone	відмовлятися
t	o foresee	foresaw	foreseen	передбачати
t	o foretell	foretold	foretold	пророкувати
t	o forget	forgot	forgotten	забувати
t	o forgive	forgave	forgiven	пробачати
t	o forsake	forsook	forsaken	залишати
t	o freeze	froze	frozen	заморожувати

to frostbite	frostbit	frostbitten	відморожувати
G			
to get	got	got / gotten	отримувати
to give	gave	given	давати
to go	went	gone	йти
to grind	ground	ground	молоти
to grow	grew	grown	рости
Н			
to hand-feed	hand-fed	hand-fed	годувати з рук
to handwrite	handwrote	handwritten	писати від руки
to hang	hung	hung	висіти
to have	had	had	мати (щось)
to hear	heard	heard	чути
to hew	hewed	hewn / hewed	рубати
to hide	hid	hidden	ховатися
to hit	hit	hit	вдаряти
to hold	held	held	тримати
to hurt	hurt	hurt	завдавати болю
1			
to inbreed	inbred	inbred	розводити (рослини)
to inlay	inlaid	inlaid	інкрустовувати
to input	input / inputted	input / inputted	вводити дані
to interbreed	interbred	interbred	схрещувати
to interweave	interwove / interweaved	interwoven / interweaved	вплітати
to interwind	interwound	interwound	заплітати
J			
to jerry-build	jerry-built	jerry-built	будувати халтурно
K			
to keep	kept	kept	тримати
to kneel	knelt / kneeled	knelt / kneeled	ставати на коліна
to knit	knitted / knit	knitted / knit	в'язати
to know	knew	known	знати
L			
to lay	laid	laid	класти (щось)
to lead	led	led	вести
to lean	leaned / leant	leaned / leant	спиратися

to leap	leaped / leapt	leaped / leapt	стрибати
to learn	learned / learnt	learned / learnt	вчити
to leave	left	left	полишати
to lend	lent	lent	давати у борг
to let	let	let	дозволяти
to lie	lay	lain	лежати
to light	lit / lighted	lit / lighted	освічувати
to lip-read	lip-read	lip-read	читати з губ
to lose	lost	lost	втрачати

M

to make	made	made	робити, створювати
to mean	meant	meant	означати
to meet	met	met	зустрічати
to miscast	miscast	miscast	неправильно вирахувати
to misdeal	misdealt	misdealt	діяти невірно
to misdo	misdid	misdone	помилятися
to misgive	misgave	misgiven	передчувати зле
to mishear	misheard	misheard	недочути
to mislead	misled	mislaid	вводити в оману
to mishit	mishit	mishit	промахнутися
to mislearn	mislearned / mislearnt	mislearned / mislearnt	вивчати невірно
to misread	misread	misread	неправильно тлумачити
to misset	misset	misset	невірно настроїти
to misspeak	misspoke	misspoken	обмовлятися
to misspell	misspelled / misspelt	misspelled / misspelt	писати з помилками
to misspend	misspent	misspent	розтринькувати гроші
to mistake	mistook	mistaken	помилятися
to misteach	mistaught	mistaught	вчити невірно
to misunderstand	misunderstood	misunderstood	не порозумітися
to miswrite	miswrote	miswritten	писати невірно
to mow	mowed	mowed / mown	жати

to offset	offset	offset	компенсовувати
to outbid	outbid	outbid	перекуповувати
to outbreed	outbred	outbred	виховувати поза сім'єю
to outdo	outdid	outdone	перевершувати
to outdraw	outdrew	outdrawn	привертати увагу
to outdrink	outdrank	outdrunk	перепити
to outdrive	outdrove	outdriven	обганяти
to outfight	outfought	outfought	перемагати в бою

to outfly	outflew	outflown	перелітати
to outry			1
· ·	outgrew	outgrown	переростати
to outleap	outleaped / outleapt	outleaped / outleapt	вистрибувати
to outride	outrode	outridden	випереджати
to outrun	outran	outrun	випереджати
to outsell	outsold	outsold	продавати більше
to outshine	outshined / outshone	outshined / outshone	затьмарювати
to outshoot	outshot	outshot	стріляти далі
to outsing	outsang	outsung	співати краще
to outsit	outsat	outsat	засиджуватися
to outsleep	outslept	outslept	прогавати
to outsmell	outsmelled / outsmelt	outsmelled / outsmelt	винюхати
to outspeak	outspoke	outspoken	висловлюватися
to outspeed	outsped	outsped	переганяти
to outspend	outspent	outspent	витрачати більше
to outswear	outswore	outsworn	клястися більше
to outswim	outswam	outswum	перепливти когось
to outthink	outthought	outthought	перехитрити
to outthrow	outthrew	outthrown	викидати
to outwrite	outwrote	outwritten	писати краще
to overbid	overbid	overbid	перебивати ціну
to overbuild	overbuilt	overbuilt	будувати занадто багато
to overbuy	overbought	overbought	купувати у великій кількості
to overcome	overcame	overcome	подолати
to overeat	overate	overeaten	переїдати
to overfeed	overfed	overfed	перегодовувати
to overhang	overhung	overhung	випинатися
to overhear	overheard	overheard	підслуховувати
to overlay	overlaid	overlaid	перекривати
to overpay	overpaid	overpaid	пеепачувати
to override	overrode	overridden	відкидати
to overrun	overrun	overrun	виминати
to oversee	oversaw	overseen	спостерігати
to oversell	oversold	oversold	робити розпродаж
to oversew	oversewed	oversewn / oversewed	зшивати
to overshoot	overshot	overshot	промахуватися
to oversleep	overslept	overslept	проспати
to overspeak	overspoke	overspoken	багато говорити
to overspend	overspent	overspent	смітити грошима
to overtake	overtook	overtaken	доганяти
to overthink	overthought	overthought	мудрувати
to overthrow	overthrew	overthrown	скидати
30 0 . CIVIII O W		• • • • • • • • • • • • • • • • • •	

to overwind	overwound	overwound	перекручувати
to overwrite	overwrote	overwritten	переписувати
Р			
to partake	partook	partaken	брати участь
to pay	paid	paid	платити
to plead	pleaded / pled	pleaded / pled	благати
to preset	preset	preset	заздалегідь встановлений
to proofread	proofread	proofread	коректувати
to prove	proved	proven / proved	доводити
to put	put	put	класти
Q			
to quick-freeze	quick-froze	quick-frozen	швидко заморожувати
to quit	quit	quit	виходити
to quit	quit	quit	ыходити
R			
to read	read	read	читати
to relay	relaid	relaid	змінювати
to remake	remade	remade	перероблювати
to repay	repaid	repaid	віддячувати
to resell	resold	resold	перепродавати
to reset	reset	reset	перезавантажувати
to retell	retold	retold	переказувати
to rewind	rewound	rewound	перемотувати
to rid	rid	rid	позбавлятися
to ride	rode	ridden	їхати
to ring	rang	rung	дзвонити
to rise	rose	risen	підніматись
to roughcast	roughcast	roughcast	намічати
to run	run	run	бігти
S			
to saw	sawed	sawed / sawn	пилити
to say	said	said	казати
to see	saw	seen	бачити
to seek	sought	sought	шукати
to sell	sold	sold	продавати
to send	sent	sent	надсилати
to set	set	set	встановлювати
to sew	sewed	sewn / sewed	ШИТИ
to shake	shook	shaken	трясти
to shave	shaved	shaved / shaven	голитися

to shear sheared sheared / shorn стригти to shed shed shed проливати to shine shined / shone shined / shone світитися to shit shit / shat / shitted shit / shat / shitted галити to shoot shot shot стріляти showed to show shown / showed показувати to shrink shrank shrunk стискати to shut shut shut закривати to sight-read sight-read sight-read читати з аркуша to sing sang sung співати to sink sank sunk опускатися to sit sat сидіти sat to slay slew slain вбивати to sleep slept спати slept to slide slid slid ковзати to sling slung slung кидати to slink slunk slunk крастися to slit slit slit розрізати to smell smelt smelt пахнути sneaked / snuck sneaked / snuck to sneak крастися to sow sowed sown засівати to speak spoke spoken розмовляти to speed sped sped прискорювати to spell spelt spelt зачаровувати to spend spent spent витрачати to spill spilt spilt проливати to spin spun spun крутити spit / spat spit / spat to spit плювати to split split split розділяти to spoil spoilt spoilt псувати spoon-fed to spoon-feed spoon-fed годувати з ложечки to spread spread spread поширюватися to spring sprang sprung виникати to stand stood stood стояти to steal stole stole красти to stick stuck stuck прикріплювати to sting stung stung жалити to stink stank stunk смердіти to strew strewed strewn посипати to stride stridden strode крокувати to strike stricken struck вдаряти to string strung зав'язувати strung to strive striven strove досягати

to sublet	sublet	sublet	передавати в суборенду
to sunburn	sunburnt	sunburnt	загоряти
to swear	swore	sworn	клястися
to sweat	sweat	sweat	пітніти
to sweep	swept	swept	підмітати
to swell	swelled	swollen	надуватися
to swim	swam	swum	плисти
to swing	swung	swung	гойдати

T

to take	took	taken	брати
to teach	taught	taught	вчити
to tear	tore	torn	рвати
to tell	told	told	розповідати
to test-drive	test-drove	test-driven	випробовувати
to test-fly	test-flew	test-flown	проводити випробування
to think	thought	thought	думати
to throw	threw	thrown	кидати
to thrust	thrust	thrust	штовхати
to tread	trod	trodden	вступати
to typeset	typeset	typeset	набирати (текст)
to typewrite	typewrote	typewritten	набирати на машинці

U

40 valend	h 4		
to unbend	unbent	unbent	розгинати
to unbind	unbound	unbound	звільняти
to unclothe	unclothed / unclad	unclothed / unclad	роздягатися
to underbid	underbid	underbid	збивати ціну
to undercut	undercut	undercut	підсікати
to underfeed	underfed	underfed	недоїдати
to undergo	underwent	undergone	зазнавати
to underlie	underlay	underlain	лежати в основі
to undersell	undersold	undersold	продешевити
to understand	understood	understood	розуміти
to undertake	undertook	undertaken	вживати (заходів)
to underwrite	underwrote	underwritten	гарантувати
to undo	undid	undone	відміняти
to unfreeze	unfroze	unfrozen	розморожувати
to unhang	unhung	unhung	знімати
to unhide	unhid	unhidden	вивести
to unknit	unknit	unknit	розпускати
to unlearn	unlearnt	unlearnt	відучитися
to unsew	unsewed	unsewn	розпорювати

to unstick	unstuck	unstuck	відклеювати
to unstring	unstrung	unstrung	розхитувати
to unweave	unwove	unwoven	розплутувати
to unwind	unwound	unwound	відпочивати
to uphold	upheld	upheld	підтримувати
to upset	upset	upset	засмучувати

W

to wake	woke	woken	прокидатися
to waylay	waylaid	waylaid	підстерегти
to wear	wore	worn	одягати
to weave	wove	woven	ткати
to wed	wed	wed	одружуватися
to weep	wept	wept	плакати
to wet	wet	wet	вимочувати
to win	won	won	вигравати
to wind	wound	wound	вертіти
to withdraw	withdrew	withdrawn	виводити
to withhold	withheld	withheld	утримувати
to withstand	withstood	withstood	протистояти
to write	wrote	written	писати

ДІЛОВА ДОКУМЕНТАЦІЯ **RESUME / CV SAMPLES**



Daniel Dawson

(555) 555-5555 | E: example@example.com Larkspur, CO

SUMMARY

PROFESSIONAL

Motivated Ranch Hand with experience maintaining a property in an agricultural setting. Talented in applying existing knowledge when maintaining the property and caring for animals. Detail-oriented in monitoring the property for damage and reporting it quickly to the owner before completing repairs. Competent in following safety procedures when operating tools and equipment.

WORK HISTORY

RANCH HAND

02/2015 to CURRENT

Black Mountain Ranch | Larkspur, CO

- Maintained condition of up to five stock horses used to herd cattle
- Assisted in ranch animal breeding and raising procedures by shearing, crutching, branding and dipping
- Corralled over eight horses every morning for four daily trail rides and specialized lessons
- Operated milk machines or manually milked animals such as cows and goats

RANCH HAND

10/2010 to 12/2014

Zapata Ranch | Mosca, CO

- Monitored over 10 horses health and statuses before races or competitions
- Used disinfectant solutions, brushes and shovels to thoroughly clean stalls, pumps and equipment
- Trained part-time help in livestock care and ranch operations

RANCH ASSISTANT

08/2008 to 09/2010

Lost Valley Ranch | Mosca, CO

- Rotated animals between grazing areas to provide enough access to food
- Cleaned stalls, pens, and equipment using farming tools for optimal health of animals
- Dipped or bathed animals with appropriate applications to control parasites

SKILLS (

- Worker hiring
- Horse grooming
- Riding instruction Trail maintenance
- Breeding
 - Crop management

Livestock management

Safety procedures

EDUCATION Associate of Science | Agriculture Science

05/2008

Western Colorado Community College, Grand Junction, CO

SHANE LINSCOTT

E: example@example.com

P: (555) 555-5555

A: Marble Falls, TX

|| SUMMARY STATEMENT

Efficient Farm Hand capable of safely operating forklifts and hand trucks. Adept at collecting crop samples to determine time of harvest. Skilled at examining animals to detect illness, injury or disease.

||| PROFESSIONAL SKILLS

Equipment Operation

- Operated farm equipment such as tractors and trucks with extreme care and precision
- Inspected and repaired farm equipment, completing both emergency and preventive maintenance quickly and accurately
- Used modern mechanical milking equipment for optimized productivity

Crop Maintenance

- Determined pest and weed issues and applied pesticides, herbicides and fertilizers
- Analyzed soil to measure optimum fertilizer for maximum crop production
- Removed rocks and other obstacles and prepared soil for planting

Livestock Care

- Observed animals and notified Operations Manager of any signs of illness
- Replaced animal's hay and water regularly while watching animals for changes in behavior or demeanor
- Fed over 200 animals including cattle, sheep and pigs according to strict feeding schedules and dietary needs

| | WORK HISTORY

Sweet Berry Farms - Farm Hand Marble Falls, TX • 10/2018 - Current

Peach Valley Farm - *Farm Assistant*Round Mountain, TX • 07/2017 - 09/2018

| SUMMARY OF QUALIFICATIONS

- Ability to monitor pest infestations to check effectiveness of integrated pest management (IPM) practices
- Adept at maintaining production equipment and machinery
- Understanding of various guidelines for processing and shipping of fresh foods for human consumption

|| EDUCATION

Marble Falls High School
Marble Falls, TX • 06/2017

High School Diploma

WENDOLYN SCHMELER

3154 HODKIEWICZ ORCHARD, BOSTON, MA

PHONE

+1 (555) 795 9887

EXPERIENCE

MACEJKOVIC, HAMILL AND TREUTEL

08/2019 - present

San Francisco, CA // Agribusiness Manager

- Extensive experience in relation to the specific segment of operation with a comprehensive understanding of Agribusiness including commercial practices inclusive of post farm-gate
- · Experience within the Australian Agriculture space with credit assessment experience
- A comprehensive understanding of Agribusiness including commercial practices inclusive of post farm-gate
- Experience & knowledge in trade finance would be complimentary
- Critical thinking to the development of effective strategies for our more complex customers

KOSS, PAUCEK AND LESCH

03/2012 - 03/2019

San Francisco, CA // Agribusiness Manager

- · Demonstrated knowledge and experience in Agribusiness
- · Proficiency in understanding financial statements and credit assessment
- Feed Ingredient Sales Maximize Agri-product sales volumes and revenues to achieve budgeted sales and growth targets
- Market Evaluation and Price Forecasting Analyze markets, economics and competitive products to determine and execute optimal marketing and sales strategies
- Human Resources Effectively manage, develop, and evaluate direct reports to ensure they
 can successfully perform assigned duties
- Trade Activities Stay abreast of developments within trade through industry contacts and association memberships

EDUCATION

SAVANNAH COLLEGE OF ART AND DESIGN

Bachelor's in Finance

SKILLS

- Ensure success through understanding our client's unique businesses
- · Coach and support the team to ensure efficient high quality customer service
- Expand, build, and maintain client relationships, providing the highest level of customer service
- Analyze financial statements, identify industry risks, underwrite, review collateral requirements, credit structure, and price loans
- Monitor credit performance
- Assist Relationship Managers with credit requests
- Proficiency in technical selling skills and product knowledge within the veterinary diagnostics and animal genotyping market

COVERING LETTER



Your Present Address City, State, Zip Code

Date

Mr./Ms. Name Title Company Street Address City, State, Zip Code

Dear Mr./Ms. Name:

The first paragraph is your introduction and should be three to five sentences long. Name the position for which you are applying and indicate how you learned of the opening. State briefly why you are interested in the organization or what you know about the organization. Allow your excitement/passion to come through; try to get the reader's attention. You might mention a name or refer to an article, event or experience that led you to make this contact.

The body of your letter should be one or two paragraphs in length. This is an opportunity for you to "make the match" by outlining your qualifications and skills as they relate to the job. However, do not repeat all the information on your résumé. Select three or five of your most important qualifications for the position and elaborate on the information, slanting your remarks to the employer's point of view. Give concise evidence (provide specific examples) of your functional skills and of the qualities you possess. When responding to a job announcement, refer to the requirements listed in the announcement to facilitate the task of matching you to the job. Mention your enclosed résumé to the reader.

The final paragraph is your closing. Summarize your skills in a way that focuses on what the employer needs. Make a specific request for an interview, or opportunity to discuss the position. Indicate that you will phone in the near future to see if an appointment can be arranged. Leave your phone number and/or email for quick reference. Lastly, thank the reader for taking time to read your letter, and their consideration.

Sincerely yours,

(Your signature)

Your typewritten name

Enclosure (Indicates your résumé is in the envelope with your letter)



COVER LETTER FOR AGRICULTURE FIELD OFFICER

Date: April 15, 2021 .
To, {{ATTN}} {{Address}} {{Postal code}} {{Country}}
Subject: Application
Dear Mr./Mrs. {{Name}},
I am interested in applying for the position of Agricultural Field Officer for your organization. I am confident that my qualifications fit all the requirements stated in your job posting. I believe that with my knowledge and expertise, I can contribute to the success and growth of your company.
I have had 3 years of experience in the agriculturalfield, and I am very familiar with all operations and protocols. My in-depth knowledge of soil science has earned me awards, and I also have published journals that are accredited. I have worked with several experts and collaborated with them to research how to save and utilize unproductive lands and dying crops.
Along with this letter I have attached a copy of my resume for your consideration. I hope that you will consider me as a possible candidate for this job. You may contact me at any time so that we can set up an interview.
Thank you for your consideration. I approach my work with a solid sense of urgency, working well under stress and change. I look forward to meeting you personally so that we may discuss how I can make a positive contribution to your organization.
If you have any additional questions, please do not he sitate to call me at {{Phone nr}}.
Yours sincerely,
{{Company}} {{Signature}}
{{Formal Name}}{{ Title}}

Page 2 of 3

TOM JONES

Agriculture Worker

TEL: 903-683-3380 EMAIL: TOMJ@RESUMESBOT.COM 657 HALL PLACE, RUSK, TX 75785

Human Resource Manager Greg Stewart 3302 Clair Street , Hewitt, TX, 76643 March 15, 2019

Dear Mr. Stewart,





I want to apply in an open position of Agriculture Worker within your Company. I'm excited about the growth opportunities and hope to explore the contributions I can make. I have a Bachelor's Degree from Washington State University and over 15 years of hands-on farm experience.

I live and grew up around fields and learning about agriculture and farming since childhood. My knowledge of multiple areas includes crop growth, agriculture, and land management, horticulture and landscape management areas. When I started my career, I helped spray beans, rice, corn, potting, irrigation systems, mixing of composed, cleaning water tanks for a mix. Sometimes I have to load and unload plants on a truck.

Also, I have worked with live-stock including sheep, chickens, goats, cows and horses. I have maintained animal records and assisted agriculture technicians with vaccinations, medical treatments, and providing farm-related services to livestock. I have made sure the farm is operating smoothly and assisting any other team members that need any help in their departments.

My job has taught me that I don't mind getting my hands dirty and feel the satisfaction of a job well done at the end of long hard day work. Over my diverse career, I have worked to protect and revitalize agriculture, support beginning farmers, and make food systems more vital, interconnected, sustainable and resilient. With an entrepreneurial and collaborative approach, I combine my big-picture vision with on-the-ground know-how to develop innovative projects from ideas to reality. I hope to play an active role in the future prosperity of your organization.

Thank you for your time, I'm looking forward to your response.

Best Regards, Tom Jones

Robert Smith Agriculture Field Officer

1737 Marshville Road, Alabama, (123)-456-7899, info@gwikresume.com www.qwikresume.com

[Today's Date]

[341 Company Address]
[Company City, State xxxxx]
[(xxx) xxx-xxxx]
[hiring.manager@gmail.com]

Dear [Mr./Mrs./Ms.] [Hiring Manager's Name],

I write this letter and attach my resume in response to the advertisement featured on your career page on your official website. My educational background and expertise in the field align perfectly with the requirements you are seeking from your Agriculture Field Officer. I am confident my 3 + years of experience along with my unparalleled skills will add value to your company.

A company like *** doesn't need any introduction, and you are pioneers in the agricultural market, catering to the needs of all those numerous start-ups and customers who are looking for loan-related services. I am overwhelmed by the exponential growth your company has been in the last few years, and I feel it would be a great opportunity if I can become a part of your company. I had been working for *** since *** and was tasked with several responsibilities relating to loan and mortgage services, procuring heavy agricultural equipment, and performing comprehensive disaster assessments. Here is a quick look at some of the qualifications:

- Performed field inspections to verify the place, scope, and nature of the work, before
 dispatching the assignment to contractors, monitoring the performance of the contractors
 in the field, and participating in pre and post verification activities.
- Preparing weekly status and reports, upon request concerning work performance and progress.
- Implementing 3rd party repair processes, that decreased repair times and created transparency in buyer transactions.
- Serving as a liaising between the field service technicians and service department.
- Improving flood-prone areas with watershed rehabilitation.
- Reporting on extensive soil quality monitoring.

My result-driven approach along with my excellent track record of helping farmers connect with banking, and government agencies for improved agricultural success has brought laurels to my kit. Last but not the least, I strongly believe that researching is the backbone for this industry, and I have outstanding research skills that can help *** in leading and taking up major projects.

Having said this, I am looking forward to an opportunity to meet you in person and discuss further what I can provide more for the company if selected for this role. Thank you for your time and consideration.

Sincerely, [Your Name]

RILEY WILLIS

1 Main Street, New Cityland, CA 91010 | C: (555) 322-7337 | example-email@example.com

Dear Mr. Spears,

As a highly skilled Forestry Technician, I read your posting for a new Forestry Technician with interest. My experience aligns well with the qualifications you are seeking at PRC, in particular my role as Forestry Technician with Independent Forestry Management Company, and I am certain I would make a valuable addition to your organization.

With more 11 years' experience as a Forestry Technician, I am adept in sustainability, strategic planning, and operations management. Moreover, while my on-the-job experience has afforded me a well-rounded skill set, including first-rate prioritization and project management abilities, I excel at:

- Managing forestry activity contracts and payments.
- Inspecting timber operations sites and ensuring compliance with regulations.
- Developing recreational use plans for public areas.
- Overseeing vendor contracts for planting, thinning, and other functions.

In addition to my experience and personal qualities, I have a solid educational foundation and a passion for forestry management. I am extremely enthusiastic about PRC's focus on sustainability and would welcome the opportunity to contribute to your ongoing success in this area.

Please review my attached resume for additional details regarding my expertise and career achievements. I will follow up to request an appointment to discuss how my experience and background meets your needs.

Thank you for your	time and	consideration.
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Sincerely,

Riley Willis

РЕКОМЕНДОВАНІ ДЖЕРЕЛА ІНФОРМАЦІЇ

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НАВЧАЛЬНЕ ВИДАННЯ

РОЛЯК Ангеліна Олексіївна ГУМЕНЮК Ірина Іллівна

Англійська мова

для здобувачів вищої освіти (другого (магістерського) рівня) агрономічних спеціальностей

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