# МІНІСТЕРСТВО ОСВІТИ І НАУКИ, МОЛОДІ ТА СПОРТУ УКРАЇНИ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ ХАРЧОВИХ ТЕХНОЛОГІЙ 

## PROFESSIONAL ENGLISH FOR COMMUNICATION

Навчально-методичний посібник

Всі цитати, цифровий та фактичний матеріал, бібліографічні відомості перевірені. Написання одиниць
відповідає стандартам
Підпис(и) автора(ів) $\qquad$
«17» 2012 p.

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Professional English for Communication: Навч.-метод. посіб.; Є.С. Смірнова, Н.О. Михайлова, К.М. Чала та ін. - К.:НУХТ, 2012.- 149 с.

Основна мета посібника - допомогти студентам в опануванні лексикотематичним матеріалом на основі сучасних оригінальних текстів та мовних і мовленнєвих вправ, спрямованих на формування і розвиток у студентів іншомовної комунікативної компетенції, з метою активізації навичок комунікації в професійній діяльності майбутніх фахівців.

Посібник складається з двох частин: перша містить 10 розділів, в яких подано основні тематичні тексти побутової та країнознавчої тематики, тексти для самостійного читання, а також вправи, друга -13 розділів з текстами про майбутню спеціальність різних напрямів підготовки студентів, а також додатковим матеріалом за професійним спрямуванням з відповідними вправами.

Призначений для самостійної роботи студентів I-II курсів усіх напрямів підготовки бакалаврів денної та заочної форм навчання.

## Видано в авторській редакції

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УДК 811.111
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## ВСТУП

Поглиблення та поширення міжнародного співробітництва в різних галузях вимагає від сучасного випускника вищої школи практичного володіння іноземною мовою, що дозволяє своєчасно ознайомитись з новими технологіями та відкриттями в науці і техніці, сприяє встановленню контактів із зарубіжними фірмами та підприємствами.

Даний навчально-методичний посібник створений для методичного забезпечення навчальних дисциплін «Іноземна мова», «Іноземна мова професійного спрямування», що викладаються студентам усіх технологічних і технічних спеціальностей відповідно до освітньо-професійної програми підготовки фахівців Національного університету харчових технологій. Актуальність посібника зумовлена важливістю формування комунікативних навичок у майбутніх фахівців сфери харчової промисловості при вивченні іноземної мови, а також необхідністю розвивати у студентів вміння і навички самостійної роботи.

Основною метою посібника є розвивати і удосконалювати навички усного мовлення, розширення лексичного запасу на основі побутової, країнознавчої і професійної тематики, які спрямовані на формування творчого мислення студентів та орієнтованість на вміння знаходити інформацію з використанням новітніх джерел, оперувати нею, аналізувати та творчо обробляти.

Рівень викладеного навчального матеріалу базується на знаннях та вміннях, якими студент володіє на час вивчення даної дисципліни та дозволяє студенту самостійно засвоїти необхідний обсяг інформації.

## PART I <br> UNIT 1

## I. Lead-in questions

1. What things can you associate with the USA?
2. What main cities of the USA do you know?
3. Who was the first US President?
4. What is July 4 in the USA?
5. What is "American dream"?

## II. Reading <br> Read the following text.

## ACROSS THE USA

The United States of America is the fourth largest country in the world after Russia, China and Canada. It occupies the southern part of North America and stretches from the Pacific to the Atlantic Ocean. It also includes Alaska in the north and Hawaii in the Pacific Ocean. The total area of the country is about nine and a half million square kilometers. It also includes Alaska in the north and Hawaii in the Pacific Ocean. The total area of the country is about nine and a half million square kilometres. The USA borders on Canada in the north and on Mexico in the south. The south-eastern coast of the country is washed by the Gulf of Mexico and the US also has coasts on the Arctic, Pacific and Atlantic Oceans. The USA has a sea border with Russia.

The USA is made up of 50 states and the District of Columbia where the capital of the country, Washington, is situated. The population of the country is about 250 million people. More citizens of the USA live in the rural areas. Today American farmers plant spring wheat on the cold western plains, raise corn, wheat and fine beef cattle in the Midwest, and rice in the damp heat of Louisiana.. Florida and California are famous for their vegetable and fruit production, and the cool, rainy northwest states are known for apples, berries and vegetables.

The land varies from heavy forests to barren deserts, from high-peaked mountains (the highest peak is Mount McKinley in Alaska) to deep canyons (Death Valley in California is 1,064 meters below sea level). The highest mountains in the USA are the Cordilleras that run the length of the west coast and include the Rocky Mountains and the Sierra Nevada.

America's largest rivers are the Mississippi with its tributary Missouri, the Rio Grande, the Ohio and the Columbia. The USA is famous for its five Great Lakes: Lake Erie, Lake Ontario, Lake Huron, Lake Superior and the Michigan. There are
also a lot of small lakes and the northern state of Minnesota, for example, is known as the land of 10,000 lakes.

The USA is rich in mineral resources; their wealth provides a solid base for American industry. It has major deposits of oil and gas in Texas and Alaska, coal in Virginia and Ohio, gold in Alaska and California, silver in Nevada, non-ferrous metals in Arkansas and Colorado.
The largest cites of the USA are New York, San Francisco, Los Angeles, Chicago Philadelphia, Detroit and some others.

The territory of the USA is so large that it lies in different climatic zones. The climate of greater portion of the country is moderate continental. The climate of Alaska is arctic. The coast of the Gulf of Mexico is subtropical. Hot winds blowing from the Gulf of Mexico often bring typhoons. Along the western coast the climate is warm. The South-West region is very hot and dry. In contrast to this, there is much rainfall in the northern section of the Pacific coast line and along the coasts of the Atlantic Ocean.
The United States is a democracy. The Constitution sets the basic form of government: it has three branches - legislative, executive and judiciary. Congress, the legislative branch of the federal government, is made up of the Senate and the House of Representatives. Congress makes all laws, and each house of Congress has the power to support or reject a bill offered by the other. When they both pass a bill on which they agree, it is sent to the president for his signature. Only after that a bill becomes a law.
The members of the House of Representatives are elected for two years, and onethird of the Senators are elected every two years for six-year terms of office. Each state, regardless of the population, has two senators, while the House of Representatives has more members from more populated states. Today the Unites States has two major political parties: the Democratic party and the Republican party.

## Essential vocabulary

seaborder
rural area
damp
heavy forest
barren desert
length
tributary
moderate continental
legislative
executive

морський кордон
сільська місцевість
вологий
великі ліси
безплідна пустеля
довжина
притока
помірно континентальний
законодавчий
виконавчий
judiciary
to reject

судовий
відхиляти

## III. Reading comprehension

Answer the following questions:

1. Where is the USA situated?
2. What countries does the USA border on?
3. How many states are there in the USA?
4. What is the population of this country?
5. What can you say about American farming and mineral resources?

6 . Why is the climate of this country very different?
7. What is the political system of the USA?
8. What major political parties does the USA have today?

## IV. Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Найбільша країна в світі, велика рогата худоба, вологе тепло, глибокі каньйони, простягатися по всій довжині, тверда основа, кольорові метали, на противагу цьому, демократична держава, законодавча гілка влади, відхиляти законопроект, підпис.

## 2. Give the Ukrainian equivalents for:

The total area of the country, the rural areas, spring wheat, fine beef cattle, to be famous for their vegetable and fruit production, rainy northwest states, the land varies from, tributary Missouri, different climatic zones, arctic, to bring typhoons, the House of Representatives, to pass a bill, populated states.

## 3. Fill in the gaps with the words given below:

## Basis, rural, democracy, arctic, typhoons, subtropical, canyons, tributary

1) A $\qquad$ is a country in which all adult citizens may vote in elections to choose their leaders.
2) Compared to Los Angeles, Santa Barbara is $\qquad$ .
3) The rivers in the west of the country flow through deep $\qquad$ .
4) The settlement was concentrated in the fishing villages on the $\qquad$ Missouri.
5) The climate of Alaska is $\qquad$ and that of the coast of the Gulf of Mexico is
$\qquad$ _.
6) The United States Constitution, written in 1787 , established the country's political system and is the $\qquad$ for its laws.
7) Hot winds blowing from the Gulf of Mexico often bring $\qquad$ .

## 4. Fill in the gaps with the necessary prepositions:

For, up, on (2 times), into, out, as, after, in (3 times), to.
Washington, the capitol of the USA, is situated (1) $\qquad$ the north bank of the Potomac River close (2) $\qquad$ the country's east coast. It is (3) $\qquad$ the District of Columbia (D. C.). Washington was named (4) $\qquad$ the first US President George Washington. It was he who chose the place (5) $\qquad$ the capital city of the new independent country (6) $\qquad$ the Potomac River. Washington became the capital (7) $\qquad$ 1800. During the War of 1812 the city fell (8) $\qquad$ the hands of the British and much of it was burnt. Washington is not the largest city in the USA. The city's main product is law and government decisions. The city is unique (9)
$\qquad$ its architectural planning. It didn't just grow (10) $\qquad$ from a small village as many cities have. It was specially designed (11) $\qquad$ a capital city. Many streets go (12) $\qquad$ from circles like the spokes in a wheel.

## II. Speech Exercises

1. Make up dialogues, using the questions below and your own ones.
1) What is geographical position of the USA?
2) What is the USA rich in?
3) What is the relief of this country?
4) What are the largest cities in the USA?
5) What can you say about the climate of the USA?
6) What can you say about the political parties of the USA?

## 2. Writing

Who were these people? What did they do? Write in short about each of them. George Washington, Thomas Jefferson, Abraham Lincoln.

## Additional text

## 1. Read the text about New York.

## New York

The United States today is a nation of urban dwellers. Almost $80 \%$ of the national population lives either within the formal boundaries of the cities or in the huge suburban areas which surround them. The influence of cities in modern America is great. From urban centres into the smallest and most distant rural villages flow many social and economic values, ways of making a living, clothing styles and manners and a modern technological spirit. As a result, many of once sharp distinctions that could be made between rural and urban ways of life no longer exist.
The largest and the most famous city in the USA is, of course, New York. It is also
its main business centre and one of the most popular cities in the world. It has several famous landmarks, including the Statue of Liberty which greets every newcomer to the country, and the Empire State Building which was the first American sky-scraper that had more than 100 stories. The area in and around Wall Street is the financial centre of the USA, and the city is also famous for its theater productions in Broadway.

When people talk about New York City they are usually really talking about the island of Manhattan which contains most of the city business establishments, theaters, museums, and many expensive shops and hotels for rich tourists. It is difficult to believe that the settlers bought this island from native Indians only for a handful of colored stones and several looking-glasses. At the beginning of the 19th century Manhattan was mostly swamp, people lived in houses that were nothing more than rows of dark cages with no light, no running water or windows. According to police reports children died there simply from lack of fresh air. But by 1875 the population of New York was one million, 25 years later 3,5 million, and now it is one of the most populous cities in the world.

New York is really a cosmopolitan city; it has more Jews than Israel and more Italians, Chinese and other nationalities than any other city in the world. It is a city of immigrants so in its streets you can hear practically every world language.

New York is not just one city, but many cities or villages crowded together in one place. There are business cities that die at 5 o'clock every day, neon pleasure cities with restaurants, cafes, bars, theaters and cinemas full of noisy crowds, and sad cities with no trees and flowers along the streets. There are extremely rich parts and poor neglected districts like Harlem and parts of the Bronx and Queens.
Some people think that New York is too busy and crowded, but many people love it because of a11 its excitement, entertainment and culture. It is sometimes called the Big Apple or the city that never sleeps, because it is never quiet and many people either work or go out to enjoy themselves at night

## Active vocabulary

dweller
urban
rural
value
landmark
newcomer
settler
handful
looking glass
swamp

житель , мешканець
міський
сільський
цінність
орієнтир, помітний об'єкт місцевості
новоприбулий
поселенець
пригорща, жменя
дзеркало
болотистий

Jews
neglected district

євреї
занедбаний район

## 2. Decide if the following statements are true or false:

1. More people in the USA live in cities than in the country.
2. The difference between the life in urban and rural areas is getting bigger with every year.
3. New York is proud of having the tallest American skyscraper.
4. Manhattan can't be called a typical New York district.
5. New York is the greenest city in America.

## 3. Match the endings of the sentences.

| 1. New York City consists of five <br> boroughs: | a) is the place of playgrounds and tennis <br> courts. |
| :--- | :--- |
| 2. New York Coliseum | b) is a sea of concrete. |
| 3. Practically the whole of the <br> Manhattan area | c) and remains a centre of black culture. |
| 4. Harlem has kept its special <br> atmosphere | d) is the most modern exhibition hall. |
| 5. Central Park | e) Manhattan, the Bronx, Queens, <br> Brooklyn and Richmond. |
| 6. The first Europeans | f) was built in 1902. |
| 7. The first skyscraper in New York | g) came to Manhattan from Holland in <br> 1605. |

## 4. Supply the missing members of these words families. Check your answers with the dictionary.

1) popular- population, populous, popularity.
2) to influence
3) value
4) product
5) to excite
6) simple
5. Complete the following dialogue with the proper verbs in the right forms and role-play it: to have ( 3 times), to find, to read ( 2 times), to make, to want.

## Sightseeing in New York

Tanya: New York is a beautiful city! I am so happy we are here, Michelle.
Michelle: I am excited to see Central Park. Tanya, how many parks does New York City $\qquad$ ?
Tanya: I will look in my book....hmmm, here it is, I found it! New York City $\qquad$ more than 1,700 parks and recreation areas.
Michelle: Oh my, that is a lot! Where would you like to go in New York City?
Tanya: I was $\qquad$ my book about New York City and I $\qquad$ that some of the museums in New York are the greatest in the world!
Michelle: I am so excited to visit the Metropolitan Museum of Art! It has more than 200 galleries, more than 2,000 European paintings, more than 4,000 American pieces of art, and the entire ancient Egyptian Temple of Dendur.
Tanya: This city $\qquad$ me happy. I also want to look at universities here. Maybe I will move here after high school. New York City has more than ninety colleges and universities!
Michelle: Wow, we $\qquad$ so much to see! Let's get started. Where should we go first?
Tanya: First, let's take our luggage to the hotel room, get something to eat, and then we'll be ready!
Michelle: Sounds perfect!

## UNIT 2

## I. Lead-in questions

1. Are there many higher educational establishments in Ukraine?
2. What education have you already received?
3. What education will you receive after finishing the university?
4. What degree will you get?
5. Which speciality will you get in future?
6. Are you going to have a post graduate course?
7. Is it difficult for young people in the city you live in to get a good job without higher education?

## II. Reading <br> Read the following text

## HIGHER EDUCATION IN UKRAINE

Higher education is generally recognized as preparing individuals to realize more fully their human potential, enrich their understanding of life and make them more productive to society.

Future specialists in various fields of science, technology, economies and art get a fundamental general and specialized training, all students regardless of their specialty study foreign languages.

Apart from educational work and schooling Ukrainian higher schools carry out a great deal of scientific work in all branches of knowledge. They have either a students' research Society (Club) or a Technological Design Bureau which provide excellent facilities for young researches.

Our country needs specialists in all fields of science and all branches of industry and agriculture. Institutes exist not only in big cities like Kyiv, Kharkiv, Lviv, but in many towns of Ukraine like Irpin.

Higher educational establishments of our country fall into three main types. The first type includes the universities and institutes where there are only full-time students, which receive state grants. Students who do not live at home get accommodation in the hostels.

The second and third types of higher schools provide educational facilities for factory and office workers who combine work with studies. The second type of higher education in establishments includes evening faculties and evening higher schools for those who study in their spare time.

The third type covers extra-mural higher schools where students take correspondence courses. Every year extra-mural students receive from 30 to 40 days' leave to prepare for their exams.

The diplomas by the evening faculties and extra-mural higher schools have the same value as the diplomas of all other institutes and universities.

The period of study at higher schools is from 4 to 6 years. According to the subjects studied there exist three groups of higher schools' universities, polytechnic and specialized institutes.

## Essential vocabulary

to realize more fully one's human potential
to enrich one's understanding of life in various fields
regardless of
apart from
a great deal of scientific work to provide excellent facilities higher educational establishment full-time students to receive state grants to combine work with studies
to take correspondence courses
to receive a leave
according to

повніше реалізувати людський потенціал
збагачувати розуміння життя
в різних сферах
незважаючи на
поряд 3
великий обсяг наукової роботи забезпечувати відмінні умови
вищий навчальний заклад
студенти стаціонару
одержувати державні пільги
поєднувати роботу з навчанням
навчатися заочно
отримувати відпустку
відповідно до

## III. Reading comprehension

## Answer the following questions:

1. Does higher education help to develop your human potential and enrich your understanding of life? 2. What training do the future specialists get? 3. What can you say about the role of foreign languages in gaining higher education? 4. What is the role of scientific work in training future specialists? 5. What specialists does our country need? 6 . Where do institutes and universities exist in our country? 7. How many types of higher educational establishments do we have in our country? 8. What higher schools does the first type include? 9. Which is the second type? 10. What schools does the third type cover? 11. What do extra-mural students receive every year?12.Is there any difference between the diplomas by the evening faculties, extramural schools and full-time schools? 13. How long does the period of studies at higher schools last? 14. What groups of higher schools exist in your country?

## IV. Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Одержувати державні пільги, в різних сферах, отримувати відпустку, поєднувати роботу з навчанням, вищий навчальний заклад, забезпечувати відмінні умови, великий обсяг наукової роботи, навчатися заочно.

## 2. Give the Ukrainian equivalents for:

Higher educational establishments, future specialists, spare time, evening faculties, students' research society, a great deal of scientific work, to provide excellent facilities, to combine work with studies, to receive state grants.

## 3. Fill in the blanks with the words given below:

The same value, spare, full-time students, to fall into, to carry out, general, specialized

1. Future specialists in various fields of science, technology, economies and art get a fundamental ... and ... training. 2. Ukrainian higher schools ... a great deal of scientific work in all branches of knowledge. 3. Higher educational establishments of our country ... three main types. 4. The first type includes the universities and institutes where there are only ... ... which receive state grants. 5. Evening schools are for those who study in their ... time. 6. The diplomas by the evening faculties and extra-mural higher schools have ... ... as the diplomas of all other institutes or universities.

## 3. Choose the correct variant of the answer ( $a, b, c$,

1. The period of study at higher schools is from
a) 2-3 years
b) 1-4 years
c) 4-6 years
2. The diplomas of extra mural students have
a) the same value as all other students
b) much less value than the others have
c) no value at al
3. Higher education in our country fall into
a) many different types
b) 3 main types
c) 5 types
4. Higher education is $\qquad$ in modern life.
a) very important
b) not important at all
c) important but not to all young people
5. The higher school is the $\qquad$ .stage of the public educational system.
a) Middle
b) First
c) Final

## 4. Match the words in the left and the right columns to form word combinations.

| 1. To take | a) Master's Degrees |
| :--- | :--- |
| 2. To get | b) research work |
| 3. To give | c) devoted to something |
| 4. To live in | d) knowledge |
| 5. To do | e) part in different activities |
| 6. To make | f) diploma |
| 7. To be | g) higher education |
| 8. To get | h) a choice |
| 9. To get | i) hostel |
| 10.To submit | j) appointment |

## IV. Speech Exercises

## 1. Tell your group mates your own viewpoint about the importance of higher education in modern life.

## 2. Writing

Write down a composition about the importance of higher education in your country.

## Additional text

## 1. Read the text about NUFT

## NUFT

There are 111 higher educational establishments in Kyiv and among them is The National University of Food Technologies which is in Volodymyrska, 68. It was founded in 1930 as the Kyiv Institute of Sugar Refinery Production and had 2 departments with 400 students. Now NUFT is the only technical university in Ukraine which provides training of highly skilled specialists in 25 specialities and 15 specializations for food, meat, dairy, pharmaceutical, microbiological and other branches of agro-industrial complex as well as for food machine building of Ukraine. About 10 thousand students study at the University at its full time departments as well as by correspondence.

NUFT is a higher educational institution of the 4th level of accreditation. Training of students is provided at 7 full time departments (37 chairs) and three extra-mural departments. In 1998 Simpheropol Technical School of food production was incorporated to the University with a college status. The University chairs have 24 branches and 8 research and production complexes in leading enterprises, planning and research establishments. 3 research and production centres have been recently founded. Preliminary department and short-time preliminary courses of the University train entrants for higher educational institutions.

The NUFT occupies 9 buildings where there are many lecture-halls, classrooms, laboratories and workshops, six computer centres with more than 30 computer classes.

There is a special building for the library and reading-halls where our students usually prepare their home tasks and read up for their credits and exams.

The students of the University are provided with 5 hostels, sports and recreation facilities.
Our University trains specialists for various branches of food industry such as bread making, brewing, meat and dairy processing, sugar refining as well as engineers in thermal-engineering, mechanical engineers and economists at the
departments of

- technology of sugary, meat and dairy production,
- technology of fermentative and bakery production,
- biotechnology and ecology
- healthy products and hotel-restaurant industry
- accounting, finances and entrepreneurship
- economics and management,
- power engineering
- automation and computer systems,
- mechanical department,
- the extra-mural department.

Each department has its own Dean's office.
During junior years our students study basic subjects such as history, mathematics, physics, chemistry, descriptive geometry, technical drawing, strength of materials, elements of machines and one of the foreign languages.

During senior years our students pay more attention to the study of the subjects closely connected with their future specialities.

The study of theory is accompanied by practical training at specially equipped labs and workshops, then in experimental sugar refinery and later on at various enterprises of food industry.

Twice a year our students take their credits and exams.
Our students do not only study, they take the most active part in doing research in the students' scientific society; they participate in social life of our University; they go in for various kinds of sport and take part in amateur art activities.

The fourth year is devoted to practical training and to the work at the graduation thesis. After successful presenting a graduation thesis or sitting for the State exams students receive diplomas which qualify them to work in the field for which they have been trained and are awarded a Bachelor's Degree. Those students, who want to get a Specialist's or Master's Degree, continue their studies during the fifth and sixth years.

Upon graduating from our University they get appointments in every corner of our country. Wherever they work, they are promoters of modern food production and technology.

## Active vocabulary

Lecture hall
Department
Chair
Dean's office
Credit
Graduation thesis
Full-time student
Bachelor's Degree
Master's Degree

Лекційна зала
Факультет
Кафедра
Деканат
Залік
Дипломний проект
Студент - стаціонару
Ступінь бакалавра
Ступінь магістра

## 2. Decide if the following statements are true or false:

1. NUFT is a higher educational institution of the 3d level of accreditation.
2. NUFT trains specialists for various branches of food industry.
3. Departments don't have their own Dean's office.
4. The study of theory is accompanied by practical training at labs and workshops.
5. The second year old study is devoted to practical training.
6. There is no preliminary department and short-time preliminary courses at the university.
7. NUFT is the only technical university in Ukraine which provides training of highly skilled specialists for food industry.
8. Fill in the gaps in the following dialogues using the words below and roleplay it with a partner.

1 Hi, Olga! How are you? What's brought you here? Glad to meet you!
2 Hi , Peter, I'm fine, thanks and how are you? Haven't seen you for ages, I'm so glad to meet you too!

3 I'm $\qquad$ here at the National $\qquad$ of Foreign Languages and what about you?

4 Oh, that's great. I'm studying here too, at the $\qquad$ University of Food Technologies.

5 That's nice, so what's your future $\qquad$ ?

6 I'm a $\qquad$ of the $\qquad$ of automation and computer systems and what $\qquad$
do you study at?
7 I'm going to be a $\qquad$ of English. What $\qquad$ are you studying?

8 Now we study $\qquad$ subjects such as $\qquad$ but later will pay more attention to the subjects closely connected with our future $\qquad$ And what do you study?

9 I study $\qquad$ only and have many $\qquad$ of English.

10 Sounds interesting. Oh, Olga, excuse me but I really must be going. It's later then I thought.

11 Of course, I should go too. Was nice talking to you. Wish you good luck and hope see you soon.

12 Thanks a lot, I was glad to talk to you too and see you soon.

Studying, mathematics, humanities, faculty, history, student, lessons, basic, university, speciality, national, foreign language, faculty, speciality, teacher, subjects, physics.
4. Group the words from the text and add your own ones if possible under the following headings
a) Branches of food industry
b) Departments
c) Subjects
5. Comment upon the importance of proper education for your future career.

## UNIT 3

## I. Lead-in questions

1. What is the most favourite holiday in your family? What do you usually do before it? Do you decorate your house/flat? Do you cook anything special? Do you invite guests or arrange parties?
2. Do you observe all the traditional rituals on Christmas? Who cooks traditional Christmas dishes in your family and what are they? What kind of weather do you like to have on Christmas?
3. What associations do you have with Easter? Can you describe what is going on in your house before Easter Sunday?
4. Do you remember any funny April Fool's Day experiences? Did you like to play practical jokes on your friends? Have you ever suffered from these jokes?

## II. Reading <br> Read the following text

## TRADITIONAL HOLIDAYS IN UKRAINE, GREAT BRITAIN AND THE USA

Like most European nations Ukraine sees the New Year in on December, 31. You can hardly find a person who doesn't hope that the Old Year with all its troubles will leave forever and the New Year will bring health, prosperity and happiness.

New Year celebrations gradually glide into one of the most important religious holidays - Christmas. Now it is an official state holiday and a day off. It is favourite with children who like to go from door to door, sing carols and get sweets from the hosts. Mothers of the family cook a traditional Ukrainian Christmas dish «kutya» which all the family eat together. Many people now like to go to church to listen to Christmas sermons.

Not long ago young people and lovers of all ages started to follow the English tradition of celebrating St. Valentine's Day on February, 14 by sending special postcards and giving lovely gifts to their sweethearts.

The next official holiday in Ukrainian calendar is Women's Day. Very few people remember now how it originated, but it is an important signpost in the women's feminist movement in the world, because it commemorates the beginning of women's struggle for their economic, political and social rights. Today, it is the day to show love and respect to women of all ages.

By Orthodox canons Easter, the day of Christ's Resurrection, is celebrated in Ukraine later than in other European countries. Only several years ago it was
proclaimed an official state holiday and many people celebrate it by attending the allnight service in church and having a tasty meal at home on Red Sunday. Children enjoy painting Easter eggs and eating Easter bread.

Victory Day which is annually marked on May, 9 commemorates the victory of Soviet people over Nazi Germany in 1945. So many people died or were killed in that war that there is hardly a family in Ukraine that didn't suffer a loss.

The new Constitution of Ukraine as an independent, sovereign, democratic, social and legal state was adopted by the Verkhovna Rada on June 28, 1996 as the Fundamental Law of the country. The day of its adoption is a state holiday - the Day of the Constitution of Ukraine.
August, 24 is a new national state holiday - the Day of Independence of Ukraine, which was proclaimed in 1991 on the decision of the Verkhovna Rada of Ukraine after the military coup in Moscow. This day is marked with parades and fireworks.

Most Ukrainian people enjoy holidays both old and new because they are good breaks in everyday work, an opportunity to see their friends and relatives and just to have a good time.
National Days in Britain are not celebrated to the same extent as in France or America. Scotland's National Day is St. Andrew's Day (30 November). St. David's Day (1 March) is the National Day of Wales. England National Day is St. George's Day (23 April) which coincides with William Shakespeare's birthday. St. Patrick's Day is an official Bank Holiday in Northern Ireland.
For many British people (with the exception of Scotsmen), Christmas is the favourite holiday. It is celebrated much earlier than in our country, on December, 25. Preparation for the holiday begins several weeks before it with sending dozens of cards, buying presents and food, decorating the Christmas tree and the house. The cities and towns are decorated with thousands of coloured lights, and the biggest Christmas tree in Britain is put up in Trafalgar Square in London.
In the homes there is a great air of expectation. Holly and mistletoe are hanging on the wall waiting for the English traditional kissing when a girl standing under these evergreen plants can't refuse being kissed. Mothers of the family are busy in the kitchen getting ready for the next day's dinner of turkey, pudding and other tasty things. Before going to bed children may hang Christmas stockings on their beds in the hope of getting presents from Father Christmas or Santa Claus. The next day, on December 26 people get up late, have big meals, go to church and have a good rest after the Christmas rush.

New Year in Britain (with the exception of Scotland) is not celebrated as widely as in our country. Some people may even completely ignore it and go to bed at the usual time without waiting for the clock to strike twelve.

In Scotland New Year is called Hogmanay and is the most favourite holiday of the year. It begins with a thorough cleaning of the house and cooking plenty of tasty food.

Though February is a winter month, many British people start feeling spring on February, 14 when they get Valentine cards and symbolic love gifts.

Pancake Day is the popular name for Shrove Tuesday, the eve of the Lenten fast. In medieval times all Christians made their compulsory confessions or «shifts» from which the words «Shrove Tuesday» derives. Nowadays only pancake eating has remained.

Easter in Britain is the time of giving and receiving presents which traditionally take the form of Easter eggs and hot cross buns. Nowadays eggs are usually made of chocolate with surprises in them, but the old custom is dying and painting eggs is still, kept in some country districts. Other emblems of Easter are fluffy little chicks, the Easter Bunny and spring flowers.

April Fools' Day is not an official holiday but few people are indifferent to it. Everyone who has a sense of humor likes to play practical jokes on their friends and family neighbors.

Bank Holidays are public holidays called so because the banks as well as most offices and shops are closed. There are winter, spring and summer Bank Holidays.

Another popular holiday in Britain is Guy Fawkes Day, which commemorates the discovery of the so-called Gunpowder Plot, a conspiracy to destroy the English Houses of Parliament and King James I on November, 5 1605. It is usually marked with bonfires and dummies of Guy Fawkes.

Each of the fifty states in the USA establishes their own legal holidays. The federal government, through the President and Congress, can legally set holidays only for federal employees and for the District of Columbia. Most states however accept the federal legal holidays which are: New Year's Day, Martin Luther King's Day, Washington's Birthday, now called «President's Day» (the third Monday in February), Memorial Day (last Monday in May), Independence Day, Labor Day (first Monday in September), Columbus Day, Veterans' Day (November, 11th), Thanksgiving Day and Christmas.

There are many other traditional holidays, observed by a large number of Americans, which are neither legal nor official. Among these are Valentine's Day, St. Patrick's Day (not just people with Irish ancestry will «wear the green» on March 17th), Mother's Day and Halloween.
Perhaps the two «most American» of the holidays are the Fourth of JulyIndependence Day, and Thanksgiving. The first one is like a big nationwide birthday party. Some towns and cities have parades with bands and flags, and most politicians will try to give a patriotic speech. But what makes this holiday special is the atmosphere and enjoyment of, for instance, the family picnic with hot dogs, hamburgers and volleyball, fireworks and rockets at night
Like Christmas, Thanksgiving is a day for families to come together. Traditional foods are prepared for the feast-turkey or ham, cranberry sauce, bread rolls and pumpkin pie.

At the same time Thanksgiving is a solemn occasion, a day to remember the many who are less well off, in America and throughout the world.

## Essential vocabulary

prosperity
near and dear
gradually
Sermon
signpost
to commemorate
Coup
Firework
holly and mistletoe
Christmas rush
the Lenten fast
Pancake

близькі люди
поступово
проповідь
вказівний стовп, покажчик
вшановувати пам’ять
державний переворот
фейєрверк
падуб та омела
різдвяна метушня
Великий піст
млинець

## III. Reading comprehension

Sort these holidays into the table according to the countries they are celebrated in.

| Ukraine | Great Britain | The USA |
| :---: | :---: | :---: |
|  |  |  |

## Speak on the following:

1. What holidays celebrated in Britain and the USA are also marked in Ukraine? Do they have the same traditions and rituals? Name at least 3 differences in celebrating Christmas and Easter.
2. Which holiday do you think is the most important for each of the three countries?
3. Which holiday in the USA and Great Britain would you like to take part in?

## IV. Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Добробут та щастя, близькі люди, різдвяний гімн, різдвяна проповідь, важливий вказівний стовп, воскресіння Христа, падуб та омела, вічнозелені рослини, ігнорувати, в середньовічні часи, обов’язкова сповідь, змова, ірландське походження, соус із журавлини.

## 2. Give the Ukrainian equivalents for:

Like most European nations, you can hardly find, it is especially popular with, it commemorates the beginning, to show love and respect, by Orthodox canons, the Fundamental Law of the country, the military coup, great air of expectation, completely ignore, fluffy little chicks, fireworks, a solemn occasion.
3. Put the following verbs into the right forms ( use Active and Passive Voice): Observe, celebrate, proclaim, mark, cook, commemorate

1. The annual parade $\qquad$ the soldiers who died in the two World Wars.
2. The republic's independence $\qquad$ by the President three years ago.
3. Most people $\qquad$ the tradition of going to church and having a tasty dinner.
4. This tasty Christmas dinner $\qquad$ by our grandma a few hours ago.
5. April Fool's day is not a national holiday, but it $\qquad$ in many countries.
6. This state holiday $\qquad$ with military parades and peaceful demonstrations.

## 4. Fill in the gaps with the necessary prepositions:

In (5 times), on (6 times), for ( 2 times), of (3 times), to (2 times), at (2 times), from, with, before.

1. Thanksgiving Day is observed $\qquad$ the fourth Thursday $\qquad$ November.
2. $\qquad$ the feast, families usually pause to give thanks $\qquad$ all they have, including the joy $\qquad$ being together $\qquad$ this day.
3. Memorial Day was originally a day $\qquad$ which flags or flowers were placed
$\qquad$ the graves of soldiers who died $\qquad$ the American Civil War.
4. Halloween has a special significance $\qquad$ children who dress $\qquad$ funny costumes and knock $\qquad$ neighbourhood doors.
$\qquad$ Christmas Eve groups carol singers go $\qquad$ house $\qquad$ house to wish good luck and prosperity $\qquad$ the hosts.
5. Christmas stockings are hung $\qquad$ hope that Santa Claus will come
$\qquad$ night and fill them $\qquad$ toys and sweets.
6. Many women $\qquad$ Ukraine may say that March, 8 is their favourite holiday and they would like to be loved and take care $\qquad$ not only $\qquad$ this day but all the year round.

## III. Speech Exercises

## 1. Interview your partner about his or her favorite holiday. Find the answers to these questions:

1. What is the name of your favourite holiday?
2. When do people celebrate the holiday?
3. What do people wear?
4. What do people do?
5. Why is the holiday special?

Tell the group about your partner's special holiday. Write the names of everyone's holiday on the board. Compare them. Which holiday is the most fun? Which holiday is the most interesting?

## 2. Writing <br> Write 10-12 sentences about any special holiday.

## Additional text

## THE 'FIRST"' THANKSGIVING

A legendary Thanksgiving celebration was held in 1621. The terrible winter of the previous year had been difficult for the Pilgrims. Many of the Pilgrims had died because of illness and lack of shelter. The Thanksgiving celebration was held after the Pilgrims had their first harvest - after they had gathered their first crops.

The writings of the Pilgrims tell us that about 140 people attended the three-day celebration. Ninety of the people were Wampanoag men. About 50 people were Pilgrims. Only four of the Pilgrims at the party were women. The feast was held outside because the Pilgrims did not have a building large enough to hold so many people.

Wampanoags had helped to save the Pilgrims by showing them how to fish and plant crops. The Pilgrims were thankful for the harvest and for the help of the Wampanoag. Without their help, the Pilgrims would have had little to eat. The menu for the first Thanksgiving included venison, or deer meat, and fowl, which included ducks, geese, and turkeys. Sea bass, cod fish, cornmeal, pumpkins, fruits and vegetables were also served. The Pilgrims celebrated Thanksgiving for about three days. The two groups also made a peace and friendship agreement. This gave the Pilgrims an area to build their town.. This friendship, though, was not for long. More English settlers came to America. They did not need the help of the Indians. Many settlers forgot about the help the Indians had provided. Within a few years, the two sides were at war. Many of the Wampanoags were killed in battle or died from diseases that arrived with the Europeans.

Thanksgiving in America is now celebrated on the fourth Thursday in November. This is a family holiday. In some places special religious services are held in the morning. Then the traditional feast comes. Turkey with stuffing is the main dish. It is served with sweet potatoes, squash, cranberry sauce, and pumpkin pie. Apple cider is the drink of the day.

Football is the most popular game on this day. Usually there are several football games to watch on TV. There is Thanksgiving Day Parade in New York City

## Active vocabulary

Shelter
Feast
Venison
Fowl
sea bass
cod fish
Pumpkin
Settler
Stuffing
Cider
sweet potatoes
Squash

схованка
свято, бенкет
оленина
ПТИЦЯ
морський окунь
тріска
гарбуз
поселенець
начинка
сидр
солодка картопля
каша

## 2. Decide if the following statements are true or false:

1. The Pilgrims and Wampanoags celebrated their Thanksgiving after the harvest.
2. The feast was held outside because the Pilgrims did not like the Wampanoags.
3. The Pilgrims wouldn't have had anything to eat without the help of Wampanoags.
4. The menu for the first Thanksgiving included only venison and fowl.
5. Nowadays the main dish of Thanksgiving is turkey.

## 3. Put the questions into the right order and answer:

1. Do, Americans, Thanksgiving, today, where, day, celebrate?
2. In, did, the, season, Pilgrims, which, the, celebrate, Thanksgiving Day, first?
3. They, eat, did, what?
4. How, to, who, survive, in, taught, the Pilgrims, America?
5. The Pilgrims, to, did, why, come, America?
6. Did, invite, the Indians, their, to, feast, why, the Pilgrims?
7. You are going to have a Thanksgiving feast. Fill in the gaps with the words:

Turkey, table, say, your family, I'm full, cut, put

1. Set the ...
2. Take the roast... out of the oven.
3. ... all the food on the table.
4. Call... to the table: "It's time to eat!"
5. Sit down. Put your napkin on your lap.
6. ... prayers.
7. ... the turkey.
8. Serve each person.
9. Enjoy.
10. Say...
11. Finish the sentences to make them true for you:
12. 1 The last present I was given to was $\qquad$ .
13. I helped my $\qquad$ to cook $\qquad$ .
14. Recently I have been taught how to $\qquad$ .
15. 4. Each year I have my birthday and $\qquad$ .
1. Last year a traditional Christmas dinner was $\qquad$ .
2. Sometimes I go out to the country with $\qquad$ to celebrate $\qquad$ .

## UNIT 4

## I. Lead-in questions

1. What food enterprises are there in Ukraine?
2. What products are available at the food stores?
3. Are you satisfied with the quality and quantity of foods at the Ukrainian supermarkets?
4. How is the history of the Ukrainian food industry connected with the history of the NUFT?
5. What would you say about the present economic policy in food industry?

## II. Reading

## 1. Read the following text.

## FOOD INDUSTRY IN UKRAINE

Food industry is one of the leading branches of the national economy which combines production and industrial processing of raw materials of plant and animal origin and selling of finished goods. Its main sub-branches are meat and dairy, oil and fats, fruit and vegetable packing industry. Foodstuffs make up $59 \%$ of the total consumer goods volume. Among other countries of the world Ukraine has the most favourable natural and human potential for its development, promising home consumer market and large export potential.

The food industry in Ukraine started as a branch of mechanical production in the second half of the 19th century. Refinery production of sugar began somewhat earlier. The first sugar refinery in Ukraine was set up in 1824 in the village of Troshchine, Kaniv District, near Kyiv. The mining method of salt extraction was developed at the end of the 19th century in the Donbass (at Artemivsk and Slovyansk).

The further development of the Ukrainian food industry was connected with the production of granulated sugar, flour, groats, butter, confectionery, alcohol, beer and tobacco. A number of food enterprises were set up to produce meat, milk, bread, canned foods, margarine and other products to raise the population's standard of living. Highly-qualified food industry specialists appeared and more progressive forms of labour organization were introduced. Thus, in a relatively short period a powerful food industry was created in Ukraine. But it was largely destroyed during the Great Patriotic War.

In post-war years thousands of food enterprises were restored and reconstructed. Numerous new plants were built. That made it possible to increase the production of foodstuffs which play an important role in the human diet. The sugar industry retained its position as a leading food industry in Ukraine.

In the course of time, however, the level of food supply and the assortment of products have shown a downward trend when the prices grew by many times. The adoption of the state 'Food Program didn't help to cope with the problem.

In the period of stabilizing the market economy of Ukraine it is food producing and processing industry that is developing most dynamically. The majority of food plants and factories of Ukraine are private enterprises. Owing to the target economic policy and through attracting local and foreign investments by cooperation the Ukrainian food processing enterprises began to use widely progressive high technologies, advanced technological processes, highly productive up-to-date technological equipment and installations, complex mechanization and automation of production, and advanced production experience (know-how). As a result the Ukrainian foodstuffs grew in quality and quantity, became more versatile and competitive.

At present Ukraine is one of the world's biggest producers of sugar. Many Ukrainian food products won the world's recognition. The focus of our food industry today is health products, fortified and functional food. More and more GM (genetically modified)-free products appear on the home food market to meet the demand of the population.
Note. GM food is created by taking DNA (desoxyribonucleic acid) from one organism and putting it into another.

## Essential vocabulary

industrial processing raw materials
consumer
sugar refinery
enterprise
food supply
groats
retain one's position
granulated / cube sugar
up-to-date equipment
to be widely applied
labour organization
to introduce
confectionery
flour
canned foods
fortified food

промислова переробка
сировина
споживач
цукровий завод
підприємство
постачання їжі
крупи
утримувати позицію
цукор - пісок / рафінований
цукор
сучасне обладнання
широко застосовуватися
організація праці
впровадити
кондвироби
борошно
консерви
збагачена їжа

## III. Reading comprehension

## Answer the following questions on the text.

1. What branches does the Ukraine's food industry comprise?
2. How did the food industry in Ukraine start?
3. What was the further development of the Ukraine's food industry connected with?
4. What happened with our food industry during the Second World War?
5. How was the Ukraine's food industry developed in the post-war years?
6. What made it possible to increase the production of meat, fat, creamery, canning and other high-caloric foods?
7. What are the major problems and achievements of the Ukrainian food industry at present time?

## IV. Vocabulary and Grammar exercises

## 1. Give the English equivalents for the following words:

a) галузі харчової промисловості, бути заснованим, подальший розвиток, виробництво борошна, консерви, Велика вітчизняна війна, завод, впасти (знизитись), крупи, підприємство, збільшити (підвищитись), харчові продукти, розширюватись, хлібопекарська галузь, економічне управління.

## 2. Give the Ukrainian equivalents for:

leading branch, finished goods, total consumer goods volume, the most favourable, promising home consumer market, highly-qualified specialists appeared, to create, to restore, the level of food supply, to cope with the problem, food producing and processing industry, advanced production experience (know-how), quality and quantity, become competitive, to meet the demand of the population.

## 3. Fill in the gaps with the words given below in the correct form: <br> Kyiv Refrigerating Plant № 2

Kyiv refrigerating plant $\mathrm{N}^{\circ} 2$ open joint stock company is one of $\qquad$ and most powerful ____of ice-cream in Ukraine. The highly-mechanised ___ produces up to 30 tons of ice-cream daily, which is sold in Kyiv city and region and some other regions of the country. High ___ and biologically valuable products meet consumers' $\qquad$ . For production there are used only natural $\qquad$ materials and fillers: dry whole, dry defatted and condensed milk, creamy butter and seed-oil, sugar, cocoa, nuts, raisins, cherries, black- and red-berry, strawberry, raspberry. The laboratory assistants carefully control the product $\qquad$ .
Today the enterprise produces over 25 ice-cream $\qquad$ . The best demand is traditionally met by «Kashtan» (chestnut), «Khreschatyk», «Plombir», «Premiere»,
«Dynamo» «Kapitoshka» ice-cream.Today the plant specialists $\qquad$ the recipes of new dietary and low-cal sorts of ice-creams. New ___ will allow to $\qquad$ assortment so forth using fruit admixtures. Kyiv refrigerating plant № 2 JSC $\qquad$ in the nearest future plans the creation of a trade house, which will $\qquad$ a wide assortment of foodstuff products.

Include, producer, develop, article, lead, broaden, quality, raw, enterprise, demand, offer.
4. Use the derivatives of the words in a sentence or a small story.

1) Produce - product - production - productive - productivity - producer.
2) Technology - technological - technologically - technologist.
3) Consume - consumer - consumption.
4) Provide - provision - provider.
5) Supply - supplier - supplies.
6) Compete - competition - competitive - competitor.
7) Introduce - introduction.
8) Equip - reequip - equipment - reequipment.
5. Fill in the blanks with the necessary prepositions: in (3), by (2), to (3), on, from, with, of, over.

## Food for Different Cultures

The manner $\qquad$ which food is selected, prepared, presented and eaten often differs
$\qquad$ culture. Americans love beef, yet it is forbidden $\qquad$ Hindus, while the forbidden food ___ the Moslei and Jewish cultures is normally pork, eaten extensively $\qquad$ the Chinese and others. $\qquad$ large cosmopolitan cities, restaurant often cater to diverse diets and offer national dishes to meet varying cultural tastes. Feeding habits also differ, and the range goes $\qquad$ hands and chopsticks $\qquad$ full sets of cutlery. Often the differences among cultures in the foods they eat are related
$\qquad$ the differences in geography and local resources. People who live near water (seas, lakes, and rivers) tend to eat more fish and crustaceans. People who live in colder climates tend to eat heavier, fatty foods. However, $\qquad$ the development $\qquad$ a global economy, food boundaries and differences are beginning to dissipate: McDonalds is now $\qquad$ every continent except Antarctica, and tofu and yoghurt are served all $\qquad$ the world

## V. Speech Exercises

## 1. Interview your group-mate about his / her visit to the supermarket. Find the answers to the following questions.

1. Where do you go shopping? To the supermarket? Small food stores? Bazar? Why?
2. You make a shopping list, don't you? What items do you put on your shopping
list?
3. Do you prefer buying cheaper or more expensive products?
4. Do you have the habit of looking at the date on the label if the foods are not past the date?
5. Do you buy canned ready-to-use / half-ready products?
6. Would you rather buy foods that were advertised?

## 2. Discuss the methods of processing food.

1) Fry, bake, process, boil, skim, mix, smoke, roast, can (tin), grill, granulate, pasteurize, condense, dry, puff, grind, mill, whisk, freeze.
2) Grocery. Fruits. cherry, plump, pear, apple, lemon, orange, apricot.

Vegetables: beetroot, garlic, onion, watermelon, cucumber, carrot, pees, melon, cabbage, pumpkin, tomato.
Cereal Grains: corn, buckwheat, groats, oats, bread, millet, wheat, barley, rye.
Meat products: beef, chicken, lamb, pork, wheal, turkey, sausage, poultry, mutton, duck, goose.
Fish: salmon, herring, crabfish, sprouts.
Milk products: milk, butter, cheese, curd, yoghurt, cream, sour cream, ice-cream.
Bakery: honey, vinegar, oil, eggs, sugar; beverages: wine, (sweet) carbonated water, mineral water, energizer, coca-cola, beer, liquor, brandy, champaign, balm, whisky.

## 3. Discuss the recipes of foods and the countries they came from. Add your own ones.

1) pasta, macaroni, rice, varenyky, coca-cola, stuffed cabbage rolls (golubtsy), pizza, pancakes, pop-corn, puding, cabbage soup.
2) China, the USA, Spain, Great Britain, France, Italy, Norway, Poland, Russia, Ukraine, Crimea, Greece.

## Additional text

## I. Read and discuss the text.

## Fast Food Or Slow Food?

In North America people are always in a hurry. Children nave special lessons or sports activities after school. Parents often work late and don't get home until 7 or 8 o'clock at night. More than 50 percent of women work at full-time jobs, and many people do shift work. It isn't a surprise that the average North American family doesn't have the time to eat many meals together.

When a family takes the time to eat a meal together, often there isn't enough time to prepare the food. That is why "fast food" is so popular in North America. People
spend about 40 percent of their food dollars on fast food.
Fast food is food such as hamburgers, pizza, submarine sandwiches, or fried chicken. People usually buy this food from a restaurant chain such as Pizza Hut, McDonald's, or Kentucky Fried Chicken. Fast food saves work and time, but it is not very nutritious.

Fast food is popular in many countries. American fast-food companies now have restaurants all over the world. There are McDonald's and Pizza Hut restaurants in Bangkok, Beijing, Moscow, and Mexico City, as well as in Paris, London, and Rome.

Not everyone is happy about the spread of North American fast food. For many people, however, fast food has become symbolic of a fast-paced lifestyle that is neither natural nor healthy. An organization called Slow Food was established in Italy in 1986 to oppose fast food and its assembly-line approach to cooking and eating. They do not want any more fast-food chains to open restaurants in their country. Their organization is called the Slow Food Movement. This group wants to fight against the spread of fast food everywhere.

Fast food is a favourite topic of the mass media. The general public appears to have the idea that fast foods such as hamburgers, French fries, fish and chips, and thick shakes or milkshakes are bad for us. Rather extensive nutrient analysis of the foods typically serves in fast-serve restaurants have proved that foods served in fastservice settings are acceptable to adequate diet planning being as junk (fat, unhealthy) as many everyday meals. To fight the negative connotations of fast food, many companies now emphasize the word "fresh" in their advertising and use the term "quick service" to describe their operations.

## Active vocabulary

fast food
slow
be in a hurry
average
meal
spend
nutritious
spread
chain
spread
disrupt
force

їжа у ресторанах швидкого
обслуговування
повільний
поспішати
середній
прийом їжі
витрачати
поживний
поширюватися
черга (syn. line, queue)
розповсюдження
порушувати
сила, примушувати

## 2. Decide if the following statements are true or false.

1. Many families in North America have the time to eat their meals together.
2. Fast food is food such as hamburgers, French fries, and fish and chips.
3. Fast food saves people money and it is very good for them.
4. There aren't any American fast-food chains in other countries.
5. There are some people who don't like fast food.
6. There is an organization called the Food Movement.

## 3. Comment upon the following questions with a partner.

1. Why is fast food called so? 2. Do you visit the fast food restaurants? Why? 3. Does the fast food do people good or harm? What is "junk food"?
2. What products, in your opinion, make a healthful diet, add to longevity? 5. What does the saying 'tastes differ' mean? 6. What common recommendations of "do's" and "dont's" should every man follow in food?

## 4. Complete the following dialogue with the proper verbs in the right form (to

 package, would, to be, should, to serve, to have, to see, to take, to order) and roleplay it.
## At McDonalds

- Have you ever $\qquad$ at McDonalds? I hear they offer a choice of tasty snacks there.
- I should confess I haven't. Let's go there.
- Oh, you ___those long lines? We'll have to wait a lot of time.
- Don't worry. The service is fast.
- It's because all food is $\qquad$ and all the guys are to do is to put it on the tray. Here is a free cashier.
- Good afternoon, Miss. Are you ready $\qquad$ yet?
- Yes, we are. I'll just have a hamburger and potato free. What you $\qquad$ , dear?
- I am rather hungry. I $\qquad$ like a double cheeseburger and "Super-Duperburger".
$\qquad$ you have anything to drink?
- I am not very thirsty. I feel I $\qquad$ try a milk shake and a muffin with it. And I cant' help buying an ice cream
- As for me I choose a sprite and a muffin for me too. I feel like $\qquad$ an ice cream too.
- Could we have the bill, please? Is service included?
- Of course, it is. Don't forget the change, please.
- Thank you.


## UNIT 5

## I. Lead-in questions

1. What are the national symbols of Ukraine?
2. What holiday do we celebrate on August 24?
3. What are the colours of the national flag of Ukraine?
4. How many administrative provinces is the country divided into?
5. What traits of character are Ukrainians believed to have?

## II. Reading

Read the following text.

## UKRAINE

Ukraine, a republic in Eastern Europe, is bounded on the north by Belarus and Russia; on the east by Russia; on the south by the Black Sea and the Sea of Azov; on the southwest by Romania and Moldova; and on the west by Hungary, Slovakia and Poland.

With a total area of about 603,700 square kilometres, Ukraine is the second largest country in Europe after Russia. Kyiv is the capital and the largest city.

Almost the entire country of Ukraine is a vast flat plain, with elevations generally below 300 metres. The Carpathian Mountains intrude at the extreme west, and on the southern coast of the Crimean Peninsula are the Crimean Mountains. The highest point in Ukraine is Mount Hoverla in the Carpathians, with an elevation of 2,061 metres. Most major rivers flow south to the Black Sea. the Dnieper courses through the country for 1,204 kilometres. Other major rivers include the Dniester, Donets, Bug, and Danube. The Danube is an important water route linking the country with many European countries. There are many lakes throughout Ukraine. Lake Svytiaz, one of the largest natural lakes, has an area of 28 square kilometres. Ukraine has extremely fertile black-earth soils in the central and southern portions, totaling nearly two-thirds of the territory.

The climate of Ukraine is temperate continental, with a long summer and a short winter. The southern shores of the Crimea have a warm Mediterranean-type climate. Precipitation generally decreases from north to south; it is greatest in the Carpathians and least in the coastal lowlands of the Black Sea.

Ukraine is the second most populous country of the former USSR; only Russia has more people. Ukraine has a population of about $45,700,000$ people. Average population density is 82 people per sq km . Settlement are densest in the far eastern and western regions. Around 67 percent of population inhabits urban areas. Population growth is relatively low. Ukrainians constitute 72 per cent and Russians constitute 22 per cent. Other minorities include Belarussians, Moldovans, Hungarians, Bulgarians and Crimean Tatars.

Ukraine is richly supplied with mineral resources, with many important deposits
grouped closely together. Coal is Ukraine's most abundant and heavily exploited mineral resource. Large iron ore deposits are located in the southeast, near the bituminous coal and anthracite deposits of the Donets Basin, the famous Donbas fields. The Nikopol region boasts one of the world's richest concentrations of manganese ores. There are also commercial deposits of titanium ores, bauxite, mercury ores, mineral salts and sulphur.

Ukraine's economy is highly industrialized. Industry contributes more than 40 per cent of total net material product and accounts for more than one-quarter of total employment. Industry is based largely on the republic's vast mineral resources. Ukraine is the fourth largest steel producer in the world, and has a broad and diverse industrial base. However, economic policy since the world economic and financial crisis has had serious consequences for Ukraine's competitiveness. Agriculture accounts for about 30 per cent of total net material product and one-quarter of total employment. Ukraine is a major producer and exporter of a wide variety of agricultural products, including wheat and sugar beet, being the world's largest sugar beet producer. Other crops include potatoes, vegetables, fruit, sunflowers and flax. Animal husbandry is also important.

Ukraine is an independent democratic republic, as stated in the declaration of independence issued in August 1991. The head of state is president who is elected by a national ballot. The prime minister heads the council of ministers, which serves as the cabinet. Ukraine has the unicameral state legislature, the 450 -member Supreme Council. Members are freely elected for a four-year term. The highest judicial court is the Supreme Court of five judges, elected for five-year terms by the legislature. At the regional level justice is administered by popularly elected "people's courts".

The chief political parties are the Party of Regions, the Communist Party of Ukraine, the Our Ukraine Bloc and Bloc Yulia Tymoshenko. There are also numerous smaller parties and independents represented in the legislature.

## Essential vocabulary

fertile black-earth soil
precipitation
to decrease
average population density
net material product
employment
consequence
competitiveness
animal husbandry
ballot
unicameral state legislature justice

родючий чорнозем
опади
зменшуватися
середня густота населення
національний валовий продукт
зайнятість
наслідок
конкурентоспроможність
тваринництво
балотування, голосування
однопалатна державна законодавча влада
правосуддя

## III. Reading comprehension

## Answer the following questions:

1. Where is Ukraine situated?
2. What countries does Ukraine border on?
3. What is the total area of Ukraine?
4. What is the population of the country?
5. What are the main features of Ukraine's climate?
6. What can you say about Ukrainian natural resources and economy?
7. What is the political system of Ukraine?
8. What major political parties does Ukraine have today?

## IV. Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Друга за розміром країна у Європі; велика рівнина; помірно континентальний клімат; населяти міську місцевість; приріст населення; поклади залізної руди; широка й різноманітна промислова база; найбільший у світі виробник цукрового буряка; Верховна Рада; народні суди.

## 2. Give the Ukrainian equivalents for:

The total area; to intrude at the extreme west; coastal lowland; settlement; minorities; to be richly supplied with; to boast; commercial deposits; steel producer; a major producer and exporter; to be elected by a national ballot, the highest judicial court; to be represented in the legislature.

## 3. Fill in the gaps with the words given below:

## Republic, urban, entire, continental, populous, competitiveness, ballot, elevation

1) The most $\qquad$ territory of Ukraine is the eastern region.
2) The $\qquad$ coastline of the Black Sea is a resort area.
3) Victor Yanukovych won in the second run of presidential $\qquad$ .
4) A $\qquad$ is a form of government in which the people possess the supreme power.
5) The average $\qquad$ of Ukraine is 175 metres above sea level.
6) Most of Ukraine's population is $\qquad$ and live in cities and towns.
7) The $\qquad$ features of the Ukrainian climate intensify in an eastward direction.
8) One of the main tasks today is to strengthen the $\qquad$ of the national products worldwide.
4. Fill in the gaps with the necessary prepositions:

After, at, for, from, in (3 times), inside, of, on, to, with
Lviv, the capital of Western Ukraine, is one of the best places (1) $\qquad$ the
country. It was founded as a fort (2) $\qquad$ the mid- 13th century by Danylo Halytsky and was named (3) $\qquad$ his son Lev, which means lion. The lion is the historic symbol (4) $\qquad$ the city. Lviv's main street is Freedom Avenue. (5) $\qquad$ the middle of the avenue there is a monument (6) $\qquad$ Taras Shevchenko, and there are always a lot of flowers (7) $\qquad$ its feet. Shevchenko Avenue attracts people (8) $\qquad$ its beautiful buildings and various shops. Lviv Picture Gallery has one of the largest collections of European paintings in the country, with over 1000 paintings (9) $\qquad$ display. (10)
$\qquad$ the Town Arsenal there is the Museum of Old Arms, with a display of various arms taken (11) $\qquad$ over 30 countries. Lviv is also famous (12) $\qquad$ its churches and monasteries.

## III. Speech Exercises

## 1. Make up dialogues, using the questions below and your own ones.

1) What is geographical position of Ukraine?
2) What is Ukraine rich in?
3) What is the relief of the country?
4) What are the largest cities in Ukraine?
5) What can you say about the climate of Ukraine?
6) What can you say about the political system of Ukraine?

## 2. Writing

## Who were these people? What did they do? Write in short about each of them. Hryhoriy Skovoroda, Volodymyr the Great, Taras Shevchenko

## Additional text

## 1. Read the text about Kyiv.

## Kyiv

Ancient Kyiv is now the capital of Ukraine. Situated on the banks of the Dnieper River below its confluence with the Desna River, Kyiv is a major port and one of the largest and most important cities of Eastern Europe. Because of its many parks it is often called the "green city".

Kyiv has a moderately continental climate. January temperatures average $-6^{\circ} \mathrm{C}$. Snow covers the ground usually from mid-November to the end of March. Summers are warm, and July temperatures average $19^{\circ} \mathrm{C}$.

The city's favourable location has made it a major junction of railroads, highways and air routes. Kyiv, as the capital city, has major administrative functions. It is also an important industrial centre with a diverse economy. The principal
industries are machine building and metalworking. Kyiv is also a major publishing centre.

The surviving historical and architectural monuments are most prominent in the ancient Upper Town. The Cathedral of St. Sophia, completed in 1037 and reconstructed in the $17^{\text {th }}$ century, is decorated with frescoes and mosaics in its interior. Much of the Kyiv-Pechery Lavra monastery, built during the $11^{\text {th }}$ century, was destroyed during World War II. Now a museum, it is also still in use as a monastery. This striking building is the most holy place in Ukraine. The caves on the property serve as burial grounds for monks. Nearby is the main thoroughfare, Khreshchatyk. Another Kyiv's oldest and most beloved streets Andrew's Descent has been the centre of city activity since ancient times. The steep and winding cobbled streets are the setting for outdoor concerts and festivals in the summer, and home to several art galleries selling traditional Ukrainian crafts. Mariyinsky Palace is a picturesque Baroque palace with a charming park around it on the hilly bank of the Dnieper River designed by Rastrelli and constructed in 1744. It is an official ceremonial residence of the President of Ukraine.

Kyiv is the cultural and academic centre of Ukraine. Research institutes, the National Scientific Library, the Central Botanical Garden and the Main Astronomical Observatory are located there. There are many government-funded museums in Kyiv. The most famous are the Natural History Museum, the Historical Museum, the National Art Museum and the Western and Eastern Art Museum. Pirogovo is an outdoor museum devoted to folk architecture and traditional village life in Ukraine.

Among many professional theatres in Kyiv the most magnificent is the National Opera House which stages world class ballets and operas. Kyiv has also been the centre of Ukrainian film and mass media. In 1928 the Dovzhenko Artistic Film Studio was founded there.

Many monuments have been erected in Kyiv's squares, parks and other public places. The oldest are the monuments to the Magdeburg law on the right bank of the Dnieper, St. Volodymyr in Volodymyr Hill Park and B. Khmelnytsky in St. Sophia Square. Most have been erected in honour Ukrainian political and scholarly figures and the heroes and victims of the wars and the Chernobyl accident.

## Active vocabulary

confluence
junction
highway
diverse
metalworking
interior
monk
thoroughfare
steep
winding
cobbled
picturesque

з'єднання (річок)
перетинання доріг
магістраль
різноманітний
обробка металів
інтер'єр
монах
головна вулиця
крутий
звивистий
мощений бруківкою
живописний

## 2. Decide if the following statements are true or false:

1. Kyiv is situated on the confluence of the Dnieper River and the Desna River.
2. The processing of metals is one of the main branches of industry.
3. The Cathedral of St. Sophia and the Kyiv-Pechery Lavra monastery were built in the same century.
4. Andrew's Descent is a main street of Kyiv.
5. The official residence of the President of Ukraine is Pirogovo.

## 3. Match the endings of the sentences.

| 1. Kyiv bears the name of prince Kyi, | a) on both banks of the Dnieper. |
| :--- | :--- |
| 2. Under the rule of Yaroslav the Wise <br> Kyivan Rus with Kyiv as its capital | b) you should start your sightseeing <br> from Khreshchatyk. |
| 3. The city lies | c) can be reached by a funicular lift. |
| 4. If you have never been to Kyiv | d) reached the height of its power. |
| 5. The 'pleasure cruises' that depart <br> from the river terminal | e) is the usual way of getting from place <br> to place by most people in Kyiv. |
| 6. St. Michael's Golden Domed <br> Cathedral | f) who lived on the old Kyiv Hill in the <br> sixth century. |
| 7. The cost of the Metro is very cheap <br> and | g) offer stunning views of Kyiv's sights. |

## 4. Supply the missing members of these words families. Check your answers with the dictionary.

1) product - production, to produce, productive.
2) location
3) to develop
4) favourable
5) to complete
6) processing
5. Complete the following dialogue with the proper verbs in the right forms and role-play it: to go ( 2 times), to leave, to look, to love, to take ( 2 times), to walk.

## Looking at vacation pictures

Kathy : Jim, I heard you $\qquad$ a trip to Kyiv. Is that right?
Jim : Yeah, I just got back this morning.
Kathy : That sounds really nice. What did you do there?
Jim : Well, we were only there for three days, so we didn't do too much. We $\qquad$ shopping to the Metrograd Shopping Complex and went out to dinner a few times. At night we $\qquad$ around the city with some friends.
Kathy : Did you $\qquad$ any pictures?
Jim : Yes, I have them with me. Do you want to look at them?
Kathy : Sure, I $\qquad$ looking at photos.
Jim : This one is of my wife and me in the Hydropark, an island in the Dnieper river, and this one is our daughter Emily standing next to my wife.
Kathy : Your daughter $\qquad$ like her mother. Where was this picture taken?
Jim : That was taken at the Boryspil airport before we $\qquad$ .
Kathy : Did you have time to go to St. Sophia's Cathedral?
Jim : No, not this time. We $\qquad$ there last time.
Kathy : It looks like you all had a nice time.
Jim : Yeah, it was a lot of fun.

## UNIT 6

## I. Lead-in questions

1. What is environment for you?
2. How has the world changed since you were a child?(technology, health, environment)?
3. Do you think there are lessons to learn from nature?
4. Is government responsible for pollution?
5. How should people protect the environment?

## II. Reading <br> Read the following text.

## ECOLOGY. PROTECTING THE ENVIRONMENT

Ecology (oíkoç - home; $\lambda$ oroç - science) - is a science, which studies the relationship between all forms of life on our planet and our environment. The term was introduced for the first time by the German biologist Ernst Heinrich Hueckel in 1866. Modern ecology, in part, began with Charles Darvin. In developing his theory of evolution, Darvin stressed the adoption of organisms to their environment through natural selection.

We live on a very beautiful planet - on the Earth. Our planet has very rich resources: the bright blue of the sky, fresh crystal - clear mountain lake water, the rich green of the mountain slopes, wild flowers, picturesque view - all these sceneries of nature fill us with admiration. The $\mathrm{XX}^{\text {th }}$ century is known to be the century of scientific and technological progress. With the industrial revolution our negative influence on Nature began to increase. This progress gave birth to a very serious problems. In the XXI century the ecological problems have become especially actual and painful. Among the most urgent ecological problems are growth of population, ozone layer in the atmosphere, acid rains, the greenhouse effect, global warming, toxic pollution of the atmosphere, disappearance of forests, water pollution, contamination of underground waters by chemical elements, destruction of soil in some areas, threat to some flora and fauna representatives, shortage of natural resources, noise from cars, buses etc.

Environment is all of the external factors affecting an organism. These factors may be other living organisms (biotic factors) or nonliving variables (abiotic factors), such as water, soil, climate, light, and oxygen. All interacting biotic and abiotic factors together make up an ecosystem. Pollution is one of the most burning problems of nowadays. Poisoned substances pollute everything: air, land, water, birds, animals,
people.
Environmental protection includes all available practices used to protect our environment, whether on individual, organizational or global international level. This basically means that each and every one of us can do something to protect our environment, but of course, global actions are the ones that would help our environment the most. Many countries have different organizations, other bodies devoted to environmental protection. There are even some international environmental protection organizations, for instance United Nations Environment Programme. Greenpeace is an independent global compaigning organization that acts to change attitudes and behaviour, to protect and conserve the environment and to promote peace. This means that something is still being done for our environment, though this something is far from being enough. Only united world can save our environment and our planet for our future generation.

If we want to live on the clean Earth we should remember about ecological culture. Ecological culture means respect to the nature not only as our home, but also as a home of millions of species of insects, animals and birds. Governments should encourage eco-friendly transport that uses solar energy or alternative fuel. To make air clean we need good filters at nuclear power stations, at factories and plants and also in cars and buses. Both clean air and clean water are necessary for our health. If people want to survive they must solve these problems quickly. Man is beginning to understand that his environment is not just his own town or country, but the whole Earth. That's why people all over the world think and speak so much about ecology. Only active steps will save people from the ecological catastrophe.

## Essential vocabulary

environmental protection
negative influence
painful
ozone layer
acid rains
greenhouse effect
global warming
contamination
underground waters
poisoned substances
toxic pollution
species of insects
захист навколишнього середовища
негативний вплив
болісний
озоновий шар
кислотні дощі
парниковий ефект
глобальне потепління
забруднення
підземні води
отруйні речовини
токсичне забруднення
види комах

## III. Reading comprehension

Answer the following questions:

1. What is the definition of the word "ecology"?
2. What is the influence of Industrial revolution on nature?
3. What are the most urgent ecological problems?
4. What is environment?
5. What is ecosystem?
6. What environmental protection organizations do you know?
7. What does ecological culture mean?
8. What should be done for environmental protection?

## IV. Vocabulary and Grammar exercises

1. Give English equivalents to the following words:

Взаємовідношення, природний відбір, захоплення, ріст населення, зникнення лісів, змінити відношення, поважати природу, альтернативне паливо, атомні електростанції, виживати, вирішувати проблему, екологічна катастрофа.

## 2. Give the Ukrainian equivalents for:

Adoption, rich resources, picturesque view, urgent problems, underground water, destruction of soil, thereat to flora and fauna, representative, shortage of natural resources, to conserve, to promote peace, to encourage, filter.

## 3. Fill in the gaps with the worlds given below:

Damage, alternative, cancer, ozone layer, fuels, immune, species

1) The $\qquad$ , the upper part of atmosphere, serves to shield the earth from the sun's harmful ultraviolet rays.
2) Increased ultraviolet radiation will reduce the ability of people's $\qquad$ systems to respond to infections.
3) As fossil $\qquad$ are burned, chemicals and particulate matter are released into the atmosphere.
4) Acid rain is a serious global problem because few $\qquad$ are capable of surviving in the face of such acidic conditions.
5) Many industrially produced chemicals may cause $\qquad$ , birth defects, genetic mutations, or death.
6) It is desirable to have a wider range of energy options, other $\qquad$ sources of power.
7) To prevent nature from all forms of $\qquad$ there appeared a lot of different organizations.

## 4. Fill in the gaps with necessary prepositions:

By ( 2 times), up ( 2 times), on ( 2 times), in ( 2 times), with ( 2 times), around, of, from

Over two thirds of Earth's surface is covered (1) $\qquad$ water. Less then a third of Earth's surface is taken (2) $\qquad$ by land. As Earth's population continues to grow, people are putting even increasing pressure (3) $\qquad$ the planet's water resources. Our oceans, rivers and other inland waters are being squeezed (4) $\qquad$ human activities not so they take (5) $\qquad$ less room, but so their quality is reduced. We know that pollution is a human problem because it is a relatively recent development (6) $\qquad$ the planets history: before the $19^{\text {th }}$ century Industrial Revolution, people lived more (7) $\qquad$ harmony (8) $\qquad$ their immediate environment. As industrialization has spread (9) $\qquad$ the globe, so the problem (10) $\qquad$ pollution has spread (11) $\qquad$ it. Pollution (12) $\qquad$ toxic chemicals threatens life (13) $\qquad$ this planet.

## III. Speech Exercises

1. Make up dialogues, using questions below and your own ones.
1) What is water pollution?
2) What are the main types of water pollution?
3) How do we know when water is polluted?
4) What are the causes of water pollution?
5) What are dead zones?
6) What damage can waste water cause?

## 2. Writing

Can you explain these important definitions?
Write in short about each of them
acid rain
the greenhouse effect
global warming

## Additional text

## 1. Read the text.

## Ecological situation in Ukraine

With the development of civilization man's interference in nature has increased, the contradictions between man and nature have acquired a dramatic character. Every year the world's industry pollutes the atmosphere with millions of tons of dust and other harmful substances. The seas and rivers are poisoned with industrial waste, chemical and sewage discharge.

Ukraine is suffering a lot of environmental problems. Many of them have been caused by economic activities. There are many consequences of damaging environment. One of them is water pollution. The Dnipro and other rivers are in danger. They are filled with poison: industrial waste, all kinds of chemical elements and pesticides. Industrial enterprises of large cities waste harmful substances into river and sea's waters. The emissions destroy fishing industry and lead to damage of wildlife.

Another problem is the air pollution. The waste gases cause acid rains. The next ecological problem is the problem of the Azov Sea. Because it is such a small sea, it becomes dirty very easily. Many industrial centres such as Mariupol, Berdyansk pour into the sea all kind of chemicals. It naturally influences the state of the sea water and the shore line flora and fauna.

But the most terrible ecological problem of Ukraine is Chernobyl. The effect of Chernobyl disaster is dangerous and tragic. In 1986 a nuclear power station of Chernobyl, which is near Kiev, exploded, producing highly dangerous radioactive fallout not only in the vicinity of the accident but because of prevailing winds across the continent of Europe. As the result of that accident $18 \%$ of the territories of our republic were contaminated by radioactive elements. The agriculture of our country suffered great losses.

Supporters and opponents of nuclear power were trading wildly different estimates for the number of people who are likely to die as a result of the radioactivity spread across Europe by the explosion. Fatal cancers will eventually kill 93, 000 people according to Greenpeace, 9,000 according to the World Health Organization and just 1,000 according to one optimistic academic study. After the disaster in Chernobyl the inhabitants of the nearby towns and villages had to be evacuated. Some of them died and some become invalids.

The death toll from the world's worst nuclear accident is of far more than academic interest. The figures are propaganda in the increasingly vociferous debate over whether industrialized countries should resume building nuclear power stations in response to dwindling fossil fuel supplies and the threat from global warming. ...

While environmental groups such as Greenpeace may exaggerate the effect of Chernobyl, the nuclear industry and organisations such as the International Atomic Energy Agency have tended to play the effect down. ...

25 years after nuclear accident at Chernobyl there was an awful crisis in Japan, caused by powerful earthquake on the $11^{\text {th }}$ of March, 2011, and subsequent tsunami. A lot of people died. Levels of radioactive contamination near the Fukushima nuclear reactors caused harm to local marina life, at least 6 countries have defected radiation in small amounts in the air, water, soil.

Nuclear energy is often called the energy of the future because of a great amount of advantages, but millions of people are afraid of radiation. On the one hand
using nuclear power gives us more variety in fuel sources, on the other hand it is a remembrance about Chernobyl and Fukushima tragedies. The scientific uncertainty about the number of long-term casualties from Chernobyl directly undermines public trust in the nuclear industry. Nuclear pollution cannot be seen but its effects can be terrible. Ecological catastrophes do a lot of harm to Nature, but they are much more dangerous for man. Different countries use nuclear energy, but people from all over the world suppose that this is the very time when a serious debate about its merits is most needed.

## Active vocabulary

contradiction
eventually
harmful
to cause
cancer
death toll
vociferous debate
to resume smth
nuclear power station
to dwindle
fossil fuel
to exaggerate smth

протиріччя
поступово
шкідливий
спричиняти
злоякісна пухлина (рак)
кількість жертв
гучні дебати
відновлювати, продовжувати
атомна електростанція
скорочуватись, вичерпуватись
викопні види палива
перебільшувати

## 2. Decide if the following statements are true or false:

1. World's industry pollutes the atmosphere with useful substances.
2. A lot of environmental problems in Ukraine have been caused by economic activities.
3. The emissions promote fishing industry.
4. Poured chemicals influence the state of the sea water and the shoreline flora and fauna.
5. Nuclear energy has only a great amount of disadvantages.

## 3. Match the ending of the sentences.

1. Nuclear energy as an alternative is opposed by many because
2. The accident at the Chernobyl nuclear power plant in 1986 scattered
a) routine shipping and from the oil people pour down drains on land.
b) in lower concentrations it can cause cancers and other illnesses.
3. The reasonable solution is to combine
4. Each year, the world generates 400 billion tons of industrial waste, much of which is
5. It is not unusual for heavy summer rainstorms to wash toxic chemicals
6. At high enough concentration radioactive waste can kill -
7. Over $70 \%$ of oil pollution of sea comes from
c) into rivers in such concentrations that they kill large numbers of fish overnight.
d) conservation strategies with the increased use of solar energy.
e) radioactive contamination over a large part of Europe.
f) of massive devastation an accident can cause.
g) pumped untreated into river oceans and other waterways.
8. Supply the missing members of these words families. Check your answer with a dictionary.
1) polluted - pollute, pollutant, polluter, pollution
2) environmental
3) natural
4) harmful
5) dangerous
6) responsible
7) ecological
5. Complete the following dialogue with the proper verbs in the right form and role-play it: to understand, to know, to campaign, to rely, to accept, to prepare.

A: I've just been $\qquad$ my report concerning different organizations, protecting our environment, Greenpeace particularly.
B: Yeah, it's interesting. What is Greenpeace and what are its main actions?
A: You know Greenpeace is an independent global campaigning organization that acts to protect and conserve the environment and promote peace.
B: And does it $\qquad$ donations from governments or corporations?
A: Oh, no. To maintain its independence this organization $\qquad$ on contributions from individual supporters.
B: As I understand they struggle to preserve our future. How old is this organization?

A: Greenpeace $\qquad$ against environment degradation since 1971 when a small boat of volunteers and journalists sailed into Amchitka, an area north of Alaska where the US Government was conducting underground nuclear tests.
B: And what do you $\qquad$ about Ukrainian people? Are they members of this organization?
A: Oh yeah. Greenpeace speaks for 2.8 million supporters worldwide and $\qquad$ many millions more than that to take action every day.
B: As I $\qquad$ this organization exists to expose environmental criminals and to challenge government and corporations when they fail to live up to their mandate to safeguard our environment and our future.

## UNIT 7

## I. Lead-in questions

1. What do you think the development of science depends on?
2. How can a nation encourage science, invention and scientific creativity?
3. Which spheres of life have been influenced by the developments in science and technology most of all?
4. Would you like to connect your life with science?
5. What field of science are you interested in? Why?

## II. Reading <br> Read the following text.

## SCIENCE AND TECHNOLOGIES IN THE MODERN WORLD

Science (Latin scientia, from scire, "to know") is a term used in its broadest meaning to denote systematized knowledge in any field. The term "Technology" is derived from the Greek words tekhne, which refers to an art or craft, and logia, meaning an area of study; thus, technology means, literally, the study, or science, of crafting.
Many historians of science argue not only that technology is an essential condition of advanced, industrial civilization but also that the rate of technological change has developed its own momentum in recent centuries. Innovations now seem to appear at a rate that increases geometrically, without respect to geographical limits or political systems.
The 20th century gave us a plenty of things that improve our lives: TV, calculators, mobile phones, CDs... It also gave us some household objects that make our lives easier and more comfortable.
$T V$. A Russian engineer Vladimir Zvorykin emigrated to the USA and there in 1931 produced an apparatus that later became known as a television set. The first TV station was located on the Empire State Building in New York City. The programmes could be watched only by those who lived not farther than 60 miles from the station.
Video. In 1975 the Japanese corporation JVC made it possible to record films and TV programmes at home. The system was known as VHS (Video Home System).
Computer. The first computers were huge. They were used for scientific purposes. Sinklair ZX 80, the 1980 machine, was the first computer used by ordinary people. Psion Organizer of 1990s shifted computers off the desktop.
Internet. The global network was designed for serious scientific purposes. In 1962 the US scientists started to build a network between the leading scientific centres of the USA. In 1969 this network joined four universities. In 1972 the first e-mail with the symbol @ was sent.

Mobile phone now used by millions of people appeared in 1973.
The American Martin Cooper invented the first mobile phone - Motorola DynaTec. It weighed a kilo. But it took five years to draw in a commercial operator from Bahrein. Now mobile phones have made a massive impact on social and working activities and changed the way we communicate.

Compact Disc from the 1980s brought an end to vinyl records and revolutionized the storage of computer data.

Digital Watch appeared in 1970 on Roger Moore's wrist in the Bond film "Live and Let Die". It brought computer technology into everyday life.

Contact lenses. The first contact lenses were made from plastic in 1936 in New York. But only thanks to new materials and developed technologies there appeared soft lenses that let oxygen to the eyes.

Trainers. The first trainers were designed by Adolf and Rudolf Dessler right after WWII. Canvas and rubber soles were used to make them. Later the brothers went each his own way. In 1949 Adolf patented his trainers under the name "Adidas". This is the world famous firm now. The first three letters stand for Adi - a short form of Adolf as the last three letters represent the beginning of the surname. The second brother established his own company "Puma".

Plastic bag represents the beginning of the "plastic age" and arriving of the disposable society. It replaced shopping baskets and cloth bag. Technology has always been a major means for creating new physical and human environments. But it has been very difficult in practice, however, to predict secondary effects of new technologies. We must always remember that technology can be conceive as both a creative and a destructive process.

It is possible to ask today whether technology will also destroy the global civilization that human beings have created.

## Essential vocabulary

field
craft
advanced
innovation
to improve
to design
to invent
to patent
to establish
disposable
environment
to conceive
human beings

галузь
уміння,майстерність
розвинений
нововведення,відкриття
покращувати
проектувати , конструювати
винаходити,робити відкриття
запатентувати
засновувати,створювати
одноразового використання
навколишнєсередовище
осягати,розуміти
ЛюДИ,ЛЮдство
to create
Bahrain

створювати
держава в Перській затоці

## III. Reading comprehension

## Answer the following questions:

1. What is the difference between science and technology?
2. What do many historians of science argue about?
3. Do you agree that innovations now appear at a rate that increases geometrically.
4. The 20-th century gave us some household objects that made our lives easier and more comfortable, did not it?
5. Which of the following do you own: a DVD, a microwave oven, a computer, a cell phone, an electronic dictionary?
6. Which of them do you use most often?
7. Has technology always been a major means for creating new physical and human environments?
8. Do you think technology will destroy the global civilization?

## IV. Vocabulary and Grammar exercises

## 1. Give the Ukrainian equivalents for:

Without respect to; household objects; the 1980 machine; ordinary people; shifted computers of the desktop; the global network was designed; revolutionized the storage of computer data; arriving of the disposable society; to predict secondary effect; for creating new physical and human environments; a creative and a destructive process.
2. Give English equivalents to the following words:

Невід'ємна умова; зробила можливим; вчені в Сполучених Штатах; знадобилося п'ять років, щоб; значно вплинули на; вісімдесяті поклали кінець; відразу після II Світової війни; під назвою; всесвітньо відома фірма; заснував свою власну компанію; на практиці; світова цивілізація.
3. Fill in the gaps with the words given below:
innovations; to predict secondary effect; technology; a creative and a destructive process; plenty of things; systematized knowledge; the rate of technological change.

1) Science is a term to denote $\qquad$ in any field.
2) $\qquad$ means the study, or science, of crafting.
3) $\qquad$ has developed its own momentum in recent centuries.
4) $\qquad$ now seem to appear at a rate that increases geometrically.
5) The 20-th century gave us $\qquad$ that improved our lives.
6) But it has been very difficult in practice $\qquad$ of new technologies.
7) So we must always remember that technology can be conceived as both
$\qquad$ _.
4. These people gave their names to common things we use today. Can you identify them? Fill in the gaps with the names given below: Comma, Geiger, Ketchup, Parquet, Pasteur, Pocket, Sandwich.
5. Henry $\qquad$ (1589-1645); his invention keeps your hands in winter and is useful place to keep your keys.
6. Domenico $\qquad$ (1264-1326); an Italian monk who invented the punctuation mark we use to separate words in a sentence.
7. Hans Wilhelm $\qquad$ (died in 1945); a German nuclear physicist who designed a counter for detecting radioactivity.
8. Martha $\qquad$ (died in. 1680); whose excellent tomato sauce became very popular. Hamburgers wouldn't be the same without it!
9. Louis $\qquad$ (1822-1895); a Frenchman who was both a chemist and a biologist. Pasteurization is a method of sterilizing milk by heating it.
10. Jean-Phillipe $\qquad$ (1638-1680); a French carpenter who invented a way of laying wood on a floor in intricate patterns.
11. The Earl of $\qquad$ (1718 - 1792); a compulsive gambler who discovered that eating meat between two slices of bread meant that he didn`t have to leave his card game.

## V. Speech Exercises

1. Make up dialogues, using the questions below and your own ones.
1) Do you think technology improved our lives or made our life worse?
2) Imagine that you could only use ONE of the following: a telephone, a computer, a television or a car. Which one would you use and why?
3) What are the most important inventions and discoveries over history? (e.g. the lever, fire, the wheel, America, the computer, the airplane, penicillin, car, electricity).
4) What invention do you think has had the greatest impact on society? Why?
5) What do you think the world be like a hundred years from now?

## 2. Writing

Why can technology be conceived as both a creative and a destructive process?

## Additional text

## 1. Read the text about science and technology in Ukraine.

## Science and Technology in Ukraine

For a long time science in Ukraine developed as a part of the scientific efforts of the former Soviet Union. However, it had its own Academy of Sciences, founded in 1918 by Hetman Skoropadsky. Since 1994 it has been called the National Academy of Sciences of Ukraine.
The great forces are united under the Ukrainian Academy of Sciences. At its disposal there are many scientific centers, laboratories, experimental plants, production designing departments and computer centers. There are a lot of universities in Ukraine, the oldest one is the Lviv University founded in 1662. Besides, there are hundreds of other higher educational establishments, branch research institutes, which have done much to promote the science of our country.
When the talk turns to Ukrainian science, one immediately thinks of Bogomolets, Strazhesko, Filatov, Palladin, Pohorelov. Who does not know the names of Ostrogradsky, Sinelnikov, Antonovich, Hrushevsky, Glushkov and many others?

The first electronic computing machine in Europe was designed by our countryman S.Lebedev in 1951. The famous astronomer Academician Mykola Barabashov made significant discoveries concerning Mars, Moon and Venice. Volodymyr Vernadsky, the first President of the Ukrainian Academy of Sciences, was the creator of the biosphere theory. Yevhen Paton, famous for his contribution in bridge-building and welding, was the father of electronic welding. His son Boris Paton succeeded him and became an outstanding scientist too. For many years he was the President of the Ukrainian Academy of Sciences.
It was the Ukrainian scientists that split the nucleus of an atom, built the first accelerator of elementary particles, discovered heavy water, heavy isotopes of oxygen and hydrogen, founded the world-known school of mathematics, chemistry, physics, biology and physiology. Who does not know the achievements of Ukrainian scientists in the field of electric welding, cybernetics, industrial production of manmade diamonds? They are doing research in using genetic engineering, developing thinking machines, studying cosmic matter, utilizing the resources of the world ocean, etc.

Ukraine is developing not only business-like contact but also scientific ties with West-European countries, the USA and Japan. Such global problems as those associated with oceanology, atmospheric processes, protection of the environment, space exploration, public health, can be tackled successfully only through the joint efforts of scientists from many countries. Our scientists attach great importance to international cooperation in all spheres of national economy, science and technology.

At present Ukrainian science undergoes hard times. Instability in our economy and society, lack of necessary amount of money hampers the scientific and technological progress. Nevertheless, the work of our scientists and researchers is directed to
overcome all this difficulties and obstacles and to develop, advance and further investigate science and technology.

## Active vocabulary

discovery
creator
contribution
welding
outstanding
achievements
to do research
to utilize
protection of the environment
space exploration
joint efforts
cooperation
to hamper
to overcome
to investigate

відкриття
творець
внесок, сприяння
зварювання
видатний
досягнення
проводити наукові дослідження
використовувати
захист довкілля
дослідження космічного простору
спільні зусилля
співробітництво
перешкоджати, заважати
здолати
досліджувати,вивчати

## 2. Decide if the following statements are true or false:

1. The Academy of Science in Ukraine was founded in 1918 by Hetman Skoropadsky.
2. Since 2004 it has been called the National Academy of Sciences of Ukraine.
3. The oldest university in Ukraine is the Lviv University founded in 1662.
4. The first electronic computing machine in Europe was designed by European scientists.
5. Boris Paton is the father of electronic welding.
6. V.Vernadsky was the first President of the Ukrainian Academy of Sciences.
7. Ukraine is developing scientific ties with some European countries only.

## 3. Match the names on the left with the definitions on the right.

| 1. genetic engineering | a) the application of physical laws and <br> theories to stars and galaxies. |
| :--- | :--- |
| 2. molecular biology | b) the study of the way geographical <br> factors help to explain the basis of the <br> power of nation states. |
| 3. information technology | c) the manipulation of genetic material <br> (DNA) of living things to alter <br> hereditary traits. |
| 4. cybernetics | d) the study of the way nuclear power <br> can be made useful. |
| 5. geopolitics | e) the study of technology related to the <br> transfer of information (computers, <br> digital electronics, telecommunications). |
| 6. astrophysics | f) the study of the structure and function <br> of organic molecules associated with <br> living organisms. |
| 7. nuclear engineering | g) the study of the way information in <br> moved and controlled by the brain or by <br> machinery. |

4. Complete the following list with the name of the specialists in the particular fields. Check your answers with the dictionary.

| science <br> chemistry | $\underline{\text { scientists }}$ |
| :--- | :--- | :--- | :--- |
| physics |  |$\quad$| science |
| :--- |
| information technology |$\quad$| scientists |
| :--- |
| zoology |
| genetics |

## 5. Complete the following dialogue with the proper verbs in the right forms and

 role-play it: to discuss; to know ( 2 times); to be connected; to be achieved; to be split; to be; to mean; to design; to go.
## Useful information

Alex: Hi, Nick!
Nick: Hi, Alex! Where are you going from?
Alex: You see, I'm a member of the students' scientific society. And today at our meeting we $\qquad$ a very important theme dealing with the Ukrainian science and
scientists.
Nick: It's very interesting. I $\qquad$ many famous names but I'm not always sure of the sphere of their activity. Igor Kurchatov, for example.
Alex: Oh! His name $\qquad$ with the first split of an atom in the USSR. It
$\qquad$ at the laboratory headed by Kurchatov only several months after the nucleus of the atom $\qquad$ by the English physicists in 1932.
Nick: And what about Vernadsky? Except the fact that he was the first President of the Ukrainian Academy of Sciences.
Alex: Vernadsky $\qquad$ the world famous scientist and he was the first to estimate the age of the most ancient elements of the Earth surface the age of which is 4,5 billion years old.
Nick: One more question. I $\qquad$ Yevhen Paton. I $\qquad$ he was a great specialist in welding.
Alex: Not only in welding but in bridge-building too. He $\qquad$ over 35 bridges including the famous bridge across the Dnipro River named after him.
Nick: It's really very interesting and useful information. But unfortunately I have
$\qquad$ . Bye for now!
Alex: OK, bye! See you!

## UNIT 8

## I. Lead-in questions

1. What is your first language?
2. What is your second language?
3. Where is English the state language?
4. Why is English so widely spread?
5. What foreign languages are studied at your university?

## II. Reading Read the following text.

## ENGLISH AROUND THE WORLD

The population of Britain is only about 61 million. But throughout the world English is spoken by over 700 million people. About 350 million people speak English as their first or native language in countries such as the United Kingdom, the USA, Canada, Australia, New Zealand and South Africa.

A further 300 million use English as a second or official language in over 60 countries usually when doing business, or when completing official documents and forms. It is estimated that at least a billion people throughout the world use English.

There are over 3000 languages in the world. So why has English become so widely spoken?

From about 1600 explorers, adventurers, settlers and soldiers went out from Britain to found settlements and colonies overseas. They took the English language with them. At the height of their power, during the 19Ih century, the British could claim that the sun never set on their Empire. Today almost all the countries of the old Empire have become independent. However, most of them are now members of the Commonwealth of Nations, and English continues to be an important language for them. At the same time, England was one of the most active trading countries in world. Traders in other countries found it beneficial to learn English to develop trade links and do business with the British.

After the Second World War the United States became what Britain had been in the 19 'h century: politically and economically the most powerful nation in the world. As its power spread, so the English language spread. English replaced German as the dominant language of science Nobel Prize laureates during the second half of the 20th century. Finally, with the development of computer technology and the explosion of information, English truly became a global language.

We can distinguish three major periods in the evolution of English:
The first, called Old English, covers the period from the beginning of the language to about 1100.

During the Old English period, most additions to the English vocabulary were based on native English words. Latin was the most influential of foreign languages. The Scandinavian languages also influenced the English vocabulary.

The second, called Middle English, covers the period from 1100 to 1500. This period was marked by a great extension of foreign influence on English. The Norman Conquest in 1066 made English for a time a language of only secondary importance. Many English words were borrowed from French.

The third, called Modern English, covers the period from 1500 to the present. It derives much of its learned vocabulary from Latin and Greek. English has also borrowed words from nearly all the languages of Europe.

English occupies an important position. It is the main foreign language taught within most school systems worldwide, many newspapers are published in English and it is the language of much radio and television broadcasting. English is a global language for doing business. In some industries, such as the airline and shipping industries, English is the official standard language. Therefore, an excellent command of English is required for key jobs, such as air traffic controller or ship captain. In addition, English has emerged as a major language for finance and the stock markets around the world. People wishing to do business globally need to have a good command of spoken English. The ability to clearly write in English is also key, as many forms of business communication, from emails to presentations and marketing to important business contracts, are written in English.

It is the language of science, technology and medicine, and it is estimated that two-thirds of all scientific papers today are first published English. It is the language of diplomacy and sport; it is one of six official languages of the United Nations and the language used by the International Olympic Committee. International pop culture and advertising are also dominated by English.

English has appeared as one of the major languages for doing business on the Internet. A website written in English can attract many customers and enable even small business owners in remote villages to sell items to people around the world. Well-written product and service descriptions in English are key for attracting new customers and keeping them up to date on any new product offerings. $70 \%$ of the world's mail is written in English, $80 \%$ of all information in electronic retrieval systems is stored in English.

## Essential vocabulary

estimate
settler
overseas
explosion
distinguish

оцінити, підрахувати
поселенець
за кордоном, за морем
вибух
розрізняти
extension
derives
broadcasting
emerge
air traffic controller
stock markets

розповсюдження
походити
мовлення
виникати
авіадиспетчер
фондові ринки

## III. Reading comprehension

## Answer the following questions:

1. How many people throughout the world use English?
2. How many languages are there in the world?
3. Why has English become so widely spoken?
4. What periods are distinguished in the evolution of English?
5. What languages provide English with vocabulary?
6. In what industries is English the official standard language ?
7. What international organizations use English?
8. How is English used in the Internet?

## IV. Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Рідна мова, дослідники, шукачі пригод, заснувати колонії, розвивати торгівельні зв’язки, розвиток комп’ютерних технологій, провідна мова, займатись бізнесом, домінувати, приваблювати клієнтів, пошукові системи.

## 2. Give the Ukrainian equivalents for:

Settlers, at the height of their power, a global language, to become independent, influential, air traffic controller, covers the period, business communication, advertising, a major language, scientific papers, to have a good command of spoken English, to attract many customers.

## 3. Fill in the gaps with the words given below:

Incomprehensible, colonial, to establish, borrowed, derived, connected, belongs

1) The words English and England are $\qquad$ from the name of one Germanic tribes, the Angles.
2) The earliest written records of the English language are $\qquad$ to the speaker without training.
3) English is closely $\qquad$ with the history of the country and with the history of conquests.
4) English $\qquad$ to the Romanic and Germanic branch of the Indo- European
family of languages.
5) English has also $\qquad$ words from nearly all the languages of Europe.
6) For a long time English was the most important languages of the
$\qquad$ countries in Africa, Asia, Australia and Oceania.
7) English is used $\qquad$ business relation in the world.

## 4. Fill in the gaps with the necessary prepositions:

By, from, Although, However, than, on, in, that

## British and American English

It has been said "England and America are two countries divided (1)__ a common language." (2)__, the differences between British and American English are comparatively small. (3)__ British newspapers occasionally publish letters from irate citizens complaining that they are unable to understand a word of the latest American TV series, it is clear (4)___ few people have serious problems. In fact, people (5) $\qquad$ both sides of the Atlantic might have much more difficulty(6)__ understanding the stronger regional dialects of their own country than in understanding an average speaker(7) __ the other country. Television, movies, and popular music have helped to bridge the Atlantic, and those minor difficulties which might occur in comprehension are probably much fewer (8)__ 40 or 50 years ago. It is true that an American would say:
"Excuse me, do you have ...?" while in Britain it would be more common to say:
"Pardon me, have you got...?"
However, both forms would be understood in both countries.

## III. Speech Exercises

1. Make up dialogues, using the questions below and your own ones.
2. Where is English used as international language?
3. Why is English so well-spread nowadays?
4. What English words are regularly used in your language?
5. Is it important to know at least one foreign language?

## 2. Writing

Do you agree with the saying:
Languages open doors.

## Additional text

## 1. Read the text.

## One World — One Language!

Many people feel that the only realistic chance of breaking the foreign language barrier is to use a natural language as a world lingua franca. Today, English is the main contender for the position of world lingua franca.
There are few competitors. Several other languages have an important local role as a lingua franca but no comparable level of international use, such as Russian in Eastern Europe, or Spanish in South and Central America. More people in the world speak Chinese than any other language, but in the West Chinese is too unfamiliar to be a serious contender. French is still widely used, but far less than it was a century ago. Many factors contribute to the gradual spread of a language - chiefly political and military might, economic power, and religious influence. These same factors mean that the development of a world language is not viewed with enthusiasm by those who would have to learn it. Such a language, it can be argued, would give its originating culture an unprecedented influence in world affairs and scientific research. For example, scientists who used it as a mother tongue would be in a privileged position: they would not have to spend time learning it and would more easily assimilate ideas expressed in it.
Furthermore, it is thought, a world language would inevitably erode the status of minority languages and pose a threat to the identity of nations. Many people thus view the current progress of English towards world language status with concern and often with antagonism.
Ironically, the main danger to the growth of a world language comes from within. As the language becomes used in all corners of the world, by people from all walks of life, it begins to develop new spoken varieties which are used by local people as symbols of their identity.
In the course of time these new varieties might become mutually unintelligible. It cannot be predicted how far this diversification will affect English. Linguistic predictions have a habit of being wrong. A hundred years ago, predictions were being made that British and American English would by now be mutually unintelligible. It is not always easy to predict' the trend that will result from increased modern contacts through travel and communications.

## Active vocabulary

lingua franca
contender
contribute
unprecedented

змішана мова
суперник
робити внесок
безпрецедентний
inevitably
erode
mutually
unintelligible
predictions

неминуче
роз"їдати, псувати
взаємно, спільно
незрозумілий, нечіткий
прогнози

## 2. Decide if the following statements are true or false:

1. There is an opinion that none of the existing languages can be used as a world language by all peoples.
2. English, Chinese, Russian and French have equal opportunities of becoming a lingua franca.
3. English is the most widely spoken language of the world.
4. The development of an artificial language will help other languages to develop.
5. Many people in the world welcome English as an international language.
6. Not all people are in favor of choosing one modern language to become a world one.
7. It would only be fair to choose the most used language to be a lingua franca.
8. Few people think that English influences the culture of their countries in a bad way.
9. If one language is chosen to become a lingua franca, people in different localities will easily understand each other.
10.The author of the article predicts that either British or American English will one day become a world language.

## 3. Match the endings of the sentences.

| 1. English is | a) but far less than it was a century ago. |
| :--- | :--- |
| 2. French is still widely used, | b) the status of minority languages and <br> pose a threat to the identity of nations. |
| 3. Many factors contribute to the <br> gradual spread of a language - | c) the main contender for the position of <br> world lingua franca |
| 4. It is thought, a world language would <br> inevitably erode | d) chiefly political and military might, <br> economic power, and religious influence |
| 5. The development of a world language <br> is not viewed with enthusiasm by | e) with concern and often with <br> antagonism. |
| 6. Many people view the current <br> progress of English towards world <br> language status | f) comes from within. |
| 7. The main danger to the growth of a <br> world language | g) those who would have to learn it. |

## 4. Look at the words given below. Tell which words are American and which ones are British?

garbage/rubbish
cabana/beach hut
pharmacist/chemist
cookie/biscuit
elevator/lift
drapes/curtains

ground beef/minced beef<br>VCR/video<br>yard/garden<br>napkin/serviette<br>aborigine/eggplant<br>trash basket/waste bin

NOTE: All of the American words would be understood by most British people.
5. Write a $\mathbf{1 5 0 - 2 0 0}$ words composition about your experience in learning English. The guiding questions below can help you do it

1. How old were you when you began learning English?
2. Do you remember your first English lesson? Did you enjoy it?
3. Who was your first English teacher? Did you like him/her?
4. What did you like/dislike about your first English lesson?
5. What marks did you get?
6. Did you play any games at the lesson? Did you draw? Did you sing songs? Did you learn poems by heart?
7. Did you always do your English homework?
8. Were you afraid to speak at your English lessons?
9. Was it difficult for you to learn new words?
10. What was the most difficult aspect for you in learning English: grammar, vocabulary, listening or speaking?

## UNIT 9

## I.Lead-in questions

1. What working position is the best for you?
2. What qualities do you need for your future career?
3. What is meant by "professional qualification" for a job?
4. Are you accustomed to working under pressure?
5. What personal characteristics does an employer consider when choosing an employee?

## II. Reading

## Read the following text

## MY FUTURE CAREER. APPLYING FOR A NEW POSITION

In different countries, different conventions apply to the process of job application and interviews. In most parts of the world, it's common to submit a typed or laserprinted CV (curriculum vitae - British English) or resume (American English). This contains all the unchanging information about you: your education, background and work experience. This usually accompanies a letter of application, which in some countries is expected to be handwritten, not wordprocessed. A supplementary information sheet containing information relevant to this particular job may also be required, though this is not used in some countries.

Many companies expect all your personal information to be entered on a standard application form.

Unfortunately, no two application forms are alike, and filling in each one may present unexpected difficulties.

Some personnel departments believe that the CV and application letter give a better impression of a candidate then a form.

There are different kinds of interviews: traditional one-to-one interviews, panel interviews where one or more candidate are interviewed by a panel of interviewers and even 'deep-end' interviews where applicants have to demonstrate how they can cope in actual business situations. The atmosphere of an interview may vary from the informal to the formal and interviewers may take a friendly, neutral or even hostile approach.

Different interviewers use different techniques and the only rules that applicants should be aware of may be 'Expect the unexpected' and 'Be yourself'!

Progress interviews are interviews where employees have a chance to review the work they are doing and to set objectives for the future. Such interviews usually take place after a new employee has been working with a company for several months, and after that they may take place once or twice a year.

In different countries, and in different trades and different grades, the salary that goes with a job may be only part of the package: extra benefits like a company car or cheap housing loans, bonuses paid in a 'thirteenth month', company pension schemes, free canteen meals, long holidays or flexible working hours may all contribute to the attractiveness of a job.

## Essential vocabulary

convention
to apply
application
curriculum vitae
resume
relevant
personnel department
panel
hostile
employee
employer
trade
grade
benefit
loan

звичай, умовність звертатися
заява, прохання
біографія
стислі анкетні данні
доречний,
відділ кадрів
комісія, група фахівців
ворожий, неприязний
службовець
роботодавець
професія
ранг, ступінь
вигода, користь, прибуток
позика

## III. Reading comprehension

## Answer the following questions:

1. What is it common to submit in most parts of the world when applying for a job?
2. What do many companies expect?
3. What kinds of interviews are there?
4. What are the only rules that applicants should be aware of?
5. What are progress interviews?
IV. Vocabulary and Grammar exercises
6. Give English equivalents to the following words:

Різні звичаї, процес подання заяви на роботу, біографія, стислі анкетні дані, додаткова інформація, стандартна форма заяви, відділ кадрів, інтерв'ю при комісії, неприязне ставлення, новий працівник, різні професії, додатковий прибуток

## 2. Give the Ukrainian equivalents for:

In most parts of the world, a letter of application, particular job, unexpected difficulties, personnel department, traditional 'one-to-one' interviews, 'deep-end' interviews, may vary, hostile approach, to set objectives, the salary that goes with a job, cheap housing loans

## 3. Fill in the gaps with the words given below:

Better impression, salary, CV, atmosphere, resume, employees application forms, personal information

1) In most parts of the world, it's common to submit a typed or laserprinted
$\qquad$ (British English) or $\qquad$ ( American English).
2) Many companies expect all $\qquad$ to be entered on a standard application form.
3) Unfortunately, no two $\qquad$ are alike.
4) Some personnel departments believe that the CV and application letter give a $\qquad$ of a candidate than a form.
5) The $\qquad$ of an interview may vary from the informal to the formal.
6) Progress interviews are interviews where $\qquad$ have a chance to review the work they are doing.
7) The $\qquad$ that goes with a job may be only part of the package.

## 4. Fill in the gaps with the necessary prepositions: <br> Of, after, to, in, of, with, in, for, in, for, with, after

Progress interviews are interviews where employees have a chance to review the work they are doing and to set objectives $\qquad$ the future. Such interviews usually take place $\qquad$ a new employee has been working $\qquad$ a company $\qquad$ several months, and ___that they may take place once or twice a year.
$\qquad$ different countries, and $\qquad$ different trades and different grades,
the salary that goes $\qquad$ a job may be only part $\qquad$ the package: extra benefits like a company car or cheap housing loans, bonuses paid _ a 'thirteenth month', company pension schemes, free canteen meals, long holidays or flexible working hours may all contribute $\qquad$ the attractiveness _ a job.

## V. Speech Exercises

## 1. Make up dialogues, using questions below and your own ones

1) What applies to the process of job application and interviews in different countries?
2) What do many companies expect your personal information to be entered
3) What are panel interviews?
4) How may the atmosphere of an interview vary?
5) When do progress interviews usually take place?
6) What are extra benefits of the salary that goes with a job?

## 2. Writing

What are the ways of applications and interviews in your country? Write in short about jobs in your culture that might seem unusual to a person from another culture.

## Additional text

## 1. Read the text about CV

## CURRICULUM VITAE

The Curriculum Vitae (CV) is a summary of your personal details, achievements and experience, and should be presented - preferably on a single sheet of A4 paper - in such a way that a prospective employer can quickly and easily assess your quality and suitability. It should be typed and structured under relevant headings. You must be prepared to insert additional sections if you think they are necessary, and omit any which are not relevant to your own background and experience.

Here are some tips for preparing CVs:

- Don't include too much information. The employer must want to find out more about you
- Always address your letter to an individual if possible. You might ring the company to establish the name and position of the appropriate person.
- Present a positive image - emphasize things you have done and competences you have demonstrated.
- Include information on team or group activities, situations where you have demonstrated initiative, relevant academic, vocational or professional training.
- Exclude comments on your physical appearance, politics, religion or other possibly contentious subjects.
- Do not submit a CV which contains any errors. Make sure all spelling, punctuation and grammar is correct, and keeps a copy of the CV.
- Keep it simple and clear - one page, two pages at most.
- Avoid pronoun "I". Use action words which vividly bring your CV to life.
- Don't sign or date the CV.
- Always send an original of your CV, don't send a copy.
- Keep copies of CVs on file for future reference. Once you have a job, update your CV on a regular basis.


## Active vocabulary

CV - Curriculum Vitae
achievement
experience prospective employer
relevant heading omit
background

біографія
досягнення
досвід
майбутній роботодавець
доречний заголовок
пропускати, не включати
біографічні данні

## CURRICULUM VITAE

## Personal details

Name:
Address:
Telephone:
E-mail:
Age:
Date of birth:
Personal status:

## Education and qualifications

Work experience

## Languages

Interests
Other information
Referees
2. Read the job adverts below. Discuss the qualifications and experience applicants need.

Tourist Services Manager
The city of Cambridge is the home of one of Britain's oldest universities. We have a new position managing visitors' facilities. The successful applicant will have responsibility for:

- improving and updating facilities for visitors
- managing a team of 20 employees
- promoting the city, both in the UK and abroad.

Apply in writing, with CV, to:
Director of Leisure Services, City of Cambridge.

## Sunny Travel

Wants a Marketing Information Manager to work in their new offices in Munich.

Responsibilities include:

- maintaining good relationships with customers
- managing large marketing campaigns
- training staff in offices all over the world

Apply to: Sunny Travel Group, 45 Queen Victoria Street, London EC4
3. Use newspapers or the Internet to find adverts for jobs. Tell what experience and qualities you need for each one.
4. While applying for a job it is possible to write a short biography called Resume. The world resume is a French word, now used in English that means summary. Select a job that you are qualified for and would like to have. Write a Resume for it according to the following sample.

## RESUME

Name
Address
Telephone
Objective:
Education and qualifications:
Experience:
Personal:

## Interests:

References: Available upon request

## Read your group-mate's resume and evaluate in accordance with the following questions given below

1. Is it attractive to the eye in terms of printing, organization of information and neatness?
2. Is it easy to read?
3. Is it free from errors in spelling, punctuation, grammar, typing, and spacing?
4. Is the job objective clear?
5. Does the experience match the job being requested?
6. Are there gaps in employment?
7. Is there any irrelevant information (i.e., information that is not related to the job requested)?
8. Is all the necessary information about education (dates and degrees), employment history (names, locations, dates), and references presented?

## UNIT 10

## I. Lead - in questions

1. What is Great Britain famous for?
2. Where is it situated?
3. What ocean is the UK washed by?
4. What is the official name of Great Britain?
5. What is the biggest isle of the British Isles?

## II. Reading

## Read the following text.

## THE UNITED KINGDOM

The United Kingdom of Great Britain and Northern Ireland is situated on the British Isles. The British Isles consist of two large islands, Great Britain and Ireland, and more than 5,000 smaller islands. The UK consists of four parts: England, Wales, Scotland and Northern Ireland. The total area of the United Kingdom is about $244,820 \mathrm{sq} \mathrm{km}$. The population of the country is over 61 million. About $80 \%$ of the population is urban.

Great Britain lies not far from the continent. It is separated from the European continent by the North Sea and the English Channel. The western coast of Great Britain is washed by the Atlantic Ocean and the Irish Sea. The Atlantic Ocean and the warm waters of the Gulf Stream influence the climate of Great Britain. The southwestern winds carry the warmth and moisture into Britain. The climate in Britain is usually described as cool, temperate and humid. The strong frosts are very rare. The British never know what the weather will be like the next day. They joke: "Other countries have a climate; in England we have weather ".The most unpleasant aspect of British weather is fogs.

The surface of Great Britain varies greatly. The northern and western part of the country is mountains and is called the Highlands. The Highlands of Scotland are the highest mountains in the British Isles. The highest peak in the Highlands is Ben Nevis ( $1,343 \mathrm{~m}$.) The rest territory (south, east and centre) is a vast plain which is called the Lowlands.

British rivers are not very long but they are deep. Big ships can enter ports at some distance from the coast. In the south of England the Thames (336 km .) is navigable for big ships. Other important rivers are the Severn, the Trent and the Clyde. Lakes are found in the Lake District in England and in the Highlands of Scotland.

Great Britain is a highly developed industrial country. It is known as one of the world's largest producers and exporters of iron and steel products, machinery and electronics, chemicals and textile, aircraft and navigation equipment. One of the chief industries of the country is shipbuilding.

The capital of the UK is London which is situated on both banks of the River Thames. London dominates the life of Britain. It is the main port of the country and
the most important commercial, manufacturing and cultural centre. London is one of the world's leading tourism destinations, and the city is home to an array of famous tourist attractions. The biggest cities of Great Britain are Birmingham, Leeds, Glasgow, Sheffield, Bradford, Edinburgh, Liverpool, Manchester. Great Britain is a country with old cultural traditions and customs. The most famous educational centers are Oxford and Cambridge universities. They are considered to be the intellectual centers of Europe. The education is not free, it is very expensive. The UK is a constitutional monarchy with an unwritten constitution. The Queen is officially head of all the branches of government, but she has little direct power in the country. Parliament has two parts: the House of Commons and the House of Lords. Members of the House of Commons are elected by the voters of 650 constituencies. They are known as Members of Parliament. Members of the House of Lords are not elected. About 70 per cent of them are "hereditary peers" because their fathers were peers before them. The 30 per cent are officially appointed by the Queen, on the advice of the Government, for various services for people. The Prime Minister, or leader of the Government, is usually the leader of the political party. There are three main political parties in Great Britain: the Labour party, the Conservative and the Liberal parties. The Conservative party is the ruling party nowadays.

Essential vocabulary

| moisture | волога |
| :--- | :--- |
| temperate | помірний |
| plain | рівнина |
| textile | текстиль |
| urban | міський |
| customs | звичаї |
| navigation equipment | навігаційне обладнання |
| to dominate | впливати |
| destination | місце призначення |
| constituency | виборчий округ |
| peer | лорд |
| to execute | виконувати |

## III. Reading comprehension

## Answer the following questions:

1. What isles do the British Isles consist of?
2. What parts does the UK include?
3. What factors influence the climate of the country?
4. What can you say about the Highlands and the Lowlands?
5. Where can you find lakes in Britain?
6. What are the main peculiarities of rivers in Great Britain?
7. What is London famous for? What river is London situated on?
8. What is the political system of the UK?

## IV . Vocabulary and Grammar exercises

## 1. Give English equivalents to the following words:

Великі острови, міський, західне узбережжя, впливати на клімат, нести тепло та вологу, помірний та вологий, судноплавний, широка рівнина, високорозвинена країна, устаткування, виробник та експортер, інтелектуальні центри, неписана конституція, тлумачити закони, спадкові пери (лорди), призначений Королевою.

## 2. Give Ukrainian equivalents for:

The European continent, the total area, south-western winds, influence the climate, warmth and moisture, lies not far from the continent, varies greatly, the highest peak, navigable for big ships, cultural traditions and customs, famous tourist attractions, the branches of government, officially appointed by the Queen.

## 3. Fill in the gaps, using the correct forms of the verbs:

To have, to consist, to enter, to cover, to divide, to discover, to build

1. The British Isles .....of two large islands: Great Britain and Ireland.
2. Great Britain can ..... into two parts: the Highlands and the Lowlands.
3. Big ships can .....ports at some distance from the coast.
4. At one time oak forests ..... the greater part of Lowland Britain.
5. Natural gas and oil ..... in the British sector of the North Sea.
6. London ..... on two low hills of the Thames.
7. Britain....... Mild winters, not very hot summers and a lot of rain all the year round.

## 4. Match the endings of the sentences.

| 1.The population of the country is | a) influence the climate of Great Britain. |
| :--- | :--- |
| 2.The Atlantic Ocean and the warm <br> waters of the Gulf Stream | b) by the North Sea and the English <br> Channel. |
| 3.The climate in Britain is usually <br> described | c) are Oxford and Cambridge <br> universities. |
| 4. Britain is separated from the European <br> continent | d) as cool, temperate and humid. |
| 5.The most famous educational centers | e) usually the leader of the political party. |
| 6. The Prime Minister, or leader of the <br> Government, is | f) the Labour party, the Conservative <br> and the Liberal parties. |
| 7.The main political parties in Great <br> Britain are | g) over 61 million |

## V. Speech Exercises

1. Make up the dialogues, using the questions below and your own ones.
2. What is geographical position of the UK?
3. What are the most developed branches of industry in Britain?
4. What political parties of the UK do you know?
5. Writing What famous people of Great Britain do you know? What is their contribution into the life of the country?

## Additional text

## 1. Read the text

## LONDON, THE CAPITAL OF GREAT BRITAIN

London is the capital of the United Kingdom. It is one of the largest cities in the world. More than 8 million people live in Greater London.

London was first built on two low hills on the banks of the Thames. After the Romans left Britain in the 5th century, London became an important place. It was a great trading centre. In the 11th century William the Conqueror made London his capital. The Great Fire of London in 1666 destroyed many wooden houses and dirty streets. Gradually London began to grow. The villages around it grew. They became towns. The towns grew into a large area of houses, shops and factories which now form Greater London.

The oldest part of London is the City. It is the business centre of London. During the day it is full of people, but at the end of the day the people go home and the City becomes silent and almost empty.

By the Thames is the Tower of London, one of the oldest and most famous buildings in Britain. It used to be a royal palace, a fortress and a prison. Now it is open for visitors. It is an old tradition to keep ravens in the Tower. Charles II said in 1631 that if the ravens ever left the Tower, it would mean the end of England. A special guard is kept to give them food and look after them.

The houses of Parliament are in the part of London called the City of Westminster. They stand on the north side of the Thames. Here you can listen to the chimes of Big Ben, one of the biggest bells in the world. If you stand beside the House of Parliament you can look down the street called Whitehall. Here are the main government offices. Near Whitehall is a narrow street called Downing Street. The Prime Minister lives at No 10 Downing Street. The Queen lives in Buckingham Palace, but there are other royal palaces in London too. The architecture of London streets is a mixture of old and new. The buildings are of different height and styles. On the roofs you will see a lot of chimney pots. The view of the great historic buildings is the most beautiful if it is seen from a bridge. There are fifteen bridges over the River Thames.

London has more theatres and concert halls, more picture galleries and museums, than any other city in Britain. The British Museum, for instance, has a wonderful art collection. It is also one of the most famous and important libraries in
the world. The National Gallery in London is home to one of the greatest collections of western European painting in the world. More than 2300 paintings embrace the years between 1250 and 1900. The National Gallery was born in 1824 when the House of Commons bought a collection of 38 paintings. As the collection grew through donations and purchases, the need for a permanent and larger gallery was answered in 1831 with a building in Trafalgar Square.

London is also Britain's largest port, a national and international, commercial and financial centre and a major industrial area. London does not look like an industrial city. Industry has moved out of London, especially during the last twenty years. Factories are scattered in the older city districts, where they are often surrounded by streets of small houses. Factories built 40 or 50 years ago are about 16 kilometers from the centre of the city.

Active vocabulary

| fortress | фортеця |
| :--- | :--- |
| silent | мовчазний |
| raven | ворон |
| chimes | дзвони, куранти |
| chimney | димар |
| embrace | пропити, обійняти |
| acquisitions | непорушний |
| static | дарунок, пожертвування |
| donations | постійний |
| permanent |  |

## 2. Decide if the following statements are true or false:

1. William the Conqueror built London and made it his capital in the $10^{\text {th }}$ century.
2. The City is the business centre of London, built in the new part of London. Many people live there.
3. The Tower of London is a historic castle on the north bank of the River Thames in central London. It used to be a picture gallery.
4. The Queen lives at No 10 Downing Street.
5. The architecture of London presents s a mixture of old and new.

## 3. Match the endings of the sentences.

| 1) | More than 8 mil. people | a) the City. |
| :--- | :--- | :--- |
| 2) In the 11th century | on m buckingnam Parace. |  |
| 3) In 1666 | c)live in Greater London. |  |
| 4) | The oldest part of London is | d) William the Conqueror made London <br> his capital. |
| 5) | Charles II said in 1631 that if | e) if you stand beside the Houses of <br> Parliament. |
| 6)You can look down the street <br> called Whitehall | f) has a wonderful art collection |  |
| 7) | The Queen lives | g) the Great Fire destroyed many <br> wooden houses. |
| 8) | The Prime Minister lives | h)houses the works by almost all the <br> greatest European painters |
| 9) | The British Museum | i)the ravens ever left the Tower, it <br> would mean the end of England |
| 10) The National Gallery | 1)) at No 10 Downing street. |  |
| 11) The Tate Gallery has two |  |  |
| sections: |  |  |
| foreign schools |  |  |

## 4. Fill in prepositions:

Scotland Yard is the headquarters ... the Metropolitan Police ... London. ...most people, its name immediately brings ... mind the picture ... a detective - cool, collected, efficient, ready to track down any criminal.

Scotland Yard is situated ... the Thames Embankment close ... the Houses ... Parliament and the familiar clock tower ... Big Ben. The name "Scotland Yard" originates ... the plot ... land adjoining Whitehall Palace where, ... about the 14th century, the royalty and nobility ... Scotland stayed when visiting the English Court. The popular nickname ... the London policeman "bobby" is a tribute ... Sir Robert Peel, who introduced the police force ... 1829, and whose Christian name attached itself... members ... the force.

## 5. Speak on the given topics:

1. London dominates British life. 2. The City. 3. The Tower. 4. The district of Westminster. 5. The British Parliament. 6. Whitehall. 7. Trafalgar Square. 8. St. Paul's Cathedral. 9. London museums. 10. Scotland Yard.

## PART II <br> Unit 1

## Text 1

## MY FUTURE SPECIALITY. Biotechnology.

As for my future speciality I will be a pharmacologist. I have chosen this noble profession because I want to be useful to people by making them healthy. That is why I am a first year student of the faculty of biotechnology at the National University of Food Technologies. Our faculty trains engineers biotechnologists for working at different enterprises of food industry and pharmaceutical plants.

Biotechnology is known to be the science devoted to developing and improving those industrial and agricultural processes that make use of biological systems. The field of biotechnology includes areas as diverse as food processing, waste disposal, and mining. It involves the selective breeding of plants, animals and microorganisms. Its task is obtaining microorganisms and products of their life activity. Biotechnological methods involve the transfer of specific genes from one species to another. Biotechnology uses methods of chemistry and molecular biology. Biotechnologists have made a great contribution to food production and medicine.

We, future biotechnologists, specialize in pharmacy. The education of a biotechnologist extends over a wide range of knowledge from pure sciences to technology.
During junior years we study basic subjects, such as mathematics, physics, many chemistries: organic, nonorganic, physical, analytical, molecular chemistry; humanities. Much attention is devoted to the study of different technological processes of foodstuffs production.
During senior years we study subjects closely connected with our future speciality: biochemistry, pharmacy, genetic engineering, food technology. The final year is devoted to practical training and to the work at the graduation thesis which is submitted to the State Examining Board.

Our University carries out research on microorganisms - bacteria and fungi used in food production. The scientists are investigating microorganisms for utilization in various food processes, such as brewing, wine making, cheese making, bread-baking, milk fermentation. The University laboratories are equipped with all necessary equipment: glassware, measuring instruments, fermentation tanks, refrigerators. The students learn to use chemical glassware: test tubes, flasks, chemical glasses. They learn how to prepare
cultural media and grow and select bacteria. The chair of biotechnology delivers lectures, arranges seminars and colloquies on the problems of biotechnology for the students.
Having defended my diploma I'll be a pharmacologist and will be able to work at an enterprise of food industry or a pharmaceutical plant; also at a laboratory of a research institute. Graduates from our faculty may hold a post of a pharmacologist, the chief of the laboratory, the chief engineer.

A pharmacologist at a pharmaceutical plant controls the whole technological process of producing medicines: pills, powders, mixtures, tinctures, sprays, ointments etc., watches the correct fulfillment of all production operations, and eliminates deviations from the fixed regime. The chief of the laboratory controls the quality of raw materials and the quality of ready products. The chief engineer is responsible for the technological progress. It is under his direction that the reconstruction of the plant, mechanization and automation of the production processes are carried on.

Pharmacology is a traditional industry in our country. There are many pharmaceutical plants in Ukraine, a lot of them are modern. The successful Work of a pharmacologist requires constant perfection and advance in knowledge acquired at the University. Only under this condition his work will be interesting and fruitful.

I like my future speciality because it is useful for me and society.
Active Vocabulary

| processing переробка <br> waste disposal використання | flask колба cultural media | культурне |
| :---: | :---: | :---: |
| відходів | середовище |  |
| breeding вирощування | pill пігулка |  |
| obtain отримувати | powder порошок |  |
| transfer перенос | tincture трав'яний настій |  |
| species вид | ointment мазь |  |
| contribution внесок | eliminate deviations | видалят |
| fungi грибки | відхилення |  |
| investigate досліджувати | perfection and | advanc |
| glassware скляний посуд | вдосконалення та прогрес |  |
| tank цистерна | acquire набувати |  |

test tube пробирка

## Task 1

## Answer the questions to the text

1. What is your future speciality? Do you like it? Is it your cup of tea?
2. Why did you make up your mind to choose this profession? Did you ask your parents' advice what profession to choose? Did your parents insist on their choice? Have your parents managed to choose the right profession for you?
3 . Where are you going to work?
3. Is it easy to find employment with your speciality? What can help you to find job easier?
4. Do you think you'll have a well-paid job? What monthly salary could satisfy you? Is money a crucial point in your choice of the future speciality?
5. What must you do to be equal to your job? Can a person be a good specialist without broad experience in life? What can a person do to get such an experience? What steps are you taking to prepare yourself for the future work?
6. What has English got to do with your future speciality?
7. What are the main difficulties in your future speciality?
8. What professional characteristics are required for your future job?
9. What personal characteristics are necessary for your future speciality?

## Task 2

Fill in the gaps using the words in the box
improve, processing, breeding, activity, species, contribution, uses, applications, inheritance

Biotechnology is known to be the science devoted to developing and $\qquad$ those industrial and agricultural processes that make use of biological systems. The field of biotechnology includes areas as diverse as food $\qquad$ , waste disposal, and mining. It involves the selective of plants, animals and microorganisms. It's task is obtaining microorganisms and products of their life $\qquad$ . Biotecnological methods involve the transfer of specific genes from one $\qquad$ to another. Biotechnology $\qquad$ methods of chemistry and molecular biology. Biotechnologists have made a great $\qquad$ to food production and medicine. In medicine modern biotechnology finds promising $\qquad$ in such areas as pharmagenomics, drug production, genetic testing, and gene therapy. Pharmagenomics is the study of the effect of the genetic $\qquad$ on the body's response to drugs.

## Text 2 <br> MODERN INDUSTRIAL PHARMACOLOGY

Modern industrial pharmacology is known to be based on microbiology and genetics. Industrial microbiology uses microorganisms grown on a large scale, to produce valuable commercial products or to carry out important chemical transformations using metabolic reactions. On the other hand, in industrial biotechnology methods of genetic engineering for gene manipulation are used to yield new microbial products, most of which are naturally produced by microorganisms or to cause a permanent hereditary change in the organism.

The major organisms used in industrial microbiology are fungi (yeasts and molds) and certain procariotes, in particular, members of the genus Streptornyces. The strains are generally altered by mutation or recombination to increase the yield.

There are two techniques: in vivo genetic engineering in which the changes in genetic constitution are brought about in cells by processes analogous to those occurring in nature; and in vitro recombinant-DNA techniques in which foreign genes from entirely different sources can be ligated with stably replicating plasmid (or phage) DNA and introduced within the cells.

The in vitro recombinant-DNA technique may involve production of entirely new substances (eg, substances of animal origin) in microorganisms and, therefore, may involve both qualitative and quantitative changes.

In vivo genetic engineering may involve simple mutational alteration of transfer of the genetic material leading to an enhanced yield of the product or an improvement in the quality of the product. Such techniques have led to the isolation of mutant Actinomyces or bacterial strains capable of producing antibiotics (qv), vitamins (qv), or amino acids (qv) in high yield. Another widely used technique employs plasmid transfer between different bacterial species or genera. One approach to isolating a functional eukaryotic gene is to clone it through its mature mRNA.

Biotechnology is also commonly associated with landmark breakthroughs in new medical therapies to treat virus hepatitis B, virus hepatitis C., cancer, arthritis, haemophilia, bone fractures, multiple sclerosis, and cardiovascular disorders. The biotechnology industry has also been instrumental in developing molecular diagnostic devices than can be used to define the target patient population for a given biopharmaceutical. Herceptin, for example, was the first drug approved for use with a matching diagnostic test and is used to treat breast cancer in women whose cancer cells express the protein HER2.

Modern biotechnology can be used to manufacture existing medicines relatively easily and cheaply. Modern pharmacology is often associated with the use of genetically altered microorganisms such as Escherichia coli or yeast for the
production of of substances like synthetic insulin or antibiotics. It can also refer to transgenic animals or transgenic plants, such as Bt corn. Genetically altered mammalian cells, such as Chinese Hamster Ovary (CHO) cells, are also used to manufacture certain pharmaceuticals. Another promising new biotechnology application is the development of plant-made pharmaceuticals.

Modern biotechnology finds promising applications in such areas as pharmacogenomics, drug production, genetic testing, and gene therapy.

Pharmacogenomics is the study of how the genetic inheritance of an individual affects his/her body's response to drugs. It is a coined word derived from the words "pharmacology" and "genomics". It is hence the study of the relationship between Pharmacy and Genetics. The vision of pharmacogenomics is to be able to design and produce drugs that are adapted to each person's genetic makeups. Pharmacogenomics results in the following benefits:

1. Development of effective and safer tailor-made medicines - drugs based on the proteins, enzymes and RNA molecules that are associated with specific genes and diseases. These tailor-made drugs promise not only to maximize therapeutic effects but also to decrease damage to nearby healthy cells.
2. More accurate methods of determining appropriate drug dosages.
3. Improvements in the drug discovery and approval process.
4. Safer vaccines can be designed and produced by organisms transformed by means of genetic engineering.

Nanotechnology was developed by the Chinese scientists to raise the qualities of a variety of products. Nanotechnologies involve the study and use of materials (nanomaterials) at nanoscale (sizes of 100 nm or less) dimensions, exploiting the fact that some materials at these ultra small scales have different physiochemical properties from the same materials at a larger scale. Nanomaterials are produced using two building strategies, either a "top down" or a "bottom up" approach. With the former approach, nanomaterials are created by breaking up bulk materials using such means as milling, whereas with the latter approach the nanomaterials are built from individual atoms or molecules that have the capacity to self-assemble. Most of the current applications of nanotechnology are in the areas of electronics, medicine, pharmacy and materials science. Nanotechnology also offers exciting possibilities for detecting chemical, biological radiological and explosive (CBRE) agents, and for protecting lives from and neutralizing CBRE agents.

## Active Vocabulary

inheritance спадковість
hereditary наслідуваний
yeast дріжджі
mold пліснява
genus рід
strain штам
substance речовина
enhance yield прискорити
improvement поліпшення
amino acid амінокислота
mature m (messenger) RNA зріла м (матрична, інформаційна) РНК
target patient цільовий пацієнт
approved for use дозволений для вживання
manufacture виробляти
application застосування
tailor-made зроблений на замовлення, спеціально приготований, фабричний
damage шкода
dimensions розміри
bulk materials обєємний матеріал
mil молоти
protect захищати

## Task 1

## Match a word with its definition

Biotechnology unit of genetic information.
Genetically modified organism (GMO) the study of effect of the genetic inheritance on the body's response to drugs.
Genetic engineering the use of in vitro techniques in the isolation, manipulation, re combination, and expression of DNA, and in the development of genetically modified organisms.
Cloning a DNA molecule that, on being replicated in a cell, brings about the replication of other genes inserted into the DNA molecule.
Gene use of genetically engineered organisms to carry out defined chemical processes for industrial application.
In vitro placing organisms under conditions where the growth of those with a particular genotype will be favored.
In vivo the study of effect of the genetic inheritance on the body's response to drugs.
Messenger RNA (mRNA) an organism whose genome carries a mutation.
Mutant in nature.
Mutation an organism whose genome has been altered using genetic engineering.
Selection a heritable change in the base sequence of the nucleic acid in the genome of an organism.

Pharmacogenomics isolation and incorporation of a fragment of DNA into a vector: it can be replicated

## Task 2

Find the words in the text to make up word combinations with the derivatives

1. Biotechnology - biotechnologist - biotechnological - biotechnologically.
2. Chemical - chemist - chemical - chemically.
3. Pharmacy - pharmaceutical - pharmacologist - pharmacological pharmacologically - pharmacology.

## MY FUTURE SPECIALITY. Power Egineering, Electrical Engineering

I am a second-year student of the National University for Food Technologies. I study at the department of Power Engineering and Energy Management. My future speciality is power engineering. The course of training of energetics engineers takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: thermo-dynamics, electrical engineering, theoretical mechanics, heat-transfer, power equipment, fluid mechanics, technology of metals, theory of machines and mechanisms, boilers, ovens, turbines, electronics, computers, etc.

Future specialist in power engineering should know well how to provide production with energy, steam and how to use energy-saving technologies. They are responsible for incessant work of power equipment, for power supply system, heat and mass transfer processes at food industry enterprises. A contemporary specialist in power engineering should also have a good command of a foreign language to use information in foreign languages from special sources for his future career, to discuss professional problems with his colleagues from foreign countries, etc.

On graduating from the university we'll be able to work at a heating boiler house, an evaporating or refining unit, a power station, any enterprise of food industry or a research laboratory.

I like my future qualification because it's very interesting, useful for the national economy development of our country. I think the usage of alternative kinds of energy and fuels in production and transport, introduction of power-saving technologies, new environmental protection approaches, etc. - all these problems are certain to be very topical and prospective for the development of up-to-date energetics.

## Active Vocabulary

future speciality - майбутня спеціальність
power engineering and energy management department - факультет енергетики та енергоменеджменту
energetics - енергетика
theoretical mechanics - теоретична механіка
heat - тепло, обогрівати, нагрівати provide smth with... - забезпечувати
energy-saving technology - технологія енергозбереження
power supply - енергопостачання
have a good command of a foreign
language - добре володіти іноземною мовою
special sources - спеціальні (професійні) джерела
on graduating from the university після закінчення університету refining unit - цукроочищувальний блок
research laboratory - науково-дослідна лабораторія
alternative kinds of energy альтернативні види енергії
topical - актуальний
prospective - перспективний

## Task 1

## Answer the questions to the text

1. What is the name of your department?
2. Which specialists does it train?
3. Which qualification will the students of this department get after graduating from the University?
4. Which special disciplines do senior-year students learn at this department?
5. Which knowledge and skills must a future specialist in energetics possess?
6. Why must a contemporary engineer have a good command of a foreign language?
7. Where can future specialists in power engineering work?
8. Do you consider your future qualification interesting, creative, topical? Why?
9. What do you know about alternative kinds of energy?
10.How would you give the reasons for a choice of your future speciality to your friend from other university?(Make up a short story).

## Task 2

## Fill in the gaps using the words in the box

Power equipment; trains; energetics; specializing; supply; career; responsible; alternative; resources; save.

The National university for Food Technologies 1 $\qquad$ students 2 $\qquad$ in power engineering. Future specialists in 3 $\qquad$ must know how to use in practice theoretical knowledge in thermodynamics, theoretical mechanics, 4 $\qquad$ and a lot of other special disciplines. They are 5 $\qquad$ for proper work of power equipment, power 6 ___ system, heart and mass transfer processes at food industry enterprises. A working knowledge of a foreign language helps students in their future 7 $\qquad$ . Using of 8 $\qquad$ kinds of energy in Ukraine will help to solve many economic, industrial, environmental and other problems. To keep the life on our planet people must 9 $\qquad$ natural energy 10 and use them in a proper way.

## Text 2

## BIOENERGY USE AND PRODUCTION.

Bioenergy is energy derived from plant matter - what is known as biomass. Green plants capture solar energy and store it as chemical energy. The energy is stored in the form of cell walls in the plants' stalks, stems, and leaves and as oils or starch in the seeds, fruits, or roots. Both plants and the waste materials derived from them - such as sawdust, wood wastes, and agricultural wastes - are referred to as biomass.

Biomass can be used directly as a solid fuel to produce heat. It can also be converted to other energy carriers such as liquid and gaseous fuels, as well as electrical energy. For example, biomass from distilleries in Brasil produces such an excess of electrical energy that its realization makes spirit cheaper than oil. Sugar cane alone can produce $50 \%$ energy in the cane-growing countries. Biomass utilization may economize annually 6 mln tones of organic fuel. Bioenergy encompasses a variety of renewable energy technologies that are locally available and used the world over. Wood and dung have been burned for thousands of years in fireplaces and stoves for heating and cooking. In several industrialized countries some cities burn trash to generate electricity.

Industries around the globe burn wood wastes - bark and branches - to generate heat and electricity for running mills. Charcoal provides the energy for steelmaking in Brazil. In that particular country 50 percent of the transportation fuel is ethanol derived from the fermentation and distillation of sugar from sugar cane. Biogas digesters use bacteria to decompose (break down) biomass. These devices are widely used in China and India to convert animal and plant wastes into the gas methane, which can be used for heating, cooking, and electricity. Biomass used in these and other ways currently accounts for about 38 percent of the energy used in developing countries. Bioenergy contributes substantially to meeting global energy requirements.

For example, today an increasing use of biomass to produce electrical and thermal energy is observed. Turbogenerators working on the biomass gasification products can successful compete with traditional thermal, nuclear, and hydraulic energy resources.

## Active Vocabulary

| bioenergy - біологічна енергія | енергія |
| :---: | :---: |
| (біоенергія) | waste materials - відходи 3 різних |
| derive from - походити від, | матеріалів |
| отримувати 3... | solid, liquid, gaseous fuel - тверде, |
| plant matter - рослинна речовина | рідке, газоподібне паливо |
| biomass - біомаса | distillery - перегоновий завод |
| solar energy - сонячна енергія | sugar cane - цукрова тростина |
| chemical energy - хімічна енергія | economize - зберігати, економити |
| electricity - електроенергія | generate - утворювати |
| thermal (power) energy - теплова | heat - тепло, нагрівати |
| енергія | meet requirements - задовольняти |
| nuclear energy - атомна (ядерна) | потреби |
| енергія | compete - змагатись |

hydraulic energy - гідроенергія
mechanical energy - механічна

## Task 1 Match a word with its definition

1. bioenergy
2. nuclear energy
3. biomass
4. fossil fuel
5. solar energy
6. generate
7. convert into
8. waste material
9. plant matter
10. create
11. energy derived from the sun
12. energy derived from the biomass
13. energy derived from atoms'interaction
14. what is left of smth after the valuable parts of it have been used
15. change from one state, use, system, etc., to another
16. a fuel such as coal or oil, made
from decayed material from
prehistoric animals or plants

## Task 2

Each of these words is used with energy. Separate them into words which go before and words which come after energy.

| change | conversion | mechanical | solar |
| :--- | :--- | :--- | :--- |
| chemical | electrical | nuclear | crisis |
| conservation | heat | potential | resources |

## Unit 3

## Text 1

## MY FUTURE SPECIALITY. Technology of Bread, Confectionary, Macaroni and Food Concentrates

The professions of baker and confectioner have always been essential for mankind. They fall under the category of 'food processing occupations.' Bakery and confectionery as a career is both an art and science. Individuals in these professions are responsible for processing raw food products into finished goods that are sold
either through wholesalers, in food services establishments, or at point-of-sale to a customer in a grocery store, for example.
Bakers produce varying quantities of bread, pastries, and other baked goods for sale in establishments such as bakeries, grocery stores, and manufacturers' outlets.
Confectioners are people who manufacture confectionery items such as sweets, biscuits, bread, toffees, chocolates, chocolate cakes etc.
In small bakeries or specialty shops, bakers and confectioners bake small quantities of breads, pastries, cookies, and pies for consumers. They may also take orders and create specialty items, such as wedding and birthday cakes, for customers. They may feature foods that appeal to particular regions or that emphasize a baker's specialty. Creativity is required, because bakers create new variations of products and decorate specialty goods like wedding cakes in accordance with a customer's request.
In large-scale manufacturing operations, bakers and confectioners produce goods in large quantities using industrial equipment, such as mixers and ovens. The items are then sold through distributors, grocery stores, or manufacturers' outlets.
Bakers and confectioners typically perform the following tasks:

- check baking production schedules on a daily basis;
- weigh, measure, and mix ingredients (following recipes) to make dough, batter, fillings, and icings;
- work with large mixing/blending machine bowls to combine products;
- knead, roll, interweave, twist, cut, and form prepared dough into various shapes for cookies, tarts, pie crusts, etc.;
- pare, cut, and prepare fruits for pastry or pie fillings;
- determine and use a wide variety of sheets, pans, and moulds;
- $\quad$ set oven temperatures and baking times, and monitor products while they bake;
- prepare and apply icings, glazes, and a wide variety of toppings to finished baked products;
- decorate fancy pastries and special cakes;
- check equipment to conform to safety and health rules and regulations.

Bakers do not need an advanced education. They often start as apprentices or trainees, and learn through on-the-job training or take high school or community college courses in the culinary arts before they get a job in a specialty or industrial bakery.
Bakers must also learn about nutrition, government health and sanitation regulations, operating and maintaining machinery, and production processes. If they aspire to own their own bakery, knowledge of business and accounting is necessary.
When asked what qualities and good baker and confectioner should have, Joseph Gomes, Senior Lecturer of the National Institute of Hotel Management in Kolkata, answers, 'Proper knowledge of ingredients, costing, proper methods of preparing products and pricing is essential. One should at least know that mozzarella and not cheese should be used to make pizza. One should also take care not to waste ingredients.' Chef Barbara Truskaller, former pastry chef at the Grand Hyatt of Mumbai, advises, 'A good baker and confectioner should be well-acquainted with the products that he/she is using, the reaction when he/she mixes products and correct presentation.'

Prospective bakers and confectioners should apply directly to specialty bakeries to become an apprentice, or apply to supermarkets to become a bakery trainee. High school training in the culinary arts is an advantage, as is knowledge of baking processes, equipment, and ingredients.

## Active Vocabulary

Confectioner [kən'fek $\int($ (ә)nə] - кондитер
occupation [,vkjo'pe I $\int($ ә)n] - заняття; рід занять, професія, фах
wholesale ['həulse Il] - оптова торгівля
mankind [mæn'ka Ind] - людство
toffee ['tpf I] - іриска
biscuit ['b Isk it] - бісквіт
large-scale [,la:d弓'skeIl] - великомасштабний
schedule ['Sedju:1] - графік; план; програма
measure ['me弓ə] - міряти, вимірювати
weigh [weI] - зважувати
knead [ni:d] - замішувати, місити тісто
interweave [,Inta'wi:v] - тісно сплітати, переплітати
dough [dəu] - тісто
batter ['bжtə] - збите тісто
mould [məuld] - форма для випікання
icing ['aIsIn] - цукрова глазур
glaze [gleiz] - глазур, полива; глянс
culinary ['kлlın(ә)rI] - кулінарний; кухонний
nutrition [nju:'tri $\left.\int(ə) \mathrm{n}\right]$ - годування; харчування; живлення
sanitation [,sænI'teI $\left.\int(\partial) \mathrm{n}\right]$ - поліпшення санітарних умов
aspire [әs'раІә] - прагнути, домагатися
costing [knstIn] - розрахунок собівартості продукції
trainee [treI'ni:] - стажер; практикант; той, що проходить підготовку

## Task 1

Complete the exercise with the correct prepositions

## McDonald's

1. The first McDonald's restaurant was opened $\qquad$ Dick and Mac McDonald
$\qquad$ the 15th $\qquad$ May 1940.
2. The best selling products $\qquad$ their restaurant were hamburgers.
3. So the McDonald brothers thought $\qquad$ a way to produce hamburgers more quickly.
4. This was introduced $\qquad$ 1948 and became known $\qquad$ the Speedee Service System.
5. The first franchised McDonald's restaurant was opened $\qquad$ 1953, and today you can find McDonald's restaurants $\qquad$ more than 100 countries.
6. The meats $\qquad$ the burgers vary $\qquad$ the culture $\qquad$ the country.
7. Franchisees and future managers $\qquad$ McDonald's restaurants are trained Hamburger University, which is located $\qquad$ Oak Brook, a suburb $\qquad$
Chicago.
8. McDonalds is also known $\qquad$ its sponsorship $\qquad$ various international sport events.

## Task 2

## Match words with their meanings

1 confectioner a the selling of goods in large quantities to be retailed by others
2 wholesale b a small baked unleavened cake, typically crisp, flat, and sweet
3 mankind c a thick, malleable mixture of flour and liquid, used for baking into bread or pastry
4 biscuit $d$ the process of providing or obtaining the food necessary for health and growth

| 5 | dough | e | a person whose trade is making or selling confectionery |
| :--- | :--- | :--- | :--- |
| 6 | icing | f | estimate the size, amount, or degree of (something) by using an |

7 nutrition $g$ a mixture of sugar with water, egg white, or butter, used as a coating for cakes or biscuits
8 culinary $\quad \mathrm{h}$ turn moistened flour into dough or paste with the hands
9 measure i used in the kitchen or in cookery
10 knead j human beings considered collectively; the human race

## Text 2

## A Brief History of Bread

Without bread all is misery. William Cobbett,
British journalist (1763-1835)
Man has been making bread for at least 8000 years, in the days when the tools to cut and grind were all made of stone. The crushed flour mixed with water and cooked on a flat stone over a fire gave bread that was very different from the sliced white loaf of today. It was hard on the teeth (as seen from human remains) and an example of bread from 4000 years ago can be found at the British Museum.

According to the legend, a young Egyptian once forgot to cook his dough and left it long enough to ferment before eventually baking what became the first leavened bread. The Egyptians were expert wheat growers and sold their excess to the Greeks, who developed bread making skills.
The Romans learnt from the Greeks and even started a college for bakers. It is said that there were 258 bakers' shops in Rome by the year 100BC. In the preserved Pompeian bakery, loaves had been stamped with the maker's initials, and there was a public oven where the populace could bake their home-made bread. When Cassius came to Britain with his conquering army, it is said that he had his bread sent all the way from Rome, rather than eat the local produce. The Romans imported the hard wheat which would not grow in the northern latitudes and brought us the rotary mill stone and watermill. As with roads, sanitation and central heating, much baking knowledge was lost when the Roman Empire collapsed.
The staple food crops of the Saxon were rye, barley, oats, millet, beans and peas. Bread made from wheat was a luxury.
When the Normans came a few centuries later, their greater use of yeast in beer and brewing revived the yeasted loaf, although local soft wheat did not rise very well. The large round flat loaves were frequently used as plates, called trenchers. A good trencherman could eat his dinner and his trencher. Was this the origin of the Scandinavian open sandwich? The cakes or loaves eaten by the agricultural population were usually made from a coarse meal of rye, sometimes mixed with barley, oats, wheat or beans.
Millers were often accused of taking more than their fair share of the flour, so bakers too, were accused of stealing dough. A case is recorded of a baker who cut a hole in his kneading board, though which his boy could steal bits of dough whilst the customer looked on in ignorance.
Honest bakers formed themselves into a guild: "the fraternity of St Clement of the mystery of bakers". This conducted spot checks for the weight, quality and price of bread. The unpleasant and humiliating penalties for selling underweight loaves led bakers to protect themselves by baking an extra 'make-weight' loaf to every dozen hence the baker's dozen. The guild also set conditions for apprentices, one of which was that they were not to be served salmon (then a cheap and common fish) more than twice weekly. The apprentices took seven years to learn the mystery which was largely concerned with the maintenance of the foaming yeast culture or barn.
English bread was generally made of mixed grains until the Victorian age. Barley and rye breads took longer to digest and were favoured by labourers, whilst the rich enjoyed expensive white wheat bread.
In the 19th century, imported wheat became plentiful and was milled in the ports for distribution by rail to the growing urban population, to the detriment of rural wind and water mills. Parliament put such heavy taxes on imported wheat that the price of bread rose to as much as $2 / 6$ a loaf when some wages were only three shillings a week. People revolted against these corn laws with the result that they were repealed in 1846.
The 20th century saw the mass production of bread, with some of the sliced white loaves of the later decades bearing little resemblance to the tasty hand-crafted
product. The turn of the 21 st century has seen the rise of the domestic bread making machine - a clean effortless way to enjoy fresh wholesome bread baked to one's own taste. It seems ironic that after so many centuries in which the wealthier citizens demonstrated their status by buying the whitest wheat bread from someone else's oven, the same sector of society now seek out mixed grain wholemeal flours to bake in their own kitchens!

## Active Vocabulary

Grind [graind] - молоти, розмелювати
dough [dəu] - тісто
leavened bread ['levn] - дріжджовий хліб
populace ['pDpjvləs] - простий народ, простолюддя
watermill ['wכ:tə,mIl] водяний млин
staple ['steIp(ә)l] - основний продукт, що виробляється в даному районі
wheat [wi:t] - пшениця
rye [raI] - жито
barley ['ba:lı] - ячмінь
oats [әut] - овес
millet ['mIlit] - просо; пшоно
brewing ['bru:Iy] - пивоваріння
yeast [ji:st] - дріжджі; закваска
trencher ['trentfə] - солдат, що риє траншеї
kneading board [ni:d] - дошка для замішування тіста
fraternity [frə't3:nItI] - братство, братерство; громада
apprentice [ə'prentIs] - учень, підмайстер
barm [ba:m] - (пивні) дріжджі; закваска
detriment ['detrImənt] - втрата, шкода
repealed [ri:'pi:ld] - проголошений (визнаний) нечинним

## Task 1

Fill in the gaps with the words in brackets; change the form of the verbs if necessary; use either Active or Passive Voice

Wheat ${ }_{1)}$ $\qquad$ (cultivate) by man since ancient times. Scientists think that early men 2)___ (gather) grain and 3)____ (store) it for later use. Wheat 4)___ (grow) in Mesopotamia and Egypt.

The first bread ${ }_{5}$ $\qquad$ (make) from grains and seeds harvested from wild plants. Later it ${ }_{6}$ $\qquad$ (discover) that the grains could be ground, the "flour" mixed with water and then dried in the sun or baked in coals.
Bread and wheat 7) $\qquad$ (be) especially important in Rome where it 8 $\qquad$ (be) more important than meat. In history, a person's economical status 9) $\qquad$ (judge) by the colour of bread they 10)___ (eat). The darker the bread, the lower the class. This ${ }_{11)}$ $\qquad$ (be) because whiter flour $\qquad$ (be) more expensive.
In the Middle Ages, bread ${ }_{13}$ $\qquad$ (be) one of the few foods that fed the poor through the dark age, but the Great Fire of London in 1666 totally 14)___ (destroy) the milling and baking industry in that capital.
Improvements in bread production ${ }_{15}$ ) $\qquad$ (come) after the 1850's Gold Rush when wood ovens from the USA improved home baking. Bread making 16 $\qquad$ (be /still $/$ do) by hand until the process 17 )___ (move) gradually towards mechanisation around 1910.
A large bakery
18) $\qquad$ (open) in Melbourne. Bread delivery $\qquad$ (make) door to door by horse and cart and later by trucks. The first wrapped bread loaves 20) $\qquad$ (appear) by the mid 1920's. Sliced and wrapped bread $\qquad$ became more popular as supermarkets became more common in the 1960's.
Today there $\qquad$ (be) a huge variety and selection of breads for us to choose from. As in the past, today, bread 23) $\qquad$ (form) the major part of a meal, which 24) (bring) family and friends together, and 25)___(help) contribute to a healthy lifestyle.

## Task 2

## Match words with their meanings



## Unit 4

## Text 1

## MY FUTURE SPECIALITY. Hotel-Restaurant Business

I am a second-year student of the National University for Food Technologies. I study at the department of Hotel-Restaurant and Tourism Business.

My future speciality is hotel and restaurant business. The course of training of hotel and restaurant manager takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: foreign-economic activity, chemistry, computer science, microbiology, foreign languages, theoretical basis of restaurant product technology, processes and devices of food manufactures, etc.

Future specialists in hotel business should know well how to run room rental businesses and how to set room rates, monitor income and expenses, and supervise other staff. A contemporary specialist in this sphere should also observe workers performance to make sure that company rules and procedures are being followed, answer questions about hotel policies and services, resolve customers' complaints, and arrange telephone answering service and mail delivery. As a rule, hotel manager should greet and register guests, inspect hotel for cleanliness, assign duties to workers and schedule shifts and hire staff.

Future specialist in restaurant business should know well how to estimate food consumption and schedule delivery of fresh food and beverages. Restaurant managers resolve customers' complaints about food quality or service, direct cleaning of kitchen and dining areas to maintain sanitation standards, monitor actions of staff and customers to ensure that health and safety standards and liquor regulations are obeyed.

A contemporary specialist in hotel and restaurant business should also have a good command of a foreign language to use information in foreign languages from special sources for his future career, to discuss professional problems with his colleagues from foreign countries, etc.

On graduating from the university we'll be able to work at any hotel or restaurant as a hotel manager or a restaurant manager.

I like my future qualification because it's very interesting, creative and challenging. We have a chance to enjoy dealing with people. We need to be calm and resourceful having this speciality. For a job like this a contemporary specialist has to be also a sociable person and to be diplomatic.

We should use our knowledge and skills for the modernization of Ukrainian hotel and restaurant business because it is one of the fastest growing branches of the state economy.

## Active Vocabulary

theoretical basis of restaurant product technology- теоретичні основи виробництва продукції ресторанного господарства monitor income and expenses - контролювати дохід та витрати resolve customers' complaints - розглядати скарги клієнтів mail delivery - доставка пошти
assign duties to workers - призначати обов'язки працівникам maintain sanitation standards - підтримувати санітарні стандарти monitor actions of staff - контролювати діяльність штату liquor regulations - правила споживання напоїв have a good command of a foreign language - добре володіти іноземною мовою resourceful - винахідливий

## Task 1

## Answer the questions to the text

1. What is the name of your department?
2. Which specialists does it train?
3. Which qualification will the students of this department get after graduating from the University?
4. Which special disciplines do senior-year students learn at this department?
5. Which knowledge and skills must a future specialist in hotel and restaurant business possess?
6. Why must a contemporary hotel and restaurant manager have a good command of a foreign language?
7. Where can future specialists in hotel and restaurant business work?
8. Do you consider your future qualification interesting, creative and challenging? Why?
9. How is hotel and restaurant business in Ukraine developing nowadays?
10.How would you give the reasons for a choice of your future speciality to your friend from other university? (Make up a short story).

## Task 2

## Fill in the gaps using the words in the box

gradually, selling, orders, particular, décor, connotation, customers, crystal, restorative, subdued

The origin of the word "restaurant" comes back to the $16{ }^{\text {th }}$ century. At that time in France a popular soup was called "restaurant" because it was supposed to have (1) $\qquad$ properties. A chef who served this (2) $\qquad$ soup had the word printed above the door of this eating house and (3) $\qquad$ the word
acquired its present (4) $\qquad$ .
Nowadays saying "restaurant" we consider a (5) $\qquad$ unit being run at a profit; all offered facilities and services lead guests to making (6) $\qquad$ and, as a result, substantial taking.

The basic elements of sound catering are good food and drinks but (7) $\qquad$ and service play an important part.

Décor (which may include (8)___ lights, soft carpets, and settees, (9) $\qquad$ chandeliers, red velvet and brocade, etc. helps to create the right atmosphere and refined surroundings for attracting (10) $\qquad$ .

## Text 2

## THE MOST BEAUTIFUL HOTEL IN THE WORLD

The Burj Al Arab is a luxury hotel in Dubai, United Arab Emirates. The name is Arabic for "Tower of the Arabs". The Burj had the top 5 architects in Europe to design it. At 321 metres, it is the tallest building used exclusively as a hotel. The Burj Al Arab stands on an artificial island 280 metres out from Jumeirah beach, and is connected to the mainland by a private curving bridge. The entrance on mainland includes an elaborate water park. The Burj is an iconic structure, designed to symbolize Dubai's urban transformation.

The Burj has become the international symbol for Dubai. As Tom Wright, the architect, stated, "The client wanted a building that would become an iconic or symbolic statement for Dubai; this is very similar to Sydney with its Opera House, or Paris with the Eiffel Tower. It needed to be a building that would become synonymous with the name of the country."

Construction of Burj Al Arab began in 1994. It was built to resemble the sail of a dhow, a type of Arabian vessel. Two "wings" spread in a V to form a vast "mast", while the space between them is enclosed in a massive atrium.

The architect and engineering consultant for the project was Atkins, the UK's largest multidisciplinary consultancy. The hotel cost $\$ 650$ million to build.

The Burj is a member of the Leading Hotels of the World. Burj Al Arab does not have rooms; it has 202 suites, each one arranged over two floors. Each suite has its own concierge and butler assigned. Ranging from a capacious 169 sq. mts to an astonishing 780 sq. mts in size, the floor to ceiling glass windows offer simply breathtaking views of the Arabian Gulf.

Rates start at $\$ 2000$ USD per night and go up to $\$ 7000+$ per night! It costs $\$ 150$ U.S. just to get in the gate to look at this place! Decorated with lavish textures and exuberant colors, each suite features a sumptuous living and dining area, state of the art entertainment system and office facilities. Their sheer opulence in every tiny detail is underpinned with technology that does everything from controlling the 42
inch Plasma screen TV to closing the curtains.
In addition to a dining and living area, each suite has an office area completed with laptop, Internet access, private fax, printer and copier. Hidden network of advanced technology - lighting, curtains and air-conditioning at the touch of a button.

Surrounded by white beaches and the blue waters of the Arabian Gulf, you can choose from a variety of activities while staying at Burj Al Arab. Relax in the superb outdoor pool or soak up the rays on the private beach for your exclusive use. Alternatively, take time out in the spacious airy gymnasium boasting of the very latest equipment and personal trainers on hand.

## Active Vocabulary

curving bridge - криволінійний міст
elaborate - вигадливий, гарно спланований
dhow - однощоглове арабське каботажне судно
vessel - корабель, судно
mast - щогла
atrium - атріум, критий дворик
multidisciplinary consultancy - багатофункціональна консалтингова компанія
suite - багатокімнатний номер в готелі
concierge - особистий консьєрж
butler assigned - призначений дворецький
lavish textures - екстравагантні тканини
exuberant colors - багаті кольори
sumptuous - розкішний
sheer opulence - абсолютне багатство
underpin - підтримувати

## Task 1

Match a word with its definition

| 1. to resemble | a. very beautiful, with a lot of <br> decoration, and made from expensive <br> materials (luxurious); |
| :--- | :--- |
| 2. suite | b. to sit outside for a long time enjoying <br> the sun |
| 3.opulence | c. to look like or be similar to someone <br> or something; |
| 4. to boast | d. very impressive, exciting, or |


|  | surprising |
| :--- | :--- |
| 5. to underpin | e. set of rooms, especially expensive <br> ones in a hotel; |
| 6. breathtaking | f. to talk too proudly about your <br> abilities, achievements, or possessions; |
| 7. elaborate | g. to give strength or support to <br> something and to help it succeed; |
| 8. to soak up the rays | h. carefully planned and organized in <br> great detail |

## Task 2

You work for the Dubai Tourist Information Centre. Five visitors (1-5) need a hotel. Which hotel ( $\mathrm{A}-\mathrm{E}$ ) is the best choice for each visitor?
(1) "I'm interested in visiting the Hajar Mountains."
(2) "I want to stay in Dubai's most luxurious hotel."
(3) "I would like to stay extremely close to the beach."
(4) "I hope to do some sport and my partner plans to do a lot of shopping!" $\qquad$
(5) "I'm here on business." $\qquad$

## Hotels in Dubai

## A The Jumeirah Beach Hotel

This is a family favourite. It is just ten minutes from the beach and is close to the Wild Wadi Waterpark (hotel guests get in for free). There are 23 places to buy food at the Jumeirah and there are over 20 shops, three tennis courts and a large gym.

## B The Al Maha Desert Resort

This is a hotel in the desert. It has air conditioning, and breathtaking views of the sand dunes and the Hajar Mountains. The beach is a 45-minute drive away. Visitors stay in one of 40 luxurious tents, each with a small pool.

## C The Ritz-Carlton Dubai

This is the place to stay if you want cleanliness and calm. Its 138 rooms all have balconies. The gardens at the front of the hotel are next to Jumeirah beach.

## D The Burj Al Arab

This is an extraordinary hotel. Every room has many luxury items, two plasma-screen televisions for example, and each bed has a mirror above it. The casino on the 27th floor has incredible views. The seafood restaurant is reached by a three-minute journey by mock submarine (in reality, a lift painted with sea creatures).

## E The Emirates Towers Hotel

This is a very tall hotel in Dubai's business district. The comfortable rooms all have a minibar, room service and air conditioning. The 305 m-high Vu bar with its black leather seats is a great place to see the city.

## Unit 5

## Text 1

## MY FUTURE SPECIALITY. Technology of Meat Storage, Preservation and Processing

A butcher is a person who may slaughter animals, dress their flesh, sell their meat or any combination of these three tasks. They may prepare standard cuts of meat, poultry, fish, and shellfish for sale in retail or wholesale food establishments. A butcher may be employed by supermarkets, grocery stores, butcher shops and fish markets or may be self-employed.

An ancient trade, whose duties may date back to the domestication of livestock, butchers formed guilds in England as far back as 1272.

Butchers primarily serve as purveyors of cuts of meat, though many have branched out into chicken and fish, too. Butchers are at the end of the production: slaughtering and meat packing are still completed at off-site facilities. Butchers cut the provided meat into steaks and chops for retail sale as well as shape and tie roasts or make ground beef. Butchers serve the customer, selecting the meat or discussing the cut the customer would like, wrapping and then weighing the meat. They are also typically responsible for the displays in the cases and the preparation of any special cuts of special orders. If a butcher is in a grocery store, they may also be responsible for operations such as inventory management, record keeping and meat ordering.

Butchery is a traditional work. In the industrialized world, slaughterhouses use butchers to slaughter the animals, performing one or a few of the steps repeatedly as specialists on a semi-automated disassembly line. The steps include stunning (rendering the animal incapacitated), exsanguinations (severing the carotid or brachial arteries to facilitate blood removal), skinning (removing the hide or pelt) or scalding and dehairing (pork), evisceration (removing the viscera) and splitting (dividing the carcass in half longitudinally).

After the carcasses are chilled (unless "hot-boned"), primary butchery consists of selecting carcasses, sides, or quarters from which primal cuts can be produced with the minimum of wastage, separate the primal cuts from the carcasses using the appropriate tools and equipment following company procedures, trim primal cuts and prepare for secondary butchery or sale, and store cut meats. Secondary butchery involves boning and trimming primal cuts in preparation for sale. Historically, primary and secondary butchery were performed in the same establishment, but the advent of methods of preservation and low cost transportation has largely separated them.

It goes without saying that any potential butcher should not be squeamish about handling and preparing raw meat, dealing with carcasses, blood, and meat products. In addition, butchers will need to possess the following skills and qualities: safetyconscious approach, good practical butchery skills and hand-eye coordination, mental arithmetic skills, excellent personal hygiene and cleanliness, customer service skills, creativity and general awareness of how to present and display meat. In the rest of the
world, where refrigeration is less common, these skills are required to sell the meat of slaughtered animals.

Butchers also often produce fresh and cooked meat products such as sausages, hams, pies, faggots, and black pudding. Despite a growing interest in quality meat and locally sourced produce, local high street butchers are in decline, facing competition from independent grocers, direct sales outlets (including farm shops, farmers markets and box schemes) and, overwhelmingly, supermarkets.

Some butchers sell their goods in specialized stores, commonly termed a butcher's shop. These shops may also sell related products, such as food preparation supplies, baked goods and grocery items. In the United States, butcher shops are becoming less common because of the increasing popularity of supermarkets. According to the Red Meat Industry Forum, only about $12 \%$ to $15 \%$ of beef, lamb, and pork is sold through traditional butchers. Remarkably, it is estimated that supermarkets account for up to $70 \%$ of total meat sales.

Today, many jurisdictions offer trade certifications for butchers. Some areas expect a three-year apprenticeship followed by the option of becoming a master butcher. This is a traditionally male-dominated industry, but you can certainly succeed as a female butcher. Recently, a shortage of butchers in France has brought about a revolution. Now, over one hundred women in the country are certified butchers.

## Active Vocabulary

Slaughter - забій (худоби)
poultry - свійська птиця retail - роздрібний продаж
wholesale - оптова торгівля
livestock - поголів'я худоби
purveyor- постачальник
wrap - загортати
weigh - зважувати
exsanguinations - знекровлення
stun - оглушати
carcasse - туша
wastage - виробничий брак
hygiene - гігієна
aware - обізнаний; що усвідомлює
refrigeration - охолоджування; заморожування
faggots - в'язка сосисок
competition - конкуренція
overwhelming - незліченний, незчисленний
lamb -м'ясо молодого барана
apprenticeship - навчання; практика

## Task 1

## Answer the questions to the text

1. What are the main duties of a butcher?
2. Where the butcher may be employed nowadays?
3. Do butchers only serve as purveyors of cuts of meat or they also deal with chicken and fish?
4. Butcher is an ancient trade, isn't it?
5. Do butchers serve the customer, selecting the meat or discussing the cut the customer would like?
6. What skills and qualities should a good butcher have?
7. What is primary and secondary butchery?
8. Do butchers produce fresh and cooked meat products such as sausages, hams, pies and others?
9. Why are butcher shops becoming less common in the United States\&
10.Do you need special professional training or apprenticeship to become a butcher?

Task 2
Fill in the gaps using the words in box

| date back | dress | disassembly line | guilds |  | coordination |
| :--- | :---: | :---: | :---: | :---: | :---: |
| traditional | wholesale | industrialized | meat | qualities |  |

A butcher is a person who may slaughter animals, 1) $\qquad$ their flesh, sell their
$\qquad$ or any combination of these three tasks. They may prepare standard cuts of meat, poultry, fish, and shellfish for sale in retail or $3_{3}$ ____ food establishments. An ancient trade, whose duties may 4 $\qquad$ to the domestication of livestock, butchers formed $\qquad$ in England as far back as 1272. Butchery is a ${ }_{6}$ ) $\qquad$ work. In the
$\qquad$ world, slaughterhouses use butchers to slaughter the animals, performing one or a few of the steps repeatedly as specialists on a semi-automated 8 ) $\qquad$ . It goes without saying that butchers will need to possess the following skills and 9) $\qquad$ : safety-conscious approach, good practical butchery skills and hand-eye ${ }_{10}$ )
$\qquad$ , mental arithmetic skills, excellent personal hygiene and cleanliness, customer service skills, creativity and general awareness of how to present and display meat. In the rest of the world, where refrigeration is less common, these skills are required to sell the meat of slaughtered animals.

## Text 2

## Meat

Meat is animal flesh that is eaten as food. Most often, this means the skeletal muscle and associated fat and other tissues, but it may also describe other edible tissues such as organs and offal. In commerce, meat is generally used by the meat packing industry in a more restrictive sense - the flesh of mammalian species (pigs, cattle, lambs, etc.) raised and prepared for human consumption, to the exclusion of fish, poultry, and other animals. Usage varies worldwide by culture, and some countries such as India have large populations that avoid the consumption of all or most kinds of meat.

The consumption of meat has various traditions and rituals associated with it in different cultures such as kosher and halal and its production is generally regulated by state authorities as well.

While meat is a common generic term meaning flesh, to chefs it refers specifically to four-legged domesticated animals. This includes mainly beef, lamb, and pork. Lamb is just now becoming popular in America, and pork is gaining in popularity as a lean meat option. But by far, the favorite meat in the United States is beef. Historically, the cow's size made it more valuable as a draft animal than a source of food. The logistics of slaughtering such a large animal were daunting. Preservation methods revolved around salting, and such methods were not very sophisticated.

Unless there was a real crowd to feed, lamb was a more popular choice. But modern Americans love cows. They no longer harness the strength of the cow, but the meat and milk, easily make it the world's most important domesticated animal.

Beef and veal are readily available in modern supermarkets, and for the most part, quality is high. The United States Department of Agriculture (USDA) grades meat for consumption based on muscle-to-bone and fat-to-muscle ratios. Beef grades, from best to worse, are prime, choice, and select. Lesser grades, used mainly for processed meat products, include standard, commercial, and utility. Grades are stamped in purple on the outer carcass of the animal, and are usually prominently advertised by retailers, especially when the grade is high.

Beef cows are taken to market at between 18 and 24 months of age. Before that time it is considered veal. Veal is a male dairy cow between 16 and 18 months of age. Veal grades, from best to worse, are prime, choice, good, standard, and utility.

Meat is generally considered a high-fat protein choice. Of course, usually fat means flavor. In today's world people appreciate, and even expect, a high level of flavor in their meat, despite full knowledge that saturated fat contributes to coronary artery disease and elevated cholesterol levels.

There are lean cuts available, but even if you cannot see the fat marbled throughout a particular cut, the saturated fat is still present within the muscle cells. When meat is heated, the fat melts and penetrates the muscle. So even if you do not eat the visible fat on a steak, you are consuming saturated fat.

This appetite for fatty beef has drastically changed the landscape of modern agriculture. Today cattle is bred and raised to provide the most meat with the least
cost. According to the USDA, the average American consumes 67 pounds of beef every year.

## Active Vocabulary

Muscle - мускул; м'яз
edible - їстівний
tissue - тканина
mammal - ссавець
cattle - велика рогата худоба
consumption - споживання
associate - асоціюватися
daunt - залякувати
salting - засолювати, консервувати
sophisticated - витончений (про смак, манери)
ratio - пропорція; коефіцієнт;
preservation - консервування
veal - телятина
utility - корисність; вигідність
saturated fat - насичені жири
flavor - аромат; запах
drastically - рішуче

## Task 1

## Match words with their meanings

1 meat a the flesh of the calf used as food
2 pork b any domesticated bovine mammals

3 veal c taste perceived in food or liquid in the mouth
4 cattle d the flesh of various bovine animals, esp. the cow, when killed for eating
5 flavor e the flesh of mammals used as food, as distinguished from that of birds and fish
6 steak f any of a class of naturally occurring soft greasy solids that are esters of glycerol and certain fatty acids
7 fat $\mathbf{g}$ the science or occupation of cultivating land and rearing crops and livestock; farming
8 agriculture $\quad \mathbf{h}$ expenditure on goods and services for final personal use 3) the quantity consumed
9 beef $\mathbf{i}$ any of various cuts of beef of varying quality, used for braising, stewing, etc
10 consumption $\mathbf{j}$ the flesh of pigs used as food

## Task 2

## Fill in the gaps with the given words to complete the text

source preservation flesh packing consumption lamb poultry countries domesticated rituals traditions popularity

Meat is animal ${ }_{1}$ ____ that is eaten as food. In commerce, meat is generally used by the meat ${ }_{2}$ ) $\qquad$ industry in a more restrictive sense - the flesh of mammalian species (pigs, cattle, lambs, etc.) raised and prepared for human ${ }_{3}$ ) $\qquad$ , to the exclusion of fish, 4) $\qquad$ , and other animals. Usage varies worldwide by culture, and some 5 $\qquad$ such as India have large populations that avoid the consumption of all or most kinds of meat.

The consumption of meat has various ${ }_{6}$ $\qquad$ and 7 $\qquad$ associated with it in different cultures. $\qquad$ is just now becoming popular in America, and pork is gaining in 9) $\qquad$ as a lean meat option. But by far, the favorite meat in the United States is beef. Historically, the cow's size made it more valuable as a draft animal than a 10 ) $\qquad$ of food. The logistics of slaughtering such a large animal were daunting. 11) $\qquad$ methods revolved around salting, and such methods were not very sophisticated.

Unless there was a real crowd to feed, lamb was a more popular choice. But modern Americans love cows. They no longer harness the strength of the cow, but the meat, milk, and hide easily make it the world's most important $\qquad$ animal.

## Unit 6

## Text 1

## MY FUTURE SPECIALITY. Technology of Fermentative Production and Winemaking

Our country needs specialists in industry, agriculture, science and other fields.
National University of Food Technologies trains specialists for various branches of food industry. I study at the department of sugar and fermentation technology. The course of studying lasts 5 years. During junior years students study basic subjects such as chemistry, strength of materials, descriptive geometry, drawing and others. During senior years students begin to pay special attention to the subjects connected with their future speciality. Having defended their diplomas, students will get the work according to their speciality.
On graduating from the university students will be engaged in brewering, for example, or deal with wine making techniques. They can control the quality of yeast which is related to successive fermentation. The aim is to ensure a vigorous fermentation which will leave just the right amount of fermentable matter in the beer at racking to provide secondary fermentation in cask. Young specialists may also deal with crushing and primary fermentation of wine, pressing, blending and fining, filtration as well as storage of wine. It should be kept in mind that the quality of grapes determines the quality of wine more than any other factor. So, harvest is the picking of grapes and in many ways the first step in wine production.
I like my speciality because it's very interesting and useful because wine is important in cuisine not just for its value as a beverage, but as a flavor agent, since its acidity lends balance to rich savory or sweet dishes. Besides, the use of wine in religious ceremonies is common to many cultures and religions. As for beer, it is also a popular beverage that accompanies and enhances a wide range of European as well as Ukrainian cuisines.

## Active Vocabulary

industry - промисловість
agriculture - сільське господарство
science - наука
branch - галузь
fermentation - бродіння
yeast - дріжжі
brewing - процес варіння пива
cask - бочка
rack - зубчаста рейка
beverage - напій
quality - якість
cuisine - кухня, страви
harvest - врожай
dish - блюдо
culture - культура
religion - релігія
production - виробництво

## Task 1

## Answer the questions to the text

1. What is the name of your department?
2. Which specialists does it train?
3. Why did you make up your mind to choose this profession?
4. Did you choose the same occupation as your parents?
5. What young specialists may be engaged in after their graduation from the university?
6. Is it easy or difficult to find a good job nowadays?
7. Can a person be a good specialist without broad experience in life?
8. What are the main difficulties in your future speciality?
9. What personal characteristics are necessary for your future speciality?

10 . What steps are you taking to prepare yourself for the future work?

## Task 2

Fill in the gaps using the words in the box
Taste; addle; properties; young; evaporation; sugar; winemaking; organic; fining.
Wines, just like people, have babyhood, childhood, adolescence and maturity. Some wines must be aged during a certain period; the others, on the contrary, are good when young. Expensive wine is aged in a cell in oak barrels, which give an additional aroma and 1 $\qquad$ . Because of 2 $\qquad$ , wine must be constantly added into the barrels in order to avoid its oxidation of contact with air. Most of white, rose and inexpensive wines of any colour must be drank when 3 $\qquad$ . Their most valuable 4 $\qquad$ are freshness and powerful odour. Young wine allows to feel fresh grape taste in full. It contains the whole complex of acids, minerals, 5 $\qquad$ and tannin. However, time is required for these components extracted from grape and fermented to merge together in an 6 $\qquad$ whole and create something called, by analogy with flowers, a bouquet. 7 $\qquad$ , which appears during aging, gradually sinks to the barrel bottom, so wine must be poured out into clean barrels four times a year. After aging wine is brightened with the help of 8 $\qquad$ . Then wine is filtered
through mechanical 9 $\qquad$ and poured out into the bottles. Quality of the end product depends on the winemaker's experience, knowledge and integrity at every stage of 10 $\qquad$ process.

## Text 2

## FERMENTATION

The essential chemical changes which take place in the world under the influence of the yeast transform it into beer by fermentation. The quality of the yeast has been developed through successive fermentations and the brewer now has to control this process by regulating the temperature and by airating as well as rousing the world. His aim is to ensure a vigorous fermentation which will leave just the right amount of fermentable matter in the beer at racking to provide proper secondary fermentation in cask. Individual conditions are peculiar to each brewery, size and shape of fermenting vessels, even the positioning of attemperators introduce variations in the fermentation, so that different breweries may have different problems although using the same system of fermentation.
Systems of fermentation may be divided into four main classes. We deal mainly with top fermentation systems. Top fermentation systems are so-called because the yeast crop which is to be gathered and used to kitchen future fermentations is collected from the yeast thrown up into the head. The system of bottom fermentation, which is used in brewing lager beer, differs considerably in many ways and various types of yeast are used.
As for wine, during the primary fermentation the yeast cells feed on sugar and multiply producing carbon dioxide gas and alcohol. The temperature during the fermentation affects both the taste of the end product as well as the speed of fermentation. For red wines the typical temperature is from 22 to $25^{\circ} \mathrm{C}$, and for white wines $-15-18^{\circ} \mathrm{C}$. For every gram of sugar that is converted, about half a gram of alcohol is produced. If the sugar content of the grapes is too low to obtain the desired alcohol percentage, sugar can be added. Alcohol of more than $12 \%$ can be achieved by using yeast that can withstand high alcohol content. Some yeast can produce $18 \%$ alcohol in wine, however extra sugar is added to produce a high alcohol content.
During or after the alcoholic fermentation, a secondary, or malolactic fermentation can also take place, during which specific strains of bacteria convert malic acid into the milder lactic acid. This fermentation is often initiated by inoculation with desired bacteria.

## Active Vocabulary

Fermentation - бродіння
Yeast - дріжжі
Barrel - бочка, баррель
Content - вміст
Temperature - температура
Lager beer - лагерне пиво
Attemperator - охолоджуючий пристрій
Brewery - пивоварний завод
Ferment - фермент
Positioning - розташування
Bacteria - бактерії
Acid - кислота
Taste - смак
Speed - швидкість
Vessel - резервуар, чан
End product - кінцевий продукт
Quality - якість
Cask - бочка
Alcohol - алкоголь
Primary - первинний
Specific - специфічний
System - система

## Task 1

Match the end of each sentence with its end

1. The temperature during the a) using yeast that can withstand high fermentation affects both ... alcohol content.
2. Alcohol of more than $12 \%$ can be b) four main classes. achieved by ...
3. Systems of fermentation can be c) the taste of the end product as well as divided into ... the speed of fermentation.
4. The system of bottom fermentation, which is used in brewing lager beer, differs considerably in many ways and ...
5. The quality of the yeast has been e) various types of yeast are used. developed ...
6. For red wine the typical temperature is f) about half a gram of alcohol is produced.

| 7. For every gram of sugar that is <br> converted $\ldots$ | $\mathrm{g})$ from 22 to $25^{\circ} \mathrm{C}$. |
| :--- | :--- |
| 8. During or after the alcoholic <br> fermentation,.. | h) $18 \%$ alcohol in wine. |
| 9. Some yeast can produce ... | i) a secondary, or malolactic fermentation <br> can also take place. |

## Task 2

Say weather these sentences true or false

1. The essential chemical changes which take place in the world under the influence of the yeast don't change it into beer by fermentation.
2. The quality of the yeast has been developed through successive fermentations.
3. Individual conditions peculiar to each brewery, even the positioning of attemperators introduce variations in the fermentation.
4. Systems of fermentation may be divided into five main classes.
5. The system of bottom fermentation, which is used in brewing lager beer, differs considerably in many ways and different types of yeast are used.
6. For every gram of sugar that is converted, about two grams of alcohol is produced.
7. A secondary fermentation is often initiated by inoculation with desired bacteria.
8. During or after the alcoholic fermentation, a primary, or malolactic fermentation can also take place.
9. As for wine, during the primary fermentation the yeast cells feed on sugar and multiply producing carbon dioxide gas and alcohol.
10. Some yeast can produce $18 \%$ alcohol in wine.

## Unit 7

## Text 1

## MY FUTURE SPECIALITY. Sugary Substances Technology

I am a second-year student of the National University of Food Technologies. I study at the department of sugar and fermentation technology. My future speciality is industrial engineering. Our department trains industrial engineers for working at different enterprises of food industry. The course of training of industrial engineers takes five years of studying. The education of an engineer extends over a wide range of knowledge from pure science to technology. During junior years students study basic subjects, such as mathematics, physics, chemistry, descriptive geometry, strength of materials, elements of machines, drawing, one of the foreign languages, humanities. Much attention is devoted to the study of different technological processes of foodstuff production. During senior years students study subjects closely connected with our future speciality. The final year is devoted to practical training and to the work at the graduation thesis which is submitted to the State Examining Board. Future industrial engineers specialize in the technology of sugar production. Having graduated from the university young specialists will be able to work at the laboratories of the sugar refinery or at the laboratories of the research institutes. Graduates may also work as a chief of the laboratory, a production foreman, a chief engineer. An industrial engineer controls the whole technological process at the plant, watches the correct fulfillment of the production process, eliminates deviations from the fixed regime. The chief of the laboratory controls the quality of raw materials and the quality of ready products. The chief engineer is responsible for the technological process which deals with mastering and reconstruction of the plant, mechanization and automation of the production processes.
I think my future speciality is useful for the development of the national economy in our country. Sugar refining is a traditional industry in Ukraine. There are many sugar refineries and a lot of them are modern. The successful work of an industrial engineer requires constant perfection and advance in knowledge acquired at the university.

## Active Vocabulary

industrial engineer - інженер-технолог
graduation thesis - дипломний проект
State Examining Board - державна екзаменаційна комісія production foreman - начальник цеху
chief of the laboratory - зав. лабораторією
chief engineer - головний інженер
fixed regime - встановлений режим
perfection and advance in knowledge - удосконалення і поглиблення знань

## Task 1

## Answer the questions to the text

1. What is the name of your department?
2. What is your future speciality?
3. How long does the course of training of industrial engineers last?
4. What subjects do the first-year students study?
5. What are the subjects during the senior years of study closely connected with?
6. What is the final year of study devoted to?
7. Where are you going to work?
8. What is an industrial engineer responsible for?

9 . What does the chief of the laboratory control?
10. What are the main duties of a chief engineer?
11. What does the successful work of an industrial engineer require?

## Task 2

Fill in the gaps using the words in the box
Carbon dioxide; cane; carbohydrates; vegetables; plants; chlorophyll; digestive; honey; invert.

The term "sugar" to most people means 1 $\qquad$ sugar. However, this is only the most common of the several sugars responsible for sweet taste of certain foods. Sugar is called by chemists 2 " $\qquad$ ". People have known ordinary sugar from ancient times. The first sugar was produced from sugar cane. There are only two kinds of sugar that we are primarily concerned with in sugar refining, namely: the white sugar that is used by us in food and drink and 3 " $\qquad$ " sugar that we find in fruits and 4 . White sugar is easily absorbed by our 5
$\qquad$ organs and it is widely distributed in vegetables, roots and stems of all grasses. White sugar will turn into invert sugar very easily but it is impossible to turn invert sugar into the white one. Invert sugar comes to us in small quantities. Only 6 $\qquad$ and trees can turn invert sugar into the white sugar. In all plants the contant of sugar is due to the 7 $\qquad$ of the leaves to the sunlight in the presence of the green coloring matter of the plant, 8 $\qquad$ , by which 9 $\qquad$
$\qquad$ from the air combines with water to form sugar.

## Text 2

## FUTURE UTILIZATION OF SUGAR CROPS

The cultivation of sugar cane has been carried out in India for a long time. The sugar cane is a gigantic grass which consists of roots, stalk and leaves. The stalk is like a bamboo and may be from eight to fifteen inches in height. Long narrow leaves grow in two rows. As the cane grows the lower leaves die and fall off. The stalk is a tube filled with soft fibers. The inner fibers contain the sugar. When the cane is ripe it produces at the top of the stalk a feathery plume of grey flowers, the "Arrow". The usual time for ripening is from nine to fourteen months. Before ripening there is a lot of invert sugar present, and if the ripe cane is left standing for long, the sucrose changes into invert. Invert sugar is known to be undesirable, so it is important for the cane to be harvested when the amount of invert sugar is as low as possible and when the sucrose content is the highest. When ripe, the canes are cut down near the ground and the green tops and leaves are cut off. Part of the cane stalk near the top is cut off at harvest time and used for planting new canes.
The sugar beet has a long tapering root with long thin rootlets which gather nourishment from the soil. Beet is grown from seed sown in spring. Some weeks after sowing the young plants are thinned out. The beets are ripe at the end of September when they contain the greatest amount of sugar. The beet crop requires more attention than a cane crop. That's why beet sugar is more costly to produce than cane sugar. The harvest must be gathered quickly before the first frosts. At harvesting time the soil round the root is loosened and the root is pulled out. The long tap root and leaves contain very little sugar.
The manufacture of beet sugar is a technological process involving principles of chemistry, physics and engineering. Actually, sugar production in Ukraine is not a new industry. It emerged at the beginning of the $19^{\text {th }}$ century. Both sugar cane and sugar beet give more food energy than other major crop. Formely such solvents as ethanol, butanol and acetone were made from sucrose or invert sugar in the form of molasses. Now these substances are made from hydrocarbons of petroleum and natural gas. Much research has already been carried out in the field of sucrochemistry but still there are great opportunities for new researches in this field.

## Active Vocabulary

cane - тростина
arrow - стріла
bamboo - бамбук
gigantic - велетенський
narrow - вузький
stalk - стовбур
fiber - волокно
root - корінь
ripening - дозрівання
content - вміст
plume - перо, султан
seed - насіння
soil - грунт
nourishment - живлення
crop - врожай
production - виробництво
research - дослідження
ethanol - етиловий спирт
butanol - бутан
hydrocarbon - вуглеводень
grass - трава
leaves - листя
amount - кількість
substance - речовина
natural gas - природний газ
opportunity - можливість
solvent - розчин

## Task 1

## Match the beginning of each sentence with its end

| 1. Both sugar cane and sugar beet give <br> more food energy... | a) principles of chemistry, physics and <br> engineering. |
| :--- | :--- |
| 2. Such solvents as ethanol, butanol and <br> acetone are made nowadays from... | b) than any other major crop. |
| 3. The manufacture of beet sugar is a <br> technical process involving... | c) with long thin rootlets which gather <br> nourishment from the soil. |
| 4. The sugar beet has a long tapering <br> root... | d) the hydrocarbons of petroleum and <br> natural gas. |
| 5. Sugar production emerged in <br> Ukraine... | e) which consists of roots, stalk and <br> leaves. |
| 6. The sugar cane is a gigantic grass... | f) in the $19^{\text {th }}$ century. |
| 7. The usual time for ripening of the <br> sugar cane is... | g) the sucrose content is the highest. |
| 8. It is important for the sugar cane to be <br> harvested when the amount of invert <br> sugar is as low as possible and when... | h) from nine to fourteen months. |

## Task 2

Fill the gaps with the correct preposition from the box with; of; into; from; in; at; to; for; by; out; down; off

1. It is impossible to turn invert sugar ... sucrose.
2. The sugar cane consists ... roots, stalk and leaves.
3. Beat is grown $\ldots$ seed sown in spring.
4. Sugar production is not a new industry ... Ukraine.
5. The stalk of a sugar cane is a tube filled ... soft fibers.
6. When the cane is ripe it produces ... the top of the stalk a feathery plume of grey flowers.
7. The sugar is called $\ldots$ the chemists "carbohydrates".
8. Sucrose is the most common of several kinds of sugar responsible ... sweet taste of certain food items.
9. At harvesting time the soil round the root of a sugar beet is loosened and the root is pulled.
10. When ripe, the canes are cut ... near the ground and the green tops as well as leaves are cut ...
11. The stalk is like a bamboo and may be from eight ... fifteen inches in height.

## Unit 8

## Text 1

## MY FUTURE SPECIALITY. Tourism

I am a second-year student of the National University for Food Technologies. I study at the department of Hotel-Restaurant Business and Tourism. My future speciality is tourism. The course of training of a tourism manager takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: tourist regional geography, culture, tourism business organization, economics, computer science, history, public relations, tourism management and marketing, foreign languages, etc.

Future specialists in tourism should have a basic understanding of the tourism industry, its markets and trends. Knowledge of the industry structure, market segments and categories helps the future specialists to identify strategies for the development. They should know well how to organize and develop tours for clients. They should be able to provide promotion of a country's tourism attractions and sights. One very important aspect of a tourism manager's job is to keep track of metrics and analytics which clearly show the state of tourism agency's sales and marketing efforts. Monitoring how many tourists visited an attraction, how many used the tourism agency's services within a specific period of time, and how much money these clients spent are all part of the records that the tourism manager keeps. This analytical data can be used to make projections on future marketing programs and to direct changes on how best to approach prospective clients and tourists. A good command of foreign languages is also necessary to use information in foreign languages from special sources for their future career, to discuss professional problems with their colleagues from foreign countries, etc.

On graduating from the university we'll be able to work at travel companies as tourism managers, travel agents, tour leaders and tour guides.
I like my future qualification because it's very interesting and challenging. We have a chance to meet different people, go to different places. We have to advise tourists and visitors about accommodation, transport and sightseeing and deal with their problems.

Ukraine tourism is one of the fastest growing branches of the state economy. Ukraine has excellent geography, climatic conditions and scenic nature. We should use our knowledge and skills for the modernization of our tourism infrastructure and attraction the world's travellers to get acquainted with national culture and history.

## Active Vocabulary

future speciality - майбутня спеціальність
the department of Hotel-Restaurant Business and Tourism- факультет готельно-

ресторанної справи та туризму
tourist regional geography - країнознавство
trend- тенденція
identify strategies- визначення стратегій
provide smth with... - забезпечувати щось...
promotion - сприяння, просування
keep track of metrics - відслідковувати показники
tourism attractions and sights - визначні туристичні пам'ятки і місця a good command of a foreign language - добре знання іноземної мови special sources - спеціальні (професійні) джерела
on graduating from the university - після закінчення університету approach prospective clients - звертатись до потенційних клієнтів get acquainted - познайомитись

## Task 1

## Answer the questions to the text:

1. What is the name of your department?
2. Which specialists does it train?
3. Which qualification will the students of this department get after graduating from the University?
4. Which special disciplines do senior-year students learn at this department?
5. Which knowledge and skills must a future specialist tourism possess?
6. Why must a tourism manager have a good command of a foreign language?
7. Where can future specialists in tourism work?
8. Do you consider your future qualification interesting, creative and challenging? Why?
9. How is tourism industry in Ukraine developing nowadays?
10. How would you give the reasons for a choice of your future speciality to your friend from other university?(Make up a short story).

## Task 2

## Fill in the gaps using the words in the box

persuade, target, opportunity, persistence, market, challenging, tourists, creative, holiday, packages

The work of tourism managers are extremely (1) $\qquad$ , mainly because of two reasons. Firstly, tourism managers work with (2) $\qquad$ from all over the world. Different cultures and traditions are explored and tourism managers have the (3) $\qquad$ to show their country to the rest of the world. Secondly, tourism managers must be (4) $\qquad$ in order to attract people and more importantly(5) $\qquad$ people
to come back again.
Tourism managers have to(6) $\qquad$ their product/ service and therefore a creative and dynamic personality is required. Different(7) $\qquad$ markets have to be identified and specific (8) $\qquad$ have to be designed for them.
Tourism managers work with people that are on (9) $\qquad$ , although they themselves are not on holiday. The irregular hours of tourism managers require people with (10) $\qquad$ and determination. Tourism managers must have the ability to work with all kinds of people from foreign tourists to people with disabilities and must be friendly.

## Text 2

## ECOTOURISM

Nowadays, many of us try to live in a way that will damage the environment as little as possible. We recycle our newspapers and bottles, we take public transport to get to work, we try to buy locally produced fruit and vegetables and we stopped using aerosol sprays years ago. And we want to take these attitudes on holiday with us. This is why alternative forms of tourism are becoming more popular all over the world.

1. There are lots of names for these new forms of tourism: responsible tourism, alternative tourism, sustainable tourism, nature tourism, adventure tourism, educational tourism and more. Ecotourism probably involves a little of all of them. Everyone has a different definition but most people agree that ecotourism must:
-conserve the wildlife and culture of the area;
-involve the local community;
-make a profit without destroying natural resources.
2. Tourists stay in local houses with local people, not in specially built hotels. So they experience the local culture and do not take precious energy and water away from the local population. They travel on foot, by boat, bicycle or elephant so that there is no pollution. And they have a special experience that they will remember all of their lives. This type of tourism can only involve small numbers of people so it can be expensive. But you can apply the principles of ecotourism wherever you go for your holiday. Just remember these basic rules.
3. Learn about the place that you're going to visit. Find out about its culture and history. Learn a little of the native language, at least basics like «Please», «Thank you», and «Good morning». Think of your holiday as an opportunity to learn something.
4. Wear clothes that will not offend people. Always ask permission before you take a photograph. Remember that you are a visitor. Stay in local hotels and eat in local restaurants. Buy local products whenever possible and pay a fair price for what you buy.
5. If the area doesn't have much water, don't take two showers every day. Remember the phrase «Leave nothing behind you except footprints and take nothing away except photographs ». Take as much care of the places that you visit as you take of your own home. Don't buy souvenirs made of endangered animals or plants. Walk or use other non-polluting forms of transport whenever you can.
6. Don't be afraid to ask the holiday company about what they do that is «eco». Remember that «eco» is very fashionable today and a lot of holidays that are advertised as ecotourism are not much better than traditional tourism. But before you get too enthusiastic, think about how you are going to get to your dream «eco» paradise. Flying is one of the biggest man-made sources of carbon dioxide in the atmosphere. Friends of the Earth say that one return flight from London to Miami puts as much carbon dioxide into the atmosphere as the average British car in a year. So don't forget that you don't have to fly to exotic locations for your " eco" holiday. There are places of natural beauty in your own country that you've never visited.

## Active Vocabulary

Aerosol sprays - aepoзолі
recycle - переробляти (повторно використовувати)
sustainable tourism - екологічно - безпечний туризм
adventure tourism - пригодницький туризм
conserve the wildlife - зберегти дику природу
make a profit- отримувати прибуток
pollution - забруднення
offend people - ображати людей
a fair price - чесна ціна
endangered animals - зникаючі тварини
paradise - рай

## Task 1

Match choices ( $\mathrm{A}-\mathrm{H}$ ) to the numbers (1-6) in the text. There are two choices you don't need to use.
A. () Be prepared.
B. () Don't waste resources.
C. (1) But what is ecotourism?
D. () Have respect for local culture.
E. () Provide an experience that tourists want to pay for.
F. () Let's look at an example of an ecotour.
G. () Choose your holiday carefully.
H. ( ) Benefit the local people.

## Task 2

Match a word with its definition.

| 1. pollution | a. responsible travel to natural areas <br> supporting the fauna, flora, and local <br> economy; |
| :--- | :--- |
| 2. ecotourism | b. to process (as liquid body waste, glass, <br> or cans) in order to regain material for <br> human use; |
| 3. endangered animals | c. the introduction of harmful substances <br> or products into the environment; |
| 4. recycle | d. an endangered species is a population <br> of an organism which is at risk of <br> becoming extinct; |
| 5. make a profit | e. a colorless, odorless, incombustible <br> gas, CO2, formed during respiration, <br> combustion, and organic decomposition |
| 6. community | f. to derive advantage, benefit: |
| 7. carbon dioxide | g. an outline or indentation left by a foot <br> on a surface |
| 8. footprint | h. a group of people living in the same <br> locality and under the same government |

## Unit 9

## Text 1

## MY FUTURE SPECIALITY. Ecology , Environment Protection and Sustainable Nature Use

I am a second-year student of the National University for Food Technologies. I study at the department of ecology, environmental protection and sustainable nature use. My future speciality is ecology and environmental protection. The course of training of specialist in ecology takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: geology, meteorology, hydrology, soil science, general ecology, environmental impact assessment, environmental law, food production, environmental biotechnology, environmental monitoring, modeling and forecasting of the environment, etc.

Future ecologists should know well how to provide environmental protection and ensure environmental management. They are responsible for the protection of natural ecosystems from anthropogenic and technological influences. A contemporary specialist in ecology should also have a good command of a foreign language to use information in foreign languages from special sources for his future career, to discuss professional problems with his colleagues from foreign countries, etc.

On graduating from the university we'll be able to work in various sectors of the economy: in the Ukrainian Environmental League, and numerous food enterprises, firms of environmental profile, in research institutions and educational institutions, in the public administration (Ministry of Ecology and Environment Protection, the State Department of Food, State Department of Ecology and Natural Resources in Urban and Regional Sanitary and Epidemiological Stations).

I like my future qualification because it's very interesting, useful for the national economy development of our country. I think the increasing quality requirements for domestic food production and ecological environment in the production of food and considering the need for active output of domestic producers into international markets, the realization of a qualified environmental control in the food processing industry of Ukraine, etc. - all these problems are certain to be very topical and prospective for the development of up-to-date production.

## Active Vocabulary

future speciality - майбутня спеціальність ecology, environmental protection and sustainable nature use department - факультет

екології, охорони навколишнього середовища та збалансованого природокористування
provide smth with... - забезпечувати щось...
have a good command of a foreign language - добре володіти іноземною мовою
on graduating from the university - після закінчення університету
special sources - спеціальні (професійні) джерела
topical - актуальний
prospective - перспективний
considering the need for active output of domestic producers into international markets - враховуючи необхідність активного виводу вітчизняних виробників на міжнародні ринки

## Task 1

## Answer the questions to the text:

1. What is the name of your department?
2. Which specialists does it train?
3. Which qualification will the students of this department get after graduating from the University?
4. Which special disciplines do senior-year students learn at this department?
5. Which knowledge and skills must a future ecologist possess?
6. Why must a contemporary specialist have a good command of a foreign language?
7. Where can future ecologist work?
8. Do you consider your future qualification interesting, creative, and topical? Why?
9. What do you know about environmental protection?
10. How would you give the reasons for a choice of your future speciality to your friend from other university? (Make up a short story).

## Task 2

## Fill in the gaps using the words in the box

Technological; trains; ecology; pollution; specializing; career; responsible; cope; environmental law; urbanization.

The National University for Food Technologies $1 \_$students 2 in ecology and environmental protection. Future specialists in
$\qquad$ must know how to use in practice theoretical knowledge in geology, meteorology, hydrology, 4 $\qquad$ and a lot of other special disciplines. They are 5 $\qquad$ for the protection of natural ecosystems from anthropogenic and 6
$\qquad$ influences. A profound knowledge of a foreign language helps students
in their future 7 $\qquad$ . Today the most widely discussed aspects of the pollution problem are those caused by industrialization, 8 $\qquad$ and motorization. At
present, most highly developed countries are taking steps to fight 9 $\qquad$ . Many countries 10 $\qquad$ with pollution in any form, and the problem is being successfully solved.

## Text 2

## Ecology and Ecosystems

Ecology is the science that tries to answer such questions about how nature works. In 1869 German biologist Ernst Haeckel coined the term ecology from two Greek words: oikos, meaning "house" or "place to live", and logos, meaning "study of".

Ecology is the study of living things in their home or environment: all the external conditions and factors, living and nonliving that affect an organism. In other words, ecology is the study of interaction between organisms and their living and nonliving environment. Scientists usually carry out this study by examining different ecosystems: forests, deserts, grasslands, ponds, lakes, oceans or any organisms interacting with one another and with their nonliving environment.

The Earth has several major parts that play a role in sustaining life. We are part of what ecologists call the biosphere - the living and dead organisms found near the earth's surface. Virtually all life on earth exists in a thin film of air, water and rock in a zone extending from about 61 meters below the ocean surface to 6,000 meters above sea level.

The living organisms that make up the biosphere interact with one another, with energy from the sun, and with various chemicals in the atmosphere, hydrosphere and lithosphere. This collection of organisms interacting with one another and their nonliving environment is called the ecosphere. The goal of ecology is to learn how the ecosphere works.

Ecosystems consist of various nonliving and living components. The nonliving or abiotic components include various physical and chemical factors. Among physical factors affecting ecosystems are sunlight and shade, temperature, precipitation, wind, soil, fire, etc. Major chemical factors include: level of water and air in soil, level of nutrients, level of toxic substances, sanity of water and some others.

The major types of organisms that make up the living or biotic components are usually classified as producers, consumers and decomposers. This classification is based on organism's general nutritional habits. Green plants are producers as they make the organic nutrients through photosynthesis. Only producers can make their own food. They provide food directly or indirectly for animals and decomposers. We get nutrients either by eating plants or by eating animals that feed on plants. Organisms that get the nutrients and energy they require by feeding either directly or
indirectly on producers are called consumers or heterotrophs (other-feeders).
There is no waste in functioning biological communities; the wastes of one form of life are food or nutrients for other forms of life. This is how no-waste-in-nature principle works.

## Active Vocabulary

environment
external conditions
living and nonliving
ecosystem
interaction
sustaining life
detritus
ecosystem
level of nutrients
toxic substances
biosphere
the earth's surface
ecosphere
producers
consumers
decomposers
nutritional habits
component
photosynthesis

оточуюче середовище
зовнішні умови
живі і неживі
екосистема
взаємозв’язок
підтримка життя
детрити
екосистеми
рівень поживних речовин
токсичні речовини
біосфера
поверхня землі
екосфера
продуценти
консументи
редуценти
звички харчування
складова, компонент
фотосинтез

## Task 1

## Match a word with its definition

| 1) ecology | harmful influence of construction, industry, agricultural <br> chemicals on the environment |
| :--- | :--- |
| 2) ecosystem | the part of the world in which animals, plants etc. can live |
| nutrient | any form of life. |
| 3) organism | community of organisms interacting with one another and with <br> chemical and physical factors making up their environment. |
| 4) photosynthesis | element or compound needed for the survival, growth and <br> reproduction of a plant or an animal. |
| 5) pollution | study of the interaction of living organisms with each other and <br> with their environment; study of the structure and functions of <br> nature. |


| 6) toxic | a process by which two or more things affect each other |
| :--- | :--- |
| 7 ) biosphere | harmful for living things and for people's health, poisonous |
| 8) interaction | complex process that takes place in cells of green plants. <br> Radiant energy from the sun is used to combine carbon dioxide <br> $\left(\mathrm{CO}_{2}\right)$ and water $\left(\mathrm{H}_{2} \mathrm{O}\right)$ to produce oxygen $\left(\mathrm{O}_{2}\right)$ and simple <br> nutrient, such as glucose $\left(\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}\right)$. |

## Task 2

Translate the words and find their synonyms and antonyms if possible.
Coin (v), living thing, external conditions, affect (v), interaction, examine (v), sustain (v), virtually, film, type, producer, consumer, decomposer, provide (v), require (v).

## Unit 10

## Text 1

## MY FUTURE SPECIALITY. Mechanical Engineering

I am a student of the faculty of the Engineering mechanics and packaging technique at the National University of Food Technology. The Mechanical faculty is one of the largest. There is also an extramural departments for mechanical students at our University.

Our faculty trains mechanical engineers for food industry. The mechanical department prepares specialists in the following specialities: "Processing and food production equipment", "Packing equipment and technology", "Equipment for pharmaceutics and microbiological industry". Approximately 1200 students study at the department.

The following chairs for graduate students work at the department: technology of equipment and computer technologies of projecting, machines and apparatuses of food and pharmaceuticals production, technical mechanics and packing equipment, resources economizing technologies. The chairs of engineering graphics, material science and technology of machine building, theoretical mechanics and strength of materials, social and political theory are included into the said department to provide training of specialists of the University in related disciplines.

We, future mechanical engineers, are specialized in designing, construction and exploitation of machines and equipment for sugar refining, bread-making, brewing, dairy and meat industries and for many other branches of food industry.

The education of a mechanical engineer extends over a wide range of knowledge from pure and engineering sciences to technology, exact sciences and humanities. Mechanical students study many subjects. The students have such subjects on their schedule as: mathematics, physics, chemistry, geometry, technical drawing, theory of materials, strength of materials, elements of machines, programming, etc. They also study the modern scientific and technological achievements, research methods and take field training. As we will work in food industry we must know technological processes of food stuffs production.

Senior students study subjects closely connected with their future speciality. Mechanical students have at their disposal a great number of laboratories. Senior students, besides their lab work, learn to set up laboratory equipment and instruments, make experiments and evaluate their results. The students carry out their research under the guidance of their professors. Students investigate deeper the problems studied, explore new lines of research and try their hand at designing instruments and various devices. Undergraduates have a practical training at the enterprises of food industry.

On finishing their courses, field training and final exams, the mechanical students prepare their gradual projects. The project is presented to and defended before the State Examining Board. Having defended my diploma I will receive the title of a mechanical engineer, a Bachelor of the technical sciences. A Bachelor may join the Master's course for the Master's degree, then the Post-graduate course to work at their candidate and doctorate thesis.

Having graduated from the University I will be able to work either as a mechanical engineer in exploitation and repair of machines and instruments of food industry or as an engineer-designer at a food machine-building plant, or as a designer at a special design office. Graduates of our faculty may hold a post of a mechanical engineer or a chief engineer at one of food industry enterprises. A mechanical engineer of the plant is responsible for continuous work of all machines and mechanisms. He is also responsible for the work of lifting and transporting technique. A mechanical engineer directs the exploitation and repair of machines and equipment at the plant and it is he who is responsible for assembling of new equipment

Graduates of our faculty work at various enterprise and research institutes of food industry and in other fields of our national economy. They work not only in Ukraine, but also in other countries.

## Active Vocabulary

| branch | галузь |
| :---: | :---: |
| designing | конструювання |
| construction | будування |
| brewing | пивоварення |
| schedule | розклад |
| pure science | теоретична наука |
| strength of <br> materials | опір матеріалів |
| exact sciences | точні науки |
| properties | властивості |
| carry <br> research | проводити <br> дослідження |
| receive the | отримати звання |
| title | hold a post |
| repair | займати посаду |
| responsible | полагодити |
| assembly | збірка |

## Task 1

## Answer the questions on the text

1. What faculty do you study at?
2.In what specialities does the mechanical department train specialists?
2. What chairs for graduate students work at the department?
3. What kind of equipment are the future mechanical engineers specialized in?
4. What subjects do the students have on their schedule?
6.Do the students carry out research work?
5. What title will you receive after graduating from the University?
6. What posts may you hold at a food enterprise?
7. What is a mechanical engineer at a food enterprise responsible for?

10 . Why do you like your future specialty?

## Task 2

Fill in the gaps using the words in the box.
momentum, laws, forces, calculus, equilibrium, rest, motion, lever, gravity, circling

Mechanics studies the conditions of static (1) $\qquad$ and of the paths of bodies when acted upon by unbalanced (2)___. The (3)____ of bodies is considered in two ways: dynamics is concerned with the causes of motion of real bodies, and kinematics deals with the paths of points following specific mathematical laws of motion. Mechanics began in ancient Greece. In the 4th century B. C. Aristotle created philosophical system in which problems of (4) $\qquad$ and motion were central. After Aristotle in the 3d century B. C. the law of the (5)___ was first explicitly proved by the greatest mathematician of antiquity, Archimedes, creator of the study of hydrostatics. The development of kinematical study in antiquity belongs to the Greek astronomer Ptolemy. The Scientific Revolution of the 171 lh started in 1543 by Nicholas Copernicus who gave a reason of earth being at the centre and the stars (6)___ it. Galileo went even further in mechanics; he showed that there was only motion under the influence of forces, caused by (7)___ and a horizontal component created by the thrower. The creator of classical mechanics was Isaac Newton. Newton put out the basic (8)___ of the new physics. He defined force as the product of mass and acceleration, and presented the principle of the conservation of (9) $\qquad$ as a fundamental law. More important, he showed that his definitions of force, mass, momentum, all aspects of statics, dynamics, and kinematics could be
treated mathematically, inventing the (10) $\qquad$ _.

## Text 2

## ON MACHINES

Machine is a complex mechanism made of simple machines: a lever, a screw, a wedge, an inclined plane, a block. Future mechanical engineers should know all main and auxiliary parts of the machine, machine-tool or mechanism so as to be able to remove any failure or assemble new equipment. The principal parts of a machine are: a body, an engine, an axle, a shaft, a drive. The parts of a machine are joined with the connective elements: a bolt, a nut, a screw, a gear, a washer, a bearing, a rivet, a key, a pin. Mechanical students should have knowledge of assembling and disassembling a machine or mechanism. They should also have a good idea of types of fastenings, forms of threads; classes of gears, bearings, clutches, couplings and their failures.

To know various machines one has to study their design principles and application. The machines employed in food industry usually include feed mechanism, drive and working organs. Feed mechanism serves to feed the raw material into the machine, the drive mechanism actually drives the working organs which do the processing. All modern machines are driven by electric motors.

The machine is an artificial person, device that performs a mechanical movement or other actions for energy conversion, materials and information. Every modern machine has the following interrelated component mechanisms: engine (power source); transfer mechanism; working body (the executive mechanism); driving mechanism; regulatory mechanism moving the engine. Any mechanism contains links that may be in separate parts or units. Depending on the nature of the work flow machines may be divided into five classes:

Machines, engines, which convert any type of energy to mechanical work.
Machines converters, which convert mechanical work into some kind of energy, such as for electricity.

Transport vehicles.
Technological machines.
Monitoring control and electronic computers.
It's impossible to mention here all the machines and apparatuses employed in various branches of food industry. Let's get acquainted with some of the machinery and apparatuses used for example, in breadmaking, meat and dairy industry, confectionery. They are:
I. the intermediary or overhead proofer in which the rounded dough balls are given a brief rest;
2. moulding and panning machine which shapes the dough pieces into loaf form, and automatically drops them into baking pans;
3.press feeding sheet of noodle dough directly to cutter;

> 4.kneader;
5.vertical hydraulic extrusion press;
6.battery of chocolate liquor mills;
7.hydraulic press for separating cocoa butter from chocolate liquor;
8.refrigerating installations in meat-packing plant;
9. pasteurising equipment in mill plant, etc.

Machines and equipment are becoming more efficient, reliable and economical from day to day. A major advance in twentieth century manufacturing was the development of mass production techniques at the machine-building plants. Mass production refers to manufacturing processes in which an assembly line, usually a conveyor belt, moves the product to stations where each worker performs a limited number of operations until the product is assembled. In the automobile assembly plant such systems have reached a highly-developed form. A complex system of conveyer belts and chain drives moves car parts to workers who perform the thousands of necessary assembling tasks.

An important factor for the industrial engineer to consider is whether each manufacturing process can be automated in whole or in part. Automation is a word coined in the 1940s to describe processes by which machines do tasks previously performed by people. We know of the advance in the development of steam engines that produced automatic valves. We now use the term automation for specific techniques combined to operate automatically in a complete system. These techniques are possible because of electronic devices, most of which have come into use in the last thirty years. They include program, action, sensing or feedback, decision, and control elements as components of a complete system.

The program elements determine what the system does and the step-bystep manner in which it works to produce the desired result. A program is a step-by-step sequence that breaks a task into its individual parts. Some steps in an industrial automation program direct other parts of the system when and how to carry out their jobs.

The action elements are those which do the actual work. They may carry or convey materials to specific places at specific times or they may perform operations on the materials. The term mechanical handling device is also used for the action elements.

Perhaps the most important part of an automated system is sensing or feedback. Sensing devices automatically check all parts of the manufacturing process such as the degree of heat or the thickness of a sheet of steel or paper. This is called feedback because the instruments return or feed back this information to the central system control.

The decision element is used to compare what is going on in the system with
what should be going on; it receives information from the sensing devices and makes decisions necessary to maintain the system correctly. If some action is necessary the decision element can give instructions or commands to the system.

## Active Vocabulary

| lever | важіль |
| :---: | :---: |
| screw | гвинт |
| wedge | клин |
| inclined plane | нахилена поверхня |
| auxiluary parts | допоміжні частини |
| machine-tool | механічний верстат |
| remove a failure | видалити пошкодження |
| engine | двигун |
| axle | вісь |
| shaft | вал |
| drive | привід |
| nut/ clutch joint | гаєчне/муфтове <br> з'єднання |
| gear | шестерня |
| washer | шайба |
| bearing | підшипник |
| rivet | закльопка |
| key | шпонка |
| fastening connection | $3^{\prime}$ ¢днання |
| thread / cutting | різблення |
| proofer | пруфер |
| kneader | тістомісильна машина |

## Task 1

## Match a word with its definition

| 1. Motion | a.the deformation of a body that results <br> from an applied force. |
| :---: | :---: |
| 2. <br> Momentum | b. resistance to external forces. |
| 3. Force | c. the property of bodies of returning, <br> after unloading, to their initial form. |
| 4. <br> Gravitation | d. the resistance to the horizontal force applied <br> to the body at rest on the horizontal surface. |
| 5. Pressure | e. moving some object by force through a <br> distance. |
| 6. Work | f. the capacity of a system or body for doing <br> work. |
| 7. Energy <br> 8. Power | g. quantity of work done in a minute af time. <br> the force per unit area. |
| 9. Friction | h. attraction of the Earth as a result of its <br> rotation <br> around its axis. |
| 10. | i. any action that causes the change of the rate <br> or |
| Elasticity | 11. Stress |

## Task 2

Use the text to name the objects with the following actions
make, move, assemble, join, employ, feed, drive, perform, convert, shape, separate, move, produce.

## Unit 11

## Text 1

MY FUTURE SPECIALITY. Perfumery and Cosmetics Products Technology
I am a second-year student of the National University for Food Technologies. I study at the Faculty of Meat and Dairy, Perfumery and Cosmetics products. My future speciality is perfumery and cosmetics products technology. The course of training of technologist takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: technology of perfumery products, control of perfumery quality, innovation technologies of perfumery production, optimization of perfumery technologies processes, technological equipment of perfumery branch, chemistry of essential oils, physical and chemical principles of perfumery and cosmetics products technology, etc. A contemporary specialist in perfumery technology should also have a good command of a foreign language to use information in foreign languages from special sources for his future career, to discuss professional problems with his colleagues from foreign countries, etc.The job of composing perfumes that will be sold is left up to an expert on perfume composition or known in the fragrance industry as the perfumer.

The composition of a perfume typically begins with a brief by the perfumer's employer or an outside customer. The customers to the perfumer or their employers, are typically fashion houses or large corporations of various industries. The perfumer will then go through the process of blending multiple perfume mixtures and sell the formulation to the customer, often with modifications of the composition of the perfume.

The perfume composition will then be either used to enhance another product as a functional fragrance (shampoos, make-up, detergents, car interiors, etc.), or marketed and sold directly to the public as a fine fragrance.

## Active Vocabulary

future speciality - майбутня спеціальність
Faculty of Meat and Dairy, Perfumery and Cosmetics products - факультет мясомолочних та парфюмерно -косметичних виробництв
optimization of perfumery technologies processes - оптимізація технології процесів парфюмерії
technological equipment of perfumery branch - технологічне обладнання парфюмерної галузі
chemistry of essential oils - хімія ефірних олій
physical and chemical principles of perfumery and cosmetics products technology -фізико-хімічні основи технології парфюмерно-косметичних продуктів
have a good command of a foreign language - добре володіти іноземною мовою fashion house - будинок мод
perfume composition - створення парфюмів
fragrance - пахощі, аромат
enhance - підвищувати, посилювати

## Task 1

## Answer the questions to the text

1. What is the name of your department?
2. Which specialists does it train?
3. Which qualification will the students of this department get after graduating from the University?
4. Which special disciplines do senior-year students learn at this department?
5. Which knowledge and skills must a future specialist in energetics possess?
6. Why must a contemporary specialist have a good command of a foreign language?
7. Where can future specialists in perfume production work?
8. Do you consider your future qualification interesting, creative, topical? Why?
9. Where is the perfume compositions used?
10.How would you give the reasons for a choice of your future speciality to your friend from other university?(Make up a short story).

## Task 2

Fill in the gaps using the words in the box
Composition; customer; perfumery; employer; cosmetics products technology; fashion; blending; modifications; fragrance; enhance; make-up.

I study at the Faculty of Meat and Dairy, 1 $\qquad$ and Cosmetics products. My future speciality is perfumery and 2 $\qquad$ . The 3 $\qquad$ of a perfume typically begins with a brief by the perfumer's employer or an outside customer. The 4____to the perfumer or their 5___, are typically 6 $\qquad$ houses or large corporations of various industries. The perfumer will then go through the process of 7 $\qquad$ multiple perfume mixtures and sell the formulation to the customer, often with 8 $\qquad$ of the composition of the perfume. The perfume composition will then be either used to 9 $\qquad$ another product as a functional fragrance (shampoos, 10 $\qquad$ , detergents, car interiors, etc.), or marketed and sold directly to the public as a fine 11 $\qquad$ .

## Text 2

## TECHNOLOGY OF PERFUMERY

Perfume is a mixture of fragrant essential oils and/or aroma compounds, fixatives, and solvents used to give the human body, animals, objects, and living spaces. The odoriferous compounds that make up a perfume can be manufactured synthetically or extracted from plant or animal sources.
Perfumes have been known to exist in some of the earliest human civilizations Modern perfumery began in the late 19th century with the commercial synthesis of aroma compounds. Specific terms are used to describe a fragrance's approximate concentration by percent/volume of perfume oil. A list of common terms is as follows: Perfume extract, or simply perfume: $15-40 \%$ aromatic compounds; Eau de Perfume, Perfume de Toilette : 10-20\% aromatic compounds, sometimes listed as "eau de perfume" ; Eau de toilette : 5-15\% aromatic compounds; Eau de Cologne : Chypre citrus type perfumes with 3-8\% aromatic compounds; After shave: 1-3\% aromatic compounds.
The traditional classification which emerged around 1900 comprised the following categories: single floral, floral bouquet, amber or oriental, wood, chypre (perfume with fragrances of bergamot, oakmoss, patchouli, and labdanum).
Since 1945, due to great advances in the technology of perfume creation as well as the natural development of styles and tastes: bright floral, green, citrus, fruity; aquatic, oceanic, or ozonic: the newest category in perfume history, appearing in 1991 with Christian Dior's Dune. A very clean, modern smell leading to many of the modern perfumes.
Aromatics sources include flowers and blossoms - rose and jasmine, blossoms of citrus and ylang-ylang trees; fruits: citrus such as oranges, lemons, and limes; leaves and twigs - patchouli, , rosemary, and citrus leaves; woods - sandalwood, rosewood, birch, cedar, juniper and pine. These are used in the form of macerations or drydistilled (rectified) forms.
Many modern perfumes contain synthesized odorants. Synthetics can provide fragrances which are not found in nature. For instance, Calone, a compound of synthetic origin, imparts a fresh ozonous metallic marine scent that is widely used in contemporary perfumes.

## Active Vocabulary

Fragrant - ароматний essential oils - ефірні олії compound - компоненти
odour - запах, аромат
solvent - розчинник
manufacture - виготовляти
extract - робити екстракт
source - джерело
perfume - парфуми
eau de pafume - парфумована вода
perfume de toilette - туалетна вода
eau de Cologne - одеколон
after shave - крем після гоління
smell - запах
oakmoss - кора дуба
labdanum - лаванда
ambergris - амбра
birch - береза
cedar - кедр
juniper - ялівець
distill - дистилювати, очищати
contain - містити
scent - запах, аромат, пахощі
origin - походження
contemporary - сучасний

## Task 1

Match a word with its definition

1. Floral
2. Wood
3. Green
4. Fresh
5. synthesized odorants
6. Chypre
7. Perfume
8. Ambered, or "Oriental
a)perfume with fragrances of bergamot, oakmoss, patchouli, and labdanum;
b)perfume with flowers fragrance;
c) perfume with ambergris fragrance;
d) perfume with fragrance of cut grass, crushed green leaf and cucumber-like scents;
e) Aquatic, Oceanic, or Ozonic perfume;
f) fragrances which are not found in nature;
g) mixture of aroma compounds used to give
a pleasant scent;
h) Fragrances that are dominated by sandalwood, cedarwood and patchouli.

Task 2
a) Find in the text synonyms to the next words:

Aroma; amber perfume; fresh perfume; modern.
b)Find in the text international words;
c) Find in the text related words to the next words: Fragrant, odour, wood.

## Unit 12

## Text 1

## MY FUTURE SPECIALITY. Technology of Milk Storage, Preservation and Processing

I am a second-year student of the National University for Food Technologies. I study at the Faculty of Meat and Dairy, Perfumery and Cosmetics products. My future speciality is technology of milk storage, preservation and processing. The course of training of technologists takes 5 years of studying. The senior-year students are taught disciplines connected with their future qualification. These disciplines are: technology of milk, control of dairy quality, innovation technologies of dairy production, optimization of dairy technologies processes, technology equipment of dairy branch, chemical raw materials for dairy production, etc.

A contemporary specialist in dairy technology should also have a good command of a foreign language to use information in foreign languages from special sources for his future career, to discuss professional problems with his colleagues from foreign countries, etc.

On graduating from the university we will be able to work at dairy plants. A specialist in dairy technology applies principles of bacteriology, chemistry, physics, engineering, and economics to develop new and improved methods in production, preservation, and utilization of milk, cheese, ice cream, and other dairy products; conducts experiments in such problems as preventing bacterial increase in milk during processing, improving pasteurization methods, and designing better packaging materials, dairy equipment, or supplies; may specialize according to product, as ice cream or cheese, or according to functional activity, as sanitation research or storage problems.

## Active Vocabulary

future speciality - майбутня спеціальність
Faculty of Meat and Dairy, Perfumery and Cosmetics products - факультет м`ясомолочних та парфюмерно -косметичних виробництв
optimization of dairy technologies processes - оптимізація технології процесів молочних продуктів
technological equipment of dairy branch - технологічне обладнання молочної галузі
sources - джерела
raw materials - сировина
have a good command of a foreign language - добре володіти іноземною мовою
be able to work - бути здатним працювати
develop - розвивати
improve - вдосконалювати
preservation - зберігання
production - виробництво
conduct experiments - проводити експерименти
preventing bacterial increase in milk during processing - запобігати зростанню кількості бактерій в молоці під час обробки
equipment - обладнання
designing - проектування, конструювання
packaging materials - упаковочні матеріали
storage - зберігання

## Task 1

## Answer the questions to the text:

8. What is the name of your department?
9. Which specialists does it train?
10. Which qualification will the students of this department get after graduating from the University?
11. Which special disciplines do senior-year students learn at this department?
12. Which knowledge and skills must a future specialist in dairy production?
13. Why must a contemporary technologist have a good command of a foreign language?
14. Where can future specialists in dairy production work?
15. Do you consider your future qualification interesting, creative, topical? Why?
16. What experiments does a specialist in dairy technology conduct?
10.How would you give the reasons for a choice of your future speciality to your friend from other university?(Make up a short story).

## Task 2

Fill in the gaps using the words in the box
Storage; be able to; plants; dairy; preservation; production; develop; conducts; processing; packaging; equipment; storage

I study at the Faculty of Meat and 1 $\qquad$ , Perfumery and Cosmetics products. My future speciality is technology of milk 2 $\qquad$ , preservation and processing. On graduating from the university we will 3 $\qquad$ work at dairy 4 $\qquad$ . A specialist in dairy technology applies principles of bacteriology, chemistry, physics, engineering, and economics to 5 ___ new and improved methods in 6 $\qquad$ , and utilization of milk, cheese, ice cream, and other dairy products; 8 $\qquad$ experiments in such problems as preventing bacterial increase in milk during $9 \ldots$, improving pasteurization methods, and designing better 10 $\qquad$ materials, dairy 11 $\qquad$ , or supplies; may specialize according
to product, as ice cream or cheese, or according to functional activity, as sanitation research or 12 $\qquad$ problems.

## Text 2

## MILK PRESERVATION AND DAIRY PRODUCTS

In most Western countries, centralized dairy facilities process milk and products obtained from milk (dairy products), such as cream, butter, and cheese.

Pasteurization is used to kill harmful microorganisms by heating the milk for a short time and then cooling it for storage and transportation. Microfiltration is a process that partially replaces pasteurization and produces milk with fewer microorganismus and longer shelf life without a change in the taste of the milk. In this process, cream is separated from the whey and is pasteurized in the usual way, but the whey is forced through ceramic microfilters that trap $99.9 \%$ of microorganisms in the milk (as compared to $95 \%$ killing of microorganisms in conventional pasteurization).

Upon standing for 12 to 24 hours, fresh milk has a tendency to separate into a high-fat cream layer on top of a larger, low-fat milk layer. The cream often is sold as a separate product with its own uses. Today the separation of the cream from the milk usually is accomplished rapidly in centrifugal cream separators. The fat globules rise to the top of a container of milk because fat is less dense than water.

Butter is a dairy product made by churning fresh or fermented cream or milk. It is generally used in cooking applications, such as baking, sauce making, and pan frying. Butter consists of butterfat, milk proteins and water.

Ice cream is a frozen dessert usually made from dairy products, such as milk and cream, and often combined with fruits or other ingredients and flavours. Most varieties contain sugar, although some are made with other sweeteners. In some cases, artificial flavourings and colourings are used in addition to, or instead of, the natural ingredients.

## Active Vocabulary

Process - обробляти
dairy products - молочні продукти
heating - підігрівання
cooling - охолодження
storage - зберігання
shelf life
taste - смак
separate - відділяти
separation -відділення
centrifugal cream separators - центрифужний сепаратор
layer - шар, пласт
consist - складатися
churn - збивати
frozen - заморожений
varieties - види
flavour - смак
contain - містити
sweetener - підсолоджувач
flavouring - ароматизатор
colouring - барвник
rapidly - швидко
harmful - небезпечний
whey - сировотка

## Task 1

Match a word with its definition
1.Pasteurization
2. Microfiltration
3. Butter
4. sour cream
5. dairy products
6. Ice cream
7. centrifugal cream separators
a)product separated from the milk
b) a dairy product made by churning cream
c) a frozen dessert made from dairy products
d) heating the milk to kill harmful microorganismus
e)Pasteurization of milk without cream f) products obtained from milk
g) fermented cream

## Task 2

A) Write down related words to the next words and translate them:

To heat, to cool, to store, to churn, to separate, processing, to pasteurize, fat, flavour, sweet, colour, container, cream.
b)Find in the text the synonyms to the next words:

Taste, dangerous, preservation.

## Unit 13

## Text 1

## My Future Speciality. Technology of Health-Improving Products and Food Expertise

At present the problem of public health is no longer the prerogative of doctors. Food technologists as well take the responsibility for the health of people. Therefore, the faculty "Technology of Health-Improving Products and Food Expertise" was founded at our university.

I am a second - year student of this faculty. Our faculty provides training of highly skilled specialists for the direction "Food Technologies and Engineering" in various specialities, such as "Technology of Healthy-Improving and Preventive Food Products", "Quality, Standardization and Certification", "Chemical Engineering of Food Additives and Cosmetics".

During the process of training future specialists study the characteristics and peculiarities of the creation of technology of products with the unique healthimproving properties. They are based on tested for centuries recipes of folk medicine of West and Orient. The composition of such food products is formed on the basis of interactions of biocomponents. The newest technologies of raw materials processing are used.

As well the students learn in detail the exposure of the falsification of alcoholic drinks, dairy products, fats, flour, meat products, juices, coffee and tea, cocoa and chocolate, spices. Future graduates of the faculty are taught to identify foodstuffs, to distinguish qualitative products from those of low quality.

The faculty also trains specialists, who can produce and use food additives without harmful effects for humans, to control the corresponding technological processes, to orientate in the wide range of cosmetic ingredients and to know methods of analysis of food additives and components of cosmetics in finished goods.

The majority of the graduates of the faculty get appointments under the contracts with the enterprises of food industry and others. Those, who showed an inclination to research and investigation work are recommended to continue their studies at Post-graduate.

I like my future qualification because it's very interesting, useful for the national economy development of our country.

## Active Vocabulary

responsibility
health-improving
preventive products
additives

відповідальність оздоровчий
продукти профілактичного призначення

добавки
peculiarities
interactions
the exposure of the falsification graduates
to distinguish
corresponding
get appointments
an inclination
Post-graduate

особливості
взаємодія
виявлення фальсифікації
випускники
відрізняти
відповідний
отримувати призначення
схильність
Аспірантура

## Task 1

## Answer the questions to the text

1. What is no longer the prerogative of doctors?
2. Who as well takes the responsibility for the health of people?
3. What is the full name of your faculty?
4. What specialities does your faculty provide training in?
5. What do future specialists study during the process of training?
6. What are the peculiarities of the creation of the technologies of products with the unique health-improving properties based on?
7. How is the composition of such products formed?
8. What do the students of your faculty learn in detail?
9. What must the future specialists in chemical engineering of food additives and cosmetics be able to do?
10. What are those students who showed an inclination to research and investigation work recommended?

## Task 2

## Fill in the gaps using the words in the box


faculty are taught 10 $\qquad$ qualitative products from those of low quality.

## Text 2

## Health-Improving and Preventive Products

Health-improving and preventive products are the healthy products which make no harm to humans as they don't have genetically modified ingredients. They are without synthetic additives (preservatives, colorings, flavorings, etc.), made of raw materials grown under strict control, with no agricultural chemicals, antibiotics, accelerators growth. Healthy or environmentally friendly products are grown according to certain requirements of agricultural produce. Products made of it are ready-made food products that have passed the stage of purification, processing, packing on separate lines with the content of environmentally friendly raw materials at least $70 \%$ of the weight of the final product. The quality of healthy products is confirmed by international certificates. These requirements are regulated by national legislation of individual states. In Austria, for example, according to statistics, healthy products are consumed by about $72 \%$ of the population. Healthy products market as a separate segment of the global food market was formed in the 90 -ies. Western Europe is the leader in the production, consumption, domestic and foreign trade healthy products. Currently, the volume of the European market for such products is around 25 billion USD.

The foodstuffs we eat depend on lots of things. Culture, religion and health play a part in what food we eat. Advertising and social factors have a big influence. Income is also an important factor.

Finally, there are three main messages to follow eating healthy products. First, we should eat less fat, especially saturated fat. Second, we are to cut down on sugar and salt. Thirdly, we must eat more fresh fruit and vegetables.

## Active Vocabulary

harmless
additives
preservative
flavouring
accelerator
environmentally friendly
commodity
ready-made
purification
despite of

нешкідливий
добавки
консервант
внесення смакових чи
ароматизуючих речовин
прискорювач росту
екологічно безпечний
товар, продукт для продажу
готовий
очищення
незважаючи на
consumption
domestic
requirements of agricultural
produce
cut down
saturated
advertising
income
health-improving
preventive products

споживання
внутрішній
вимоги
до
сільськогосподарської продукції
знижувати
насичений
реклама
дохід
оздоровчі
продукти профілактичного
призначення

## Task 1

## Match a word with its definition

a. purification
b. processing
c. packing
d. raw materials
e. food additives
f. preservatives
g. healthy products
h. acceleration

1. natural resources such as oil, gold, iron ore, gas, wheat and others
2. health-improving and preventive foodstuffs
3. speeding-up of the growth
4. a process of cleaning some material from undesirable elements and transforming
5. a process of wrapping of a ready-made products
6. a process of remaking of raw materials into ready-made product
7. substances added to foods for technological reasons, to maintain and improve the taste
8. substances that can increase the shelf life of food and other products

## Task 2

Give English equivalents to the following words and word combinations:
Генетично-модифіковані, без синтетичних добавок, забарвлення, надання смаку, прискорювачі росту, екологічно-безпечний, певні вимоги, сільськогосподарська продукція, сировина, вага кінцевого продукту, законодавство, продаж вітчизняних та імпортних оздоровчих продуктів.

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## PROFESSIONAL ENGLISH FOR COMMUNICATION

Навчально-методичний посібник

Видано в авторській редакиії

| Підп. до друку | Формат $60 \times 84 / 16$ |  |
| :--- | :---: | :---: |
| Обл.- вид. арк. | Ум. друк. арк. | Наклад 150 прим. |
| Вид. № 30/12. | Зам. № |  |

НУХТ. 01601 Київ-33, вул. Володимирська, 68
Свідоцтво про реєстрацію серія ДК № 1786 від 18.05.04р.

