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## **ENGLISH TEXT BANK**

Методические указания по английскому языку  
для практических занятий, СРСП, СРС  
для студентов 1-2 курсов всех специальностей  
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Данные методические указания предназначены для работы над всеми видами чтения и представляют собой хрестоматию современных аутентичных текстов разных уровней сложности: текст А уровня Intermediate и текст В уровня Pre-Intermediate. Для работы над текстами преподаватель может использовать любые современные активные и интерактивные методы и приемы работы.

Методические указания предназначены для студентов 1-2 курсов всех специальностей дневной формы обучения ВКГТУ им. Д. Серикбаева для практических занятий, СРСП и СРС по английскому языку

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## ВВЕДЕНИЕ

Происходящие в мире и Казахстане изменения в области образования вызывают необходимость обеспечения системой образования личностно - и социально-интегрированного результата. Реалии современной жизни диктуют свои требования во всех сферах профессиональной деятельности. Английский язык – международный язык профессионального общения – становится рабочим языком каждого успешного специалиста, при помощи которого оттачиваются грани квалификации.

Практическое владение английским языком предполагает владение техникой различных видов чтения и извлечения информации с различной степенью полноты и точности, необходимой для работы с англоязычной литературой. Необходимость совершенствования навыков чтения становится еще более очевидной, если учесть, что современный специалист должен уметь перерабатывать большие объемы информации, извлекать данные, относящиеся к конкретной задаче, осуществлять отбор по критерию и другие виды анализа. Чтение также является одним из важнейших источников языковой и социокультурной информации и помогает учащимся познакомиться с современными реалиями.

Очевидно, что чтение выступает как самостоятельный вид речевой деятельности в том случае, если мы читаем с целью получить необходимую информацию из текста. При этом нужно уточнить, что в зависимости от ситуации полнота и точность извлечения информации будут различными, и задачами обучения чтению как самостоятельному виду речевой деятельности являются: научить учащихся извлекать информацию из текста в том объеме, который необходим для решения конкретной речевой задачи, используя определенные технологии чтения.

Данные методические указания разработаны нами для работы над всеми видами чтения и представляют собой хрестоматию современных аутентичных текстов двух уровней сложности. Каждая тема включает в себя текст А уровня Intermediate и текст В уровня Pre-Intermediate. Для работы над текстами преподаватель может использовать любые современные активные и интерактивные методы и приемы работы.

Unit 1 THE REPUBLIC OF KAZAKHSTAN:  
GEOGRAPHICAL POSITION, CONSTITUTION, ECONOMY

**1.1 Text A. The Republic of Kazakhstan**

1.1.1 Read and translate the text.

**Introduction**

The Republic of Kazakhstan has played a major role in the history and development of Central Asia. It shares borders with Russia to the north, northeast and to the west, with China to the southeast and with Uzbekistan, Kyrgyzstan, and Turkmenistan to the South. Kazakhstan covers an area of 2,717,300 square kilometers and has approximately fifteen million inhabitants.

Almost all of Kazakhstan is located in the west central portion of the Asian continent; however, a small part of the republic lies west of the Ural River on the European continent. Astana (formerly Aqmola), located in northern Kazakhstan, replaced Almaty as the republic's capital in 1997.

Kazakhstan's location in the heart of Asia, the country's turbulent history and its position on the old trade routes have been decisive factors of turning Kazakhstan into a multinational society.

Kazakhstan was part of the Union of Soviet Socialist Republics (USSR) from 1922 until December 16, 1991, when it became independent. The republic has maintained a presidential system of government since independence. In 1995 Kazakhstan adopted a new constitution that granted extensive powers to the president. On December 21, 1991 Kazakhstan joined the Commonwealth of Independent States.

1.1.2 Land and Resources

Although high mountain ranges fringe the republic's eastern and southeastern borders, the terrain of Kazakhstan consists mostly of deserts, steppes (vast, semiarid grassy plains), and hilly upland areas. Deserts and semideserts (such as stone, salt, and sand wastelands) cover more than two-thirds of Kazakhstan's surface area. The largest deserts in the republic are the sandy, barren Qyzylqum, which also occupies part of Uzbekistan, and the clay-crustured Betpak-Dala; both are located in the southern portion of the republic.

Kazakhstan contains extreme variations in elevation. The Tian Shan mountains contain the country's highest point, Hantengri (6,398 m/20,991 ft), which lies in the extreme southeast where the borders of Kazakhstan, Kyrgyzstan, and China meet. The Altay Mountains along the country's eastern border also contain high peaks. Kazakhstan's lowest elevation is found in the extreme southwest, just east of the Caspian Sea, where the Karagiye Depression lies 132 m (433 ft) below sea level. The area north of the Caspian, in northwestern Kazakhstan, is occupied by the Caspian Depression, which also extends into Russia.

### 1.1.3 Rivers and Lakes

Kazakhstan contains an extensive network of rivers and several large lakes. Many of Kazakhstan's rivers drain within the republic, although the Ishim, Irtysh, and Tobol rivers flow north into Russia and eventually drain into the Arctic Ocean. Due to dry weather conditions, the riverbeds of most of the republic's small and medium-sized rivers remain dry for much of the year.

One of Kazakhstan's largest rivers, the Syr Darya, enters Kazakhstan in the south and follows a northwesterly course toward the northern portion of the Aral Sea, a saltwater lake on Kazakhstan's border with Uzbekistan.

The Ural River, which flows south from Russia, enters northwestern Kazakhstan and drains into the Caspian Sea, a saltwater lake that is the largest inland body of water in the world. The Caspian borders five countries and delineates roughly half of Kazakhstan's western border. Another large river, the Ili, enters Kazakhstan from China and drains into Lake Balqash, a large lake in the eastern part of the country. A dam that was completed on the Ili in 1970 has reduced inflow to Lake Balqash, causing the lake's surface level to lower. Other large lakes in Kazakhstan include the freshwater lake Zaysan and the saltwater lakes Alakol and Tengiz.

### 1.1.4 Plant and Animal Life

Forested areas amount to only 4 percent of Kazakhstan's territory, as the steppes and deserts are virtually treeless. Drought-resistant plants such as wormwood, tamarisk (salt cedar), and feather grass are native to the steppes, although grain crops have largely supplanted native vegetation in the northern steppes. Scrub plants are common in the Qyzylqum desert. Thickets of elm, poplar, reeds, and shrubs grow along the banks of rivers and lakes. Coniferous trees, such as spruce, larch, cedar, and juniper, grow in thick forests on the mountain slopes in the extreme east and southeast.

Animal life in Kazakhstan varies by region. The republic is home to the extremely rare saiga antelope, which is protected by government decree. The saiga inhabits the steppes, as do roe deer, wolves, foxes, and badgers. Various animals thrive in the deserts, including gazelles; rodents, such as gophers, sand rats, and jerboas; and reptiles, such as lizards and snakes. Wild boars, jackals, and deer are found near the rivers and lakes. The mountains are home to ibex (wild goats), lynx (wildcats), wolves, wild boars, and brown bears. The endangered snow leopard, which has long been illegally hunted for its fur, also lives in the mountains, preying on ibex. Kazakhstan's many different species of birds include ring-necked pheasants, partridges, black grouse, hawks, and falcons, all of which are native to the steppes. Eagles nest mostly in the mountainous regions.

### 1.1.5 Natural Resources

Only 11 percent of Kazakhstan is cultivated, and the northern steppes are the most intensely farmed area. Kazakhstan contains vast mineral resources, with significant deposits of coal, iron ore, manganese, bauxite, chromium, tungsten,

uranium, gold, silver, and other minerals. Kazakhstan also has large reserves of petroleum and natural gas in the western Caspian Sea area.

#### 1.1.6 Climate

The climate of Kazakhstan is extremely continental, with hot summers and cold winters. Temperatures vary immensely by region, with the most dramatic differences between the deserts and mountains. The southern regions have milder winters and hotter summers than the northern and central regions. The steppes experience especially harsh winters due to strong, cold winds from the north. Depending on the region, the average daily temperature in January ranges from  $-19^{\circ}$  to  $-4^{\circ}$  C ( $-2^{\circ}$  to  $25^{\circ}$  F), while in July it ranges from  $19^{\circ}$  to  $26^{\circ}$  C ( $66^{\circ}$  to  $79^{\circ}$  F). Extreme summer temperatures can reach  $45^{\circ}$  C ( $113^{\circ}$  F), and extreme winter temperatures can fall below  $-45^{\circ}$  C ( $-49^{\circ}$  F). Annual precipitation levels are generally low, ranging from less than 100 mm (4 in) in the deserts to between 250 and 350 mm (10 and 14 in) on the steppes, where summer thunderstorms often produce flash floods. During winter, most of the country is covered in snow. In the mountains, where peaks are perpetually snow-capped, precipitation averages 1,500 mm (60 in) per year.

#### 1.1.7 Environmental Issues

The environment of Kazakhstan began to suffer serious harm during the Soviet period. The country now faces an urgent need to address the Soviet legacy of ecological mismanagement.

Between 1949 and 1991 the Soviet government conducted about 70 percent of all of its nuclear testing in Kazakhstan, mostly in the northeastern area near the city of Semipalatinsk. Nearly 500 nuclear explosions occurred both above and below ground near Semipalatinsk, while more than 40 nuclear detonations occurred at other testing grounds in western Kazakhstan and in the Qyzylqum desert. More than 1 million of Kazakhstan's inhabitants were exposed to dangerous levels of radiation. In 1991 the government of Kazakhstan put a stop to nuclear testing. However, the testing grounds, and perhaps even underground aquifers (water-bearing layers of rock, sand, or gravel), remain highly contaminated.

Another ecological disaster area in Kazakhstan is the Aral Sea, which is split roughly in half between Kazakhstan and Uzbekistan. The Aral Sea has shrunk to less than half its former size since the early 1960s, when the Soviet government initiated a drive to increase cotton yields in the arid lands of Central Asia. Excessive irrigation substantially decreased inflow to the Aral, and the Aral's shoreline began to recede rapidly. This has caused severe environmental problems in the Aral Sea basin, including the destruction of wildlife habitat as a result of desertification (a process whereby previously habitable or arable land becomes desert).

Kazakhstan also faces the problem of urban pollution, particularly in its eastern cities, which receive harmful emissions from lead and zinc smelters, a uranium-processing mill, and other industries.

Other environmental issues in Kazakhstan include soil pollution from the overuse of pesticides in agriculture and the increasingly polluted waters of the Caspian Sea.

### 1.1.8 The People of Kazakhstan

In 2004 Kazakhstan had an estimated population of 15,143,704 (July 2004). Some 61 percent of the population lives in urban areas, making Kazakhstan the most urbanized of the Central Asian republics. The republic's larger cities include Almaty, the former capital; Karagandy, Shymkent, Pavlodar, Taraz, Ust-Kamenogorsk. Astana, which became the capital in late 1997, is a relatively small city located in the north.

The population of the Republic of Kazakhstan includes a number of ethnic groups: Kazakh 53.4%, Russian 30%, Ukrainian 3.7%, Uzbek 2.5%, German 2.4%, Uygur 1.4%, other 6.6% (according to 1999 census)

The official language of Kazakhstan is Kazakh, which belongs to the Kipchak (or Western Turkic) branch of the Turkic languages.

Russian is the most widely spoken language in Kazakhstan and the primary language of interethnic communication.

### 1.1.9 Economy

Kazakhstan, the second largest of the former Soviet republics in territory (after Russia) possesses enormous fossil fuel reserves as well as plentiful supplies of other minerals and metals. It also is a large agricultural - livestock and grain - producer. Kazakhstan's industrial sector rests on the extraction and processing of these natural resources and also on a growing machine-building sector specializing in construction equipment, tractors, agricultural machinery, and some defense items. The breakup of the USSR in December 1991 and the collapse in demand for Kazakhstan's traditional heavy industry products resulted in a short-term contraction of the economy, with the steepest annual decline occurring in 1994. In 1995-97, the pace of the government program of economic reform and privatization quickened, resulting in a substantial shifting of assets into the private sector. Kazakhstan enjoyed considerable economic growth in 2000-01 - and solid 9.5% growth in 2002 - thanks largely to its booming energy sector as well as to economic reform, good harvests, and foreign investment. The opening of the Caspian Consortium pipeline in 2001 from western Kazakhstan's Tengiz oilfield to the Black Sea substantially raised export capacity. The country has embarked upon an industrial policy designed to diversify the economy away from overdependence on the oil sector, by developing light industry.

### 1.1.10 Industry

The leading branches of industry in Kazakhstan are mining, oil extraction, energy production, and manufacturing, namely, refining ores, creating petrochemicals, and processing agricultural products. Other sectors include heavy engineering works, which produce machinery and machine tools, and light manufacturing such as the production of textiles.

Electricity is mostly generated in thermal plants, nearly all of which burn coal. Hydroelectric facilities produce 12 percent of the electricity. Kazakhstan has one nuclear power plant located at Aktau.

### 1.1.11 Currency

Kazakhstan's currency is *tenge* which was introduced on November 15, 1993. The *tenge* is allowed to be freely exchanged with the currencies of other countries.

## 1.2 Text B. The Republic of Kazakhstan

### 1.2.1 Read and translate the text.

The Republic of Kazakhstan is an independent state, situated in the central part of Eurasia. Kazakh is the official language; Russian is the language of international communication.

The total length of state borders is over 15000 km. It is the ninth biggest country in the world with the territory 2,7 million square km. The territory of Kazakhstan stretches 3000 km from west to east and 1600 km from north to south. In the west and north Kazakhstan borders on Russian Federation, in the south - on Turkmenia, Uzbekistan, Kirgiziya, in the east - on China.

The relief of the country varies very much. If you look at Kazakhstan from the space, you will see high ice-covered mountains, hills and highlands. Vast plains and lowlands stretch like green lines. The country spreads from Western-Siberian plain in the north to the Tian Shan Mountains in the south and from the Lower Volga in the west to the Altai in the east. There are quite a lot of rivers and lakes in Kazakhstan. The main rivers are the Irtysh, the Ural, the Chu, and the Syrdarya. The main Lakes are Balkhash, partly Aral and the Caspian Sea.

The country is situated far from the oceans. The climate is sharply continental and zonelike due to its vast territory. The average winter temperature in the north is about — 20°C. In the central parts winters are not so cold, but in the south they are mild and warm.

Summer is dry; in the south it is hot. In the mountains it is short. The summer temperature in the north is about +20° C, in the central parts it is +30°C. In the south it can reach +45°C.

The Republic of Kazakhstan consists of 14 oblasts and 2 cities of republican submission. Nowadays it has 85 cities, 169 regions, 195 settlements and 2150 districts (rural and auls).

The Constitution of the Republic of Kazakhstan is the main law of the country. The first Constitution was adopted on January 28, 1993. It was of certain historical importance in the making of a young sovereign state. The new Constitution was adopted on August 30, 1995 by the all-nation referendum. In 1998 on the President's initiative Parliament made about 20 additions and amendments to the Constitution. These amendments widened Parliament powers and democratic bases of public life.

According to the Constitution, the Republic of Kazakhstan is a unitary state with a presidential form of government. The head of the state is the President. The President

has wide powers. He forms government, appoints a Prime Minister with the Parliament's consent and releases him from office. The President is the Commander-in-Chief of the Armed Forces of the Republic. The first President of the country, N.A.Nazarbayev was elected in 1991. The President in accordance with the Constitution is elected for a five-year term.

But this term is prolonged to seven years under the amendments to the Constitution of 1998. In 1999 extraordinary elections of the President took place and N.A.Nazarbayev won them. The highest representative body performing legislative functions is Parliament of the Republic of Kazakhstan. Parliament consists of two structures: upper chamber — the Senate and lower chamber — the Majilis. The Senate is composed of deputies elected in twos from each oblast, major city and the capital of the Republic. Seven deputies of the Senate are appointed by the President.

The Majilis consists of deputies elected in constituencies having one mandate. Parliament's term of powers is four years.

The Government is the highest body implementing the executive power. The head of the government is the Prime-Minister. He is appointed by the President with the Parliament's consent. The Government develops the main directions of the social-economic policy of the state, its defense capability, security, guarantee of public orders. Judicial power is exercised by the Supreme Court and local courts. The main achievements in judicial bodies reforming are reflected in the constitutional law of the Republic of Kazakhstan. Local representative bodies — maslikhats - express the will of the population of corresponding administrative - territorial units. Local executive power is exercised by oblast administration - akimats with akims of the oblasts at the head. Akims of the oblasts are appointed by the President of the country on the recommendation of the Prime-Minister.

Nowadays the Republic of Kazakhstan being an independent state is striving to become one of the 50 developed countries of the world.

### **1.3 Text C. The Constitution of the Republic of Kazakhstan**

#### 1.3.1 Read and translate the text.

The Constitution of the Republic of Kazakhstan is the main law of the country. The first Constitution was adopted on January 28, 1993. It was of certain historical importance in the making of a young sovereign state. The new Constitution was adopted on August 30, 1995 by the all-nation referendum. In 1998 on the President's initiative Parliament made about 20 additions and amendments to the Constitution. These amendments widened Parliament powers and democratic bases of public life.

The Constitution of the Republic of Kazakhstan adopted at an all-nation referendum comes into effect from the day of official publication of the results of the referendum with the simultaneous termination of the functioning of the previously adopted Constitution of the Republic of Kazakhstan. The day of adoption of the Constitution at the all-nation referendum is proclaimed a national holiday - the Constitution Day of the Republic of Kazakhstan.

The Constitution consists of nine sections. They are:

1. General Provisions
2. The Individual and the Citizen
3. The President
4. The Parliament
5. The Government
6. The Constitutional Council
7. Court and Justice
8. Local Public Administration and Self-Administration
9. Concluding and Transitional Provisions

Each Section includes a number of Articles. Thus, the whole Constitution consists of 98 Articles. They cover all spheres of people's life as well as activities of governmental bodies. Though some changes in the Constitution can be made by the Parliament, it is a fundamental official document of the Republic of Kazakhstan.

Amendments and additions to the Constitution of the Republic of Kazakhstan may be introduced only by an all-nation referendum held by the decision of the President of the Republic made on his own initiative, at the recommendation of Parliament or the Government.

The unitary status and territorial integrity of the Republic, the forms of the government may not be changed.

### 1.3.2 General Provisions of the Constitution

In the first section of the Constitution the Republic of Kazakhstan is stated to be a democratic, secular, legal and social state whose highest values are an individual, his life, rights and freedoms. The fundamental principles of the activity of the Republic are public concord and political stability as well as economic development for the benefit of the entire nation.

According to the Constitution, the Republic of Kazakhstan is a unitary state with a presidential form of government. The sovereignty of the Republic extends to its entire territory. The administrative and territorial division of the Republic of Kazakhstan, location and status of its capital are determined by law.

In conformity with the articles of the Constitution the people is the only source of state power. The people exercise power directly through an all-nation referendum and free elections as well as delegate the execution of their power to state institutions. Nobody has the right to appropriate power in the Republic of Kazakhstan.

The Constitution has the highest juridical force and direct effect on the entire territory of the Republic.

The Republic of Kazakhstan recognizes ideological and political diversity.

The Republic of Kazakhstan recognizes and by the same token protects state and private property. The land and underground resources, waters, flora and fauna, other natural resources are owned by the state. The land may also be privately owned on terms, conditions and within the limits established by legislation.

The state language of the Republic of Kazakhstan is the Kazak language. In state institutions and local self-administrative bodies the Russian language is officially used on equal grounds along with the Kazak language.

The Republic of Kazakhstan respects principles and norms of international law, pursues the policy of cooperation and good-neighborly relations between states.

The Republic of Kazakhstan has its state symbols - the flag, emblem and anthem. Their description and order of official use are established by the constitutional law.

### 1.3.3 The President

The President of the Republic of Kazakhstan is the head of state, he determines the main directions of the domestic and foreign policy of the state and represents the Republic of Kazakhstan within the country and in international relations. All power branches (legislative, executive and judicial) are checked and balanced by the President.

According to the Constitution of the Republic of Kazakhstan, the President shall:

- 1) sign the laws of republican significance or return them to the Senate of Parliament for a second discussion and vote. In case the Senate of Parliament confirms its previous position by a majority of not less than two thirds of the votes, the President is obliged to sign the law.
- 2) appoint the Prime Minister, the Chairperson of the National Bank, the State Secretary of the Republic of Kazakhstan, the Procurator General and Chairperson of the Committee of National Security of the Republic and some others, with the Parliament's consent; release them from office;
- 3) act as the Commander-in-Chief of the Armed Forces of the Republic, appoint and replace the highest command of the Armed Forces;
- 4) in the event of a serious and immediate threat to the Republic, its independence, etc., the President has the right to use the Armed Forces of the Republic having had an official consultation with the Parliament;
- 5) exercise other powers in accordance with the Constitution and the laws of the Republic.

The President of the Republic of Kazakhstan shall issue decrees and resolutions of republican significance.

In accordance with the Constitution the President of the Republic of Kazakhstan may be prematurely released from office in the case of continued incapacity to perform his duties due to illness. In case of premature release or discharge of the President from office as well as in case of his death the powers of the President of the Republic shall be transmitted to the Chairperson of the Senate of the Parliament for the rest of the term.

At the present moment the president of the Republic of Kazakhstan is Nursultan Abishevich Nazarbayev, who was elected in April, 1990. On December 1, 1991 he was elected as the President by nation-wide ballot.

### 1.3.4 The Individual and Citizen

The citizens of our republic, their rights and freedom occupy the central position in the Constitution of Kazakhstan. There are 29 articles which consider all

sides of people's lives: public and private life, family, job, education, health and what not.

A human presents utmost value for the country and his rights are recognized and guaranteed in accordance with this Constitution. The most important of them are as follows: the right to be equal before the law and court; the right to life; the right to personal freedom; the right to inviolability of private life, personal or family secrets, protection of honor and dignity. Besides the constitution proclaims democracy and consequently it gives citizens freedom of speech and creative activities; freedom of receiving and disseminating information; freedom of conscience; freedom of labor, freedom to choose occupation and profession and so on.

Some articles stipulate the well-being of any citizen; thus it is said that conditions are created in the Republic of Kazakhstan to provide citizens with housing. Citizens in need of housing are categorized in a manner to be prescribed by law and provided with housing at an affordable price from the state housing funds in accordance with the norms stipulated by law. Also people of our country are guaranteed a minimum wage and pension, and guaranteed social security in old age, in case of disease, disability or loss of a breadwinner and other legal grounds.

According to the constitution citizens should be provided with free treat and education. It states that citizens of the Republic are entitled to free, guaranteed, extensive medical assistance established by law and guaranteed free secondary education in state educational establishments. Secondary education is obligatory. The young people have the right to receive on a competitive basis a higher education in a state higher educational establishment.

Analyzing the second paragraph devoting to the individuals and citizens we may affirm that our law takes care, defends, and guarantees security and well-being for people of the Republic of Kazakhstan.

### 1.3.5 Parliament

The fourth sector of the Constitution is dedicated to Parliament of the Republic of Kazakhstan. It covers 15 articles and each of them reveals certain issues concerning Parliament.

First of all Parliament of the Republic of Kazakhstan is determined as the highest representative body of the Republic performing legislative functions. Besides it is stated that the organization and activities of Parliament, the legal status of its deputies are determined by constitutional law.

According to the constitution the parliament is divided into two Houses: Senate and Majilis. It stipulates the quantity of deputies in each House, the necessary requirements for being a deputy, their powers, rights and prohibitions and at last schedules of actions on elections to the Senate and the Majilis of the Republic of Kazakhstan.

Speaking about the obligations and rights of the deputies of the parliament it is necessary to point out that they must take part in its work. Absence of a deputy at sittings of the Houses and their bodies without a good reason for more than three times causes the imposition of penalties established by law. A deputy of Parliament

have no right to be a deputy of another representative body, hold other paid offices, except teaching, research and creative activities.

The powers of the deputies of Parliament are terminated in cases of resignation, being recognized as incapable, dissolution of Parliament and in other cases stipulated by the Constitution.

Both Houses take part at the joint and separate sessions where the deputies discuss and solve different problems and questions.

The Constitution obliges them to introduce amendments and make additions to the Constitution; adopt constitutional laws; approve the republican budget, decide issues of war and peace; establish the procedure for resolving the issues of the administrative-territorial division of the Republic of Kazakhstan; decide issues of state loans and rendering of economic and other assistance by the Republic and so on.

Thus the Constitution of the Kazakhstan is fundamental document regulating the activities of the Parliament and stating its powers and obligations.

### 1.3.6 Government of the Republic of Kazakhstan

In compliance with the Constitution, the Government is the highest body implementing the executive power of the Republic of Kazakhstan, it stands at the head of the system of executive bodies and governs their activities.

The head of the government is the Prime-Minister. He is appointed by the President with the Parliament's consent. The Government is formed by the President on presentation made by Prime Minister within ten days after his appointment. Members of the Government take an oath of office to the people and the President of the Republic.

The Government develops the main directions of the social-economic policy of the state, its defence capability, security, guarantee of public orders. The Government in its activity is responsible before the President as well as accountable to the Parliament. It acts within the term of President's power and resigns its powers to the newly elected President. The President of the Republic has the right on his own initiative to adopt a decision to terminate the powers of the Government and to release any of its members from their offices.

According to the Constitution the Government will:

- 1) present to the Parliament the republican budget and a report about its performance;
- 2) introduce draft of laws into the Majilis and ensure enforcement of laws;
- 3) organize management of state property;
- 4) develop measures for the conduct of the foreign policy of the Republic of Kazakhstan;
- 5) manage the activity of ministries, state committees, other central and local executive bodies;
- 6) appoint to and release from office heads of central executive bodies;
- 7) perform other functions assigned to it by the Constitution, laws and acts of the President.

In compliance with the Constitution the Prime Minister of the Republic of Kazakhstan shall organize and supervise the work of the Government, personally answer for its work.

Within a month after his appointment he shall present to the Parliament a report about the Program of the Government. The Prime Minister signs resolutions of the Government and reports the main directions of the Government's activity to the President.

### 1.3.7 Constitutional Council of the Republic of Kazakhstan

It originates from August 1995 in accordance with the Constitution of the Republic of Kazakhstan.

The Constitutional Council consists of 7 members whose powers last for six years. Ex-presidents of the Republic are to be members of the Constitutional Court for life.

Chairman of the Constitutional Council is appointed by the President of the Republic and in case of equal division of votes, his vote is decisive. Two members of the Constitutional Council are appointed by the President of the Republic, two - by the Chairperson of Senate, and two - by the Chairperson of the Majilis. Half of the members of the Constitutional Council shall be renewed every three years.

The position of the Chairman and the CC member is incompatible with the Deputies' mandate, occupation of other paid posts other than teaching, scientific or any other creative activity; involvement in private business undertakings, entry into the leading body or Advisory council of any commercial entity.

The Constitutional Council organization and activity is regulated by the Constitutional Law.

The Constitutional Council under the appeal of the RK President, Prime Minister, Senate and Mazhlis Chairmen, not less than by 1/5 of the total number of Parliament Deputies:

- decides on the correctness of conducting the elections of the President of the Republic, deputies of Parliament, and conducting an all-nation referendum in case of dispute;
- examines before signing by the President the laws adopted by the Parliament to their conformity to the RK Constitution;
- examines before ratification international agreements of the RK to their conformity to the Constitution;
- gives official interpretation of the Constitution norms;
- gives resolutions on observance of Constitution procedures;

The decisions of the Constitutional Council come into force on the date of their adoption, and are binding on the RK territory, final and are not subject to appeal.

### 1.3.8 Local and Public Administration and Self-Administration

In conformity with the Constitution local public administration is exercised by local representative and executive bodies which are responsible for the state of affairs of the respective territory. Local representative bodies - maslikhats - express the will of the population of respective administrative-territorial units and determine the measures needed for its realization, and control their performance.

According to the Constitution the jurisdiction of maslikhats includes:

- approval of plans, economic and social programs for development of the territory, local budget and reports of their performance;
- decision of issues of local administrative-territorial organization;
- consideration of reports by heads of local executive bodies;
- formation of standing commissions and other working bodies of a maslikhat, decision of issues connected with organization of the work of a maslikhat;
- exercise other authorities for insuring of the rights and interests of citizens in accordance with the legislation of the Republic.

The powers of a maslikhat is prematurely terminated by the Senate according to the law as well as in the case of a decision about self-dissolution.

In accordance with the Constitution local executive bodies – akimats - insure conducting of the general state policy of the executive power in conformity with the interests and needs of the respective territory.

According to the Constitution the jurisdiction of akimats includes:

- development of drafts of plans, economic and social programs for development of the territory, local budget and provision of their realization;
- management of public property;
- appointment to and release from office the heads of local executive bodies, resolution of other issues connected with organization of the work of local executive bodies;
- exercise other powers in accordance with the legislation of the Republic in the interests of local public administration.

A local executive body (akimat) is headed by an akim who is a representative of the President and the Government of the Republic.

### 1.3.9 Elections

The republic of Kazakhstan is democratic and sovereign state, where people are the only source of state power. They exercise power directly through an all-nation referendum and free elections.

The President of the Republic is elected by people of Kazakhstan under a secret ballot for a seven-year term. The Constitution lays down that no one can hold this office for more than two terms. Any citizen of the Republic of Kazakhstan can be eligible for the office of the President if:

- he is by birth not younger than forty
- has a perfect command of the state language
- has lived in Kazakhstan for not less than fifteen years.

The candidate who receives more than 50 percent of the votes is considered to be elected. If none of the candidates receives the above number of votes, a second round of elections is held between the two candidates who got the largest number of votes. The candidate who receives the larger number of votes is elected.

The two Chambers of the Parliament of the Republic of Kazakhstan are formed by deputies elected in different ways and on various terms.

Elections of the deputies of the Majilis are carried out on the basis of the universal, equal and direct right under secret ballot. Regular elections of the deputies

of the Majilis are held no later than two months before the termination of the powers of current Parliament. The elections of the deputies of the Senate are carried out on the basis of indirect electoral right under secret ballot. Half of the elected deputies of the Senate are re-elected every three years.

A deputy of the Senate may be a citizen of the Republic of Kazakhstan who has been a citizen of the Republic for not less than five years and who has reached thirty years of age, has a higher education and length of service of not less than five years. A deputy of the Majilis may be a citizen of the Republic of Kazakhstan who has reached twenty-five years of age. A candidate is deemed elected if he receives more than fifty percent of the votes.

Maslikhats are elected by the population on the basis of universal, equal suffrage under secret ballot for a four -year term. A deputy of a maslikhat may be a citizen of the Republic of Kazakhstan who has reached twenty years of age. A citizen of the Republic may be a deputy of only one maslikhat.

## UNIT 2 EDUCATION

**2.1 Text A. The Bologna Declaration of 19 June 1999. Joint Declaration of the European Ministers of Education**

2.1.1 Read the text and find the main objectives set forth in this document.

The European process, thanks to the extraordinary achievements of the last few years, has become an increasingly concrete and relevant reality for the Union and its citizens. Enlargement prospects together with deepening relations with other European countries provide even wider dimensions to that reality. Meanwhile, we are witnessing a growing awareness in large parts of the political and academic world and in public opinion of the need to establish a more complete and far-reaching Europe, in particular building upon and strengthening its intellectual, cultural, social and scientific and technological dimensions.

The importance of education and educational co-operation in the development and strengthening of stable, peaceful and democratic societies is universally acknowledged as paramount.

The Sorbonne Declaration of 25th of May 1998 stressed the Universities' central role in developing the Bologna Declaration – the Declaration signed by 29 countries pledging to restructure their higher-education systems in an effort to create a coherent, compatible and competitive European Higher Education Area by the year 2010.

**2.1.2 European Cultural Dimensions**

The Bologna Declaration emphasized the creation of the European area of higher education as a key way to promote citizens' mobility and employability and the Continent's overall development.

Several European countries have accepted the invitation to commit themselves to achieving the objectives set out in the declaration, by signing it or expressing their agreement in principle.

European higher education institutions have accepted the challenge and taken up the main role in constructing the European area of higher education. This is of the highest importance to ensure that higher education and research systems continuously adapt to changing needs, society's demands and advances in scientific knowledge.

**2.1.3 The Bologna Process as a Stimulator of Academic Mobility**

Adoption of a system of easily readable and comparable degrees, also through the implementation of the Diploma Supplement, in order to promote European citizens employability and the international competitiveness of the European higher education system.

- Adoption of a system which is essentially based on two main cycles: undergraduate and graduate. Access to the second cycle shall require successful completion of first cycle studies, lasting a minimum of three years. The degree

awarded after the first cycle shall also be relevant to the European labour market as an appropriate level of qualification. The second cycle should lead to the master and/or doctorate degree as in many European countries.

- Establishment of a system of credits - such as in the ECTS system - as a proper means of promoting the most widespread student mobility. Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognized by receiving Universities concerned.
- Promotion of mobility by overcoming obstacles to the effective exercise of free movement with particular attention to:
  - students' access to study and training opportunities and related services;
  - recognition and of periods spent in European context researching, teaching and training.
- Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies.
- Promotion of necessary European dimensions in higher education, particularly with regards to curricular development, interinstitutional cooperation, mobility schemes and integrated programmes of study, training and research.

We undertake to attain these objectives - within the framework of our institutional competences and taking full respect of the diversity of cultures, languages, national education systems and of University autonomy - to consolidate the European area of higher education.

#### 2.1.4 The Europass Diploma Supplement

The Europass was established to record student qualifications and competencies, opening doors to learning and working in Europe. It consists of five documents: Europass Curriculum Vitae (CV), Europass Language Passport, Europass Certificate Supplement, Europass Diploma Supplement, and Europass Mobility.

The Europass Diploma Supplement is issued to graduates of higher educational institutions together with their graduation diploma. It promotes transparency between higher educational systems, provides accurate and up-to-date information on the an individual's qualifications. It aids the mobility and access to further study and employment abroad. Thus it helps to ensure that higher education qualifications are easier understood outside the country where they were awarded.

#### 2.1.5 The Structure and Net of Higher Education System

The structure of higher professional education in the Republic of Kazakhstan is as follows:

- higher basic education (bachelor degree);
- higher special education;
- higher scientific-pedagogic education (master degree).

There are various ways to get higher education – through day-time training, courses by correspondence, distance education and external studies. At present higher education institutions can be divided into three types: classical universities, profile

universities or academies, and institutes which also refer to higher education institutions of university type.

## **2.2 Text B. Tertiary System of Education. Advantages of Getting Tertiary Education**

2.2.1 Read and translate the text.

### **Advantages of Getting Tertiary Education**

Although the system of education in every country varies, getting a tertiary education is still essential. Most countries allow its citizens to get a good paying job right after a high school education but most do not get far from having to work menial careers. This is because companies will always be in need of workers who have good educational background to pursue a promotion although workers who have shown exemplary skills without attaining a tertiary education are also considered and assisted to get a degree in related courses.

For most people, finishing high school and getting usual jobs is more than enough. Even with strong desire it is not always possible to pursue tertiary education due to different financial constraints. On the one hand, there are a lot of programs offered by the government to assist prospective students who aim to continue their education. Scholarship grants from different universities and colleges will help you get a degree if you have passed several tests. A strong GPA from high school is also needed from applicants who wish to pursue their studies. On the other hand, for those who have already proceeded to the tertiary education level but unfortunately stopped schooling, a good GED or its equivalent will get prospective individuals a chance to continue and eventually finish a degree.

Getting higher education, attending colleges and universities will help you experience a lot of things that are not present during high school. You will be able to experience a diverse and rich social influence from different students coming from various walks of life. In addition, since there are a lot of possible courses you can take for a future career, a BA degree will be able to help you get started in reaching your goal.

Moreover, those who have attended a university and are able to get a degree receive a higher rate of salary compared to those who have not completed any. Aside from competitive rates offered to degree holders, a wider scale of opportunities from different industries can be taken if you are a degree holder. There are also a lot of things to learn in higher education classes that were not discussed in high school.

The cost for getting tertiary education is expensive especially for majors that specialize in different various fields of study including medicine, research and the like. Although you might think that studying higher education is difficult to attain due to financial restrictions, support from the government and private sectors can always be applied for. Higher education does not literally mean getting honors and citations from school, it means that you have finished and obtained a BS, Foundation Degree, HNC or a Diploma of Completion of Higher Education. This will also prove your competency in a specific field of study.

### 2.2.2 Studying to Complete an AA Degree

A lot of people have a misconception when it comes to the difference of a BS from an AA Degree. Although both are still a part of the tertiary education, getting a BS is entirely different from the other. AA stands for an Associate in Arts Degree where a student pursues higher education that is less in number of years to complete. Typically, a Bachelor's degree will take about 4 years or more to finish while an Associate degree will take 2 years to complete. In terms of career advancement, those who have a BS are likely to advance although potential promotions can also be given to workers possessing an AA Degree.

An Associate in Arts Degree can lead to future educational advancement leading to a Bachelor's degree. For those who are facing current financial restrictions, an AA Degree is a popular choice since it costs less than a BS Degree. Unemployment rate for Associate degree holders is also lower compared to those who were able to finish high school only. It is also faster to finish that means earning what has been spent during the years of study will be returned shortly. Further, a lot of companies are offering educational assistance for workers who wish to advance their education. If you have an Associate degree in arts, you can take up any major that will lead to a Bachelor's degree after completion.

Studying for higher education can help you advance to better career opportunities and getting an Associate degree will demonstrate your competency in a specific field. It can also boost your level of self confidence knowing that you have surpassed high school and demonstrated your ability to study.

Once you choose to advance into getting a BS degree, a prior Associate degree in arts will help you to complete it in a less time frame. The moment you get a BS degree, the subjects that you have previously taken will be accredited. This means that you do not have to retake subjects that can save you both money and time. Rewarding compensations and great deals are waiting right after you have advanced your Associate degree to a BS degree.

### 2.2.3 Getting a BA Degree

There are a lot of advantages that you can get from pursuing a BA Degree. Although there are jobs available for people who did not pursue tertiary education, chances of getting promoted is minimal. A Bachelor's Degree can lead to wider opportunities in different industries. Salary rates are also competitively higher than those who are undergraduates or graduates from high school. Another advantage that you can have is the continuous employment opportunities offered by different companies. A BA Degree is your passport to unveiling wider and more productive careers.

According to a 2002 survey, those who have obtained a Bachelor's Degree were able to find more job opportunities than those who were not able to proceed in getting higher education. In the same survey, those who were able to possess a BA Degree got higher salary rates than those who were not able to finish a university degree. In other words, completing a course from a credible institution will enable you to set a foot forward from other aspiring job candidates. Aside from that, you will be on top of the game play since getting a job is a tough competition nowadays.

Prior to getting a Bachelor's, you have to decide what field of study you are interested in. This will help you avoid shifting from one major to another in confusion of what you really like. Prospective students should think about the most marketable majors that would include familiar subjects on English and History. Since there will always be a strong demand for teachers, doctors and nurses, getting higher education in these fields will help you to achieve a diploma. At the same time, your chances of getting a job are increased following the demand for workers in these fields.

However, some people are hindered towards getting close to finishing a Bachelor's degree from a reputable school. This is because education is indeed expensive and not all can afford to have a good one. Because of this, those who are supposed to be in school are forced to drop out and start working menial jobs to earn a living. On the contrary, scholarships for those who are holding excellent high school GPAs or its equivalent are given. School fees, uniform and even daily costs of transportation are included in some programs provided that you pass a qualifying exam. The government also provides student loans where a study now pay later program can be taken. Other private sectors are giving financial assistance to qualified students with financial restrictions and you can also apply for evaluation.

Getting a BA Degree is essential to have a brighter future ahead of you. Aside from getting a good career with high compensations, you will also bear self confidence from finishing higher education. With a BA, you can always have the opportunity to advance your educational attainment through studying a masters and even pursuing a doctorate degree. As long as you have finished a bachelor's degree, advancing to an even higher education is not impossible.

#### 2.2.4 What is a Baccalaureate Degree?

Understanding the concepts behind a Baccalaureate Degree will help you know what the degree is all about. This is also a common question for some prospective students that will need definite answers to help in getting higher tertiary education. Although you might think that it is different from a Bachelor's Degree, they are no less from each other. Baccalaureate came from the Latin word *baccalarius* meaning bachelor. When referring to it as a part of higher education, it would also mean a Bachelor's Degree taken from a university or a community college.

Since a Baccalaureate Degree is similar to a BA or BS, you can complete this in a matter of 4 years or more. Commonly, a major would require you to accomplish 120 credit hours that are divided per unit in every semester. There are different subjects that you can study when taking a Bachelor's Degree. Familiar majors such as English, Math and History can be taken although there are other courses that can be applied for. Application to a reputable institution for a degree needs a lot of requirements prior to admission. This is to assess the learning competency of a student especially that rigorous course load you have to expect from a full-time study. Prior to admission, you will be required to submit your high school report card and good moral character certificate. A GED or its equivalent is also acceptable for assessment and get accredited then you will not need to retake subjects that you have already taken before.

It is essential to get a Bachelor's Degree to have innumerable chances of getting promoted to a higher position. As the 21st century took its turn, even entry level jobs require most applicants to have a Baccalaureate Degree. Due to this requirement, getting a BA or BS will get your application on top of other applicants. A Bachelor's Degree is your gateway to a brighter future. It is also a good way to boost your self esteem knowing that you have advance to a higher level of education. Further, it will also help you to qualify for a position in a company since the competition in finding a job is tough.

### 2.2.5 Studying for MS Degree

A lot of people do not understand the need for studying a MS Degree. To some, this is only additional cost of education. However, taking a Master of Science Degree will allow you innumerable opportunities and endless ways to advance in your career. You also have to consider that employers will give competitive compensations the moment you possess a Master's Degree. Endless opportunities also wait for those who have taken a further step in advancing their education. Although studying a Masters Degree may mean additional cost of expenses, you will be able to return your investment shortly. Depending on your major, a Master's Degree is not entirely long to complete making it easier for you to get a good job with high paying salary.

A MS Degree does not necessarily mean you have to take similar studies with your BS or BA. For some people, getting a Master's Degree can be a great shift from one course to another. For instance, if you obtained a Bachelor's Degree in English, yet want to be a guidance counselor, you can always seek a Masters for Counseling. This type of education advancement will allow you to continuously accumulate higher levels of learning in a specific field. A rich and diverse environment also comes with studying this course since you will meet a lot of degree holders from different fields.

Getting a MS Degree is not really long to complete. With a Bachelor's Degree on hand, you will be able to complete your studies in a period of 2 years. After which, a broader scope of career is opened for your advantage. Take note that a Masters will open a lot of career opportunities including personal and professional growth. During a Master's Degree class, you will be directed to numerous seminars where open discussions are usually made. This is like taking an undergraduate class although a more specific study to advance learning is driven. You also have to remember that because it is shorter to complete, you have to expect a rigorous study program. Before the semester ends for graduating students, a research paper or a Master's thesis needs to be done. This will also determine your completion of the course after the defense of your paper work.

Written comprehensive examinations are also a part of your MS Degree class. This is also used to gauge a student's competency after several classes, seminars and discussions have been made. There are also other types of Masters aside from the Master in Science. Others include MA, MBA and even MSW for those who are in the social work field. Other Master's Degree will require students to have a practicum or internship class where they are to perform what was learned during the entire period

of taking the class. All of these degrees are part of the higher tertiary education that can be taken to advance different fields of study. By having a Master's Degree, your chance of getting promoted from your current position at work is increased.

## UNIT 3 UNIVERSITIES AND DEGREES

### 3.1 Text A. Bachelor Degrees in Different Countries

#### 3.1.1 Read and translate the text.

A bachelor degree is usually an academic degree awarded for an undergraduate course or major that generally lasts for three or four years, but can range anywhere from two to six years depending on the region of the world. In some exceptional cases, it may also be the name of a postgraduate degree, such as a Bachelor of Civil Law, the Bachelor of Music, or the Bachelor of Philosophy.

#### 3.1.2 Canada

Education in Canada is governed independently by each province or territory, so there can be many differences between provinces when it comes to granting of degrees. The western provinces tended to follow American models, while the province of Ontario tended to be a leader in education, with many other provinces adopting its model.

Depending on the province, a bachelor degree takes either three or four years to complete. Most Canadian universities no longer offer three-year pass degrees, and grant four-year degrees exclusively.

#### 3.1.3 England, Wales and Northern Ireland

The degrees awarded carry a designation related to the broad subject area such as BA, BSc, BEng etc. A first degree course is usually three years, but it might be reduced to two either by direct second year entry (for people who have done foundation degrees or changed subject or similar) or by doing compressed courses (which are being piloted by several newer universities).

3.1.4 **Honours degrees** are of a superior academic standard. An honours degree is always awarded in one of four classes depending upon the marks gained in the final assessments and examinations. The top students are awarded a first class degree, the next best, an upper second class degree, the next a lower second class degree, and those with the lowest marks gain a third class degree.

#### 3.1.5 The United States

Bachelor degrees in the United States are typically designed to be completed in four years of full-time study, although some programs (such as engineering or architecture) usually take five, and some universities and colleges, such as Grace College allow ambitious students (usually with the help of summer school and/or high school Advanced Placement courses) to complete them in little three years. Some U.S. colleges and universities have a separate academic track known as an "honors" or "scholars" program, generally offered to the top percentile of students

(based on GPA), that offers more challenging courses or more individually-directed seminars or research projects in lieu of the standard core curriculum.

If the student has completed the requirements for an honors degree only in a particular discipline (e.g., English language and literature), the degree is designated accordingly (e.g., BA with Honors in English). In this case, the degree candidate will complete the normal curriculum for all subjects except the selected discipline ("English," in the preceding example). The requirements in either case usually require completion of particular honors seminars, independent research at a level higher than usually required (often with greater personal supervision by faculty than usual), and a written honors thesis in the major subject.

### 3.1.6 English-Speaking World (British)

The Universities of Oxford and Cambridge are perhaps alone in the United Kingdom today in awarding the BA for all undergraduate degrees. Almost all American universities award both BA and BS degrees, though a number of small liberal arts colleges award only the BA. However, on a global scale, many universities over the last hundred years have expanded the range of bachelor's degrees enormously, especially in countries such as Australia, New Zealand, Pakistan, India, and South Africa.

### 3.1.7 BA, AB, BS, BSc, SB, ScB, BAAS,

Today, the most common undergraduate degrees given are the Bachelor of Arts (*Artium Baccalaureus*) (BA, AB) and the Bachelor of Science (*Scientiæ Baccalaureus*) (BS, BSc, SB, ScB). Originally, in the universities of Oxford, Cambridge and Dublin, all undergraduate degrees were in the Faculty of Arts, hence the degree of Bachelor of Arts. The Bachelor of Applied Arts and Sciences (BAAS) is an undergraduate degree that bridges academic and work-life experiences.

In the United States, many colleges (particularly liberal arts colleges) as well as universities award the Bachelor of Arts for all academic (non pre-professional) subjects. In these institutions, students studying academic subjects (e.g. English, chemistry, etc.) would receive a Bachelor of Arts while students studying for professions (e.g. nursing) would receive a Bachelor of Science. Some schools award the Bachelor of Arts for the humanities and the Bachelor of Science for both natural sciences and social sciences. In some cases a student may choose between a BA course of study and a BS course of study in the same subject at the same college, where the difference in the degrees lies in the core requirements for the degree rather than in the major requirements.

Four American universities (the California Institute of Technology, the Georgia Institute of Technology, the Colorado School of Mines, and the Massachusetts Institute of Technology), the six State Maritime Academies; as well as the five United States Service academies (the Military, Naval, Air Force, Merchant Marine, and Coast Guard Academies) award the Bachelor of Science for all subjects, including subjects that at other institutions would be awarded a Bachelor of Arts (such as literature), though their courses of study are heavily weighted in the sciences and engineering. Harvard University, on the other hand, offers only the degrees

Bachelor of Arts and Bachelor of Liberal Arts except to engineering students who may be awarded a SB in engineering as a supplement to the Bachelor of Arts, which still must be earned first.

### 3.1.8 BDes

The Bachelor of Design (BDes, or SDes in Indonesia) is awarded to those who complete the four or four and a half years course of study in design, usually majoring in a specific field of design such as Interior Design or Graphic Design.

### 3.1.9 Engineering Degrees

The Bachelor of Engineering (*Baccalaureus in Arte Ingeniaria*) degree or Bachelor of Applied Science degree is a professional degree awarded to students who have completed the three or four year course of study in engineering. Common abbreviations include BEng, BE, BSE, BSc, BSEng, BAsC, BTech, BSc(Eng), AMIE, GradiETE. The BAI (Baccalaureus in Arte Ingeniaria) is awarded by the University of Dublin (Trinity College Dublin); some South African Universities refer to their Engineering degrees as BIng (Baccalaureus Ingeniaria).

There are more specific variants for many subfields, such as the BSEE degree (*Bachelor of Science in Electrical Engineering*). The BSE and BSEng (Bachelor of Software Engineering) are awarded by the University of Waterloo and the University of Victoria, respectively. In India the Bachelor of Engineering, Bachelor of Technology and AMIE (Association of Membership of Institution of Engineers) are professional degrees awarded in specific discipline such as computers, electrical, electronics, mechanical, communication, civil, plastics, chemical etc. Specialization is referred into brackets e.g. "BE (computers)".

The Bachelor of Science in Engineering Technology degree (BSET) is a professional degree awarded to students who have completed a four year course of study in engineering technology. There are variants including general engineering technology, mechanical engineering technology, electrical engineering technology and civil engineering technology. Some of these variants even have optional areas of concentration. For instance mechanical engineering technology could include mechanical systems design, manufacturing systems, marine engineering technology, among others. Engineering technology degrees usually lead to licensing as engineering technologists requiring further studies for licensing as Professional Engineers.

### 3.1.10 Business and Management Degrees

The Bachelor of Business Administration (BBA) is awarded to students who complete three to four years of full-time study in business administration. The degree often, though not always, requires a major in a specific field such as accounting, finance, HRM/personnel, marketing, management, management information systems, real estate, strategic management, and others. Similar programs include the Bachelor of Science in Business Administration, Bachelor of Science in Business, Bachelor in Management Studies and Bachelor of Administrative Studies.

The Bachelor of Commerce (BCom, or BComm in Canada) is, likewise, an undergraduate degree in general business management, although it is more theoretically based, and usually incorporates an academic major. The distinction between the BComm and the BBA then is, often, that the latter allows students to apply theories to real-life business situations, while the former concentrates on ideas and concepts. It is often offered as a three year program.

The Bachelor of Business (BBus or BBus(Major)) is an undergraduate degree in general business management offered by universities in Australia and New Zealand. Similar in nature to the Bachelor of Commerce, Bachelor of Business degrees are often awarded at technology focused universities. At many Australian universities a Bachelor of Business enables graduates to undertake greater specialty in their chosen academic major as compared to a general BBA degree.

The Bachelor in Management and Organizational Studies (BMOS in Canada) is a four-year undergraduate degree in business management. However, this degree teaches knowledge based business and is as much theoretical as it is case based. A key distinction with the BMOS degree is that it offers a social science component, in that, it mixes business with social science courses, such as psychology, sociology, economics, etc.; this way students become well rounded thinkers.

The Bachelor of Business Science (BBusSc) is similar to the BCom, however it is a four-year Honours level course with an increased focus on the major, and which covers management theory in further depth. Additionally, all Business Science degrees require the student to take a full first-year mathematics course.

The Bachelor of Accountancy (B.Acy. or B.Acc. or B. Accty) is a specialized degree in accountancy; it is often the principal (or only) undergraduate degree recognized for later professional practice. It is distinct from a BBA or BComm with a major in accountancy in that the entire program is focused on accountancy, while other topics are supplementary. It is also known as: Bachelor of Accounting or Bachelor of Accounting Science or Bachelor of Comptrolling (B.Acc.Sci. or B.Compt.).

The Bachelor of Economics (BEc, BEconSc; sometimes BA(Econ) or BSc(Econ)) is similarly a specialized degree in the field of economics. Courses may last from three years to as long as six years and are typically more theoretical and mathematical than the BBA or BComm with a major in economics (often substantially so). Economics is not a business discipline, as such, but a social science, and economics degrees are therefore often offered through liberal arts colleges.

There are various other specialised business degrees. An example is the Bachelor of Arts in Organizational Management (BAOM) which is awarded to students who complete a four year course of study in the field. The core functions of this program are to learn organizational functions, communication, group behavior, decision making, human resource management, ethics, and to develop and deploy effective skills in management and leadership.

### 3.1.11 Computer Science and Information Systems

There are various undergraduate degrees in information technology incorporating programming, database design, software engineering, networks and

information systems. These programs prepare graduates for further postgraduate research degrees or for employment in any variety of roles in the information technology industry. The program focus may be on the technical or theoretical aspects of the subject matter, depending on which course is taken.

Theoretically oriented degrees focus on computer science and are correspondingly titled. These include: the Bachelor of Computing (BComp) and Bachelor of Computer Science (BCompSc). Computer science is also offered as a major within most Bachelor of Science programs.

The practically oriented degrees cover many disciplines from within the IT industry including Software Engineering, Information Systems and Data Communications. Examples here include the Bachelor of Science in Information Technology (BSc IT), the Bachelor of Computer Applications (BCA), the Bachelor of Information Technology, and the Bachelor of Applied Science (Information Technology) (BAppSc(IT)). Many of the disciplines taught as part of this degree are covered under other degrees as well, such as engineering.

Degrees combining IT with business study are also offered at many universities. Specialised programs in information systems - such as the Bachelor of Business Information Systems (BBIS) - are often positioned as professionally orientated degrees. More general degrees here would include business degrees, such as the BBA or BComm, with Information systems as a major.

### **3.2 Text B. D. Serikbayev East Kazakhstan State Technical University**

#### 3.2.1 Read and translate the text.

D. Serikbaev East Kazakhstan State Technical University (EKSTU) is a higher education institution which carries out professional educational programs of higher, postgraduate, extended, vocational education and pre-university training.

It was established in 1958 and was named Ust-Kamenogorsk Civil and Highway Engineering Institute (UK CHEI).

On May 7, 1996 Ust-Kamenogorsk Civil and Highway Engineering Institute was reorganized into East-Kazakhstan Technical University, in 1997 it was named in honor of its first rector Daulet Serikbayev. In 2001 the University was renamed the Republican state government enterprise D. Serikbayev East Kazakhstan State Technical University.

Now EKSTU is one of the largest higher education institutions in Kazakhstan, a leading centre of science, education and culture in East Kazakhstan region. It comprises 5 departments (the departments of Architecture, Civil Engineering, Mechanics, Mining and Metallurgy, Economics and Management), and 27 sub-departments.

According to the state license the university provides education on a wide spectrum of engineering and technical, economic and administrative, and natural science specialities.

On April 5, 2004 the first in Kazakhstan regional scientific and technological park "Altai" was established. EKSTU and the Technopark are a modern form of integration of science, education, and production.

More than 8 thousand students study at EKSTU every year, thousands of highly skilled specialists have been trained for 50 years. Entrance to the University is by competitive examinations. To be admitted to the university someone has to pass the Unified National Test. Scores that you get for this test are of great importance – you should have score at least 50 to enter university and with higher scores you can get a grant and study without tuition fee.

The academic year is divided into two semesters – from September to January and from February to July. Students take exams at the end of each semester. On completion of studies every student presents a graduation thesis. The complete course at the University lasts 4 years.

EKSTU is a large scientific centre. The University has a lot of scientific research laboratories and scientific-engineering centres. The university scientists make a considerable contribution into many scientific fields. Besides EKSTU collaborates with a number of foreign educational institutions of Poland, Germany, the Netherlands, Great Britain, China, Russia and the USA.

In 2009 according to Kazakhstan Independent Accreditation centre EKSTU took the second place among technical higher education institutions. Eleven educational programmes took 1-4 places in a rating of educational programs.

D. Serikbaev EKSTU takes the 417 position in the global rating performed by the Institute of Higher Education at Shanghai University.

## UNIT 4 ENGINEERING PROFESSIONS

### 4.1 Text A. Engineering

#### 4.1.1 Read and translate the text.

##### What is Engineering

Engineering is one of the most ancient occupations in history. Without the skills included in the broad field of engineering, our present day civilization never could have evolved.

Engineering is a term applied to the profession in which a knowledge of the mathematical and natural sciences, gained by study, experience, and practice, is applied to the efficient use of the materials and forces of nature. The term engineer properly denotes a person who has received professional training in pure and applied science.

#### 4.1.2 The History of Engineering

Before the middle of the 18th century, large-scale construction work was usually placed in the hands of military engineers. Military engineering involved such work as the preparation of topographical maps, the location, design, and construction of roads and bridges; and the building of forts and docks.

In the 18th century, however, the term civil engineering came into use to describe engineering work that was performed by civilians for nonmilitary purposes. With the increasing use of machinery in the 19th century, mechanical engineering was recognized as a separate branch of engineering, and later mining engineering was similarly recognized.

The technical advances of the 19th century greatly broadened the field of engineering and introduced a large number of engineering specialties, and the rapidly changing demands of the socioeconomic environment in the 20th century have widened the scope even further.

The engineer who works in any of engineering fields usually requires a basic knowledge of the other engineering fields, because most engineering problems are complex and interrelated. Besides the principal branches discussed below, engineering includes many more specialties than can be described here, such as acoustical engineering, architectural engineering, automotive engineering, ceramic engineering, transportation engineering, and textile engineering.

Since the 19th century both scientific research and practical application of its results have escalated. The work of an engineer requires the analytical frame of mind and imagination. An engineer's main functions are designing, developing and testing the products. An engineer also analyses the products' performance. At present an engineer may deal with the automation processes. So he/she can work in a designing office, in a lab and in the production field of engineering.

### 4.1.3 New Sources of Power

In the 20th century the engineer got at his command new sources of power. He works much to develop better materials for special purposes thus making a great contribution to progress.

Engineers use the laws of nature to create and refine the artifacts of modern life. They seek, through ingenuity and invention, to fashion a more livable world. Two dictionaries provide the following definitions of engineering:

“... the application of scientific knowledge about matter and energy for practical human uses such as construction, machinery, products, or systems.”

*Academic Press dictionary of science and technology*. San Diego, Harcourt Brace Jovanovich.

“... the science by which the properties of matter and the sources of power in nature are made useful to humans in structures, machines, and products.”

*McGraw-Hill dictionary of scientific and technical terms*. 6th ed. New York, McGraw-Hill.

Joseph W. Barker gives a more detailed description of engineering in the *McGraw-Hill encyclopedia of engineering* (2nd ed. New York, McGraw-Hill).

The following excerpt defines engineering and its various subfields:

“Most simply, the art of directing the great sources of power in nature for the use and the convenience of humans. In its modern form engineering involves people, money, materials, machines, and energy. It is differentiated from science because it is primarily concerned with how to direct to useful and economical ends the natural phenomena which scientists discover and formulate into acceptable theories. Engineering therefore requires above all the creative imagination to innovate useful applications of natural phenomena. It is always dissatisfied with present methods and equipment. It seeks newer, cheaper, better means of using natural sources of energy and materials to improve the standard of living and to diminish oil.

### 4.1.4 Kinds of Engineering

Traditionally there were two divisions or disciplines, military engineering and civil engineering. As knowledge of natural phenomena grew and the potential civil applications became more complex, the civil engineering discipline tended to become more and more specialized. The practicing engineer began to restrict operations to narrower channels. For instance, civil engineering came to be concerned primarily with static structures, such as dams, bridges, and buildings, whereas mechanical engineering split off to concentrate on dynamic structures, such as machinery and engines. Similarly, mining engineering became concerned with the discovery of, and removal from, geological structures of metalliferous ore bodies, whereas metallurgical engineering involved extraction and refinement of the metals from the ores. From the practical applications of electricity and chemistry, electrical and chemical engineering arose.

This splintering process continued as narrower specialization became more prevalent. Civil engineers had more specialized training as structural engineers, dam engineers, water-power engineers, bridge engineers; mechanical engineers as

machine-design engineers, industrial engineers, motive-power engineers; electrical engineers as power and communication engineers (and the latter divided eventually into telegraph, telephone, radio, television, and radar engineers, whereas the power engineers divided into fossil-fuel and nuclear engineers); mining engineers as metallic-ore mining engineers and fossil-fuel mining engineers (the latter divided into coal and petroleum engineers).”

## **4.2 Text B. Engineering Professions**

### 4.2.1 Read and translate the text.

Engineering is one of the most ancient occupations in the history. The skills included into its broad field have led our civilization to the high level development at present days.

Engineering is often defined as making practical application of theoretical sciences such as physics and mathematics. Thus the work of engineer requires the analytical cast of mind and imagination. His main functions are designing, developing and testing products. At present the engineer may deal with the automation processes, so he can work in the designing office, in the lab and in the production field of engineering.

Mechanical engineering is one of its main divisions, which deals with the design, construction and operation of machines and devices of all kinds. Among these machines are prime movers such as engines and turbines, operating pumping machines and other hydraulic apparatus; air conditioning, refrigerating equipment and what not.

As for civil engineering its quality influences greatly industry, health, agriculture, commerce and communication. Civil engineers are people with vision, able to comprehend the forces and processes of nature and use them for the future well-being of mankind.

A rapidly changing world demands the design competence which should be situated within knowledge of current issues, such as urban problems, the new environment of computer aided design, the Internet and the application of new materials and technology. The work of the architectural technologist bridges this gap between design theory and construction practice. Modern day architects are well qualified professionals with practical and creative skills who can analyze construction problems and find attractive, prolific solutions.

In 21 century the people of engineering professions have at the command new sources of power. They are to work hard for developing different industrial branches and thus making a great contribution to the progress of our society.

## **4.3 Text C. Job Descriptions**

### 4.3.1 Read and translate the text.

#### **Electrical Electronics Engineering Jobs**

This job group consists off jobs regarding to the application of the laws of electrical energy and the principles of engineering for the generation, transmission,

and use of electricity. The job group also consists off the design and development of machinery and equipment for production and utilization of electric power. Accessory techniques needed are those used in mechanical engineering.

Typical specializations are electrical power generation, transmission, and distribution, atomic power generation, electrical and electronic components, equipment, and systems manufacturing, radio and television broadcasting, telephone, telegraph, and electronic computer engineering, and bioengineering.

#### 4.3.2 Electrical Engineer

Researches, develops, designs, and tests electrical components, equipment, and systems, applying principles and techniques of electrical engineering, designs electrical equipment, facilities, components, products, and systems for commercial, industrial, and domestic purposes.

#### 4.3.3 Design Engineer

Designs and directs engineering personnel in fabrication of test control apparatus and equipment, and determines methods, procedures, and conditions for testing products.

Develops applications of controls, instruments, and systems for new commercial, domestic, and industrial uses.

Directs activities to ensure that manufacturing, construction, installation, and operational testing conform to functional specifications and customer requirements.

May also direct and coordinate operation, maintenance, and repair of equipment and systems in field installations.

May also specialize in specific area of discipline, for example electrical energy generation, transmission, and distribution systems, products, for example appliances, generators, transformers, control devices, and relays, or area of work, for example manufacturing, applications, or installation.

May also use computer-assisted engineering and design software and equipment to perform engineering tasks.

#### 4.3.4 Electronics Engineer

Researches, develops, designs, and tests electronic components, products, and systems for commercial, industrial, medical, military, and scientific applications, applying principles and techniques of electronic engineering.

Designs electronic circuits, components and integrated systems, utilizing ferroelectric, nonlinear, dielectric, phosphorescent, photo-conductive, and thermoelectric properties of materials.

#### 4.3.5 Electrical Technician

Electrical-laboratory technician applies electrical theory and related knowledge to test and modify developmental or operational electrical machinery and electrical control equipment and circuitry in industrial or commercial plants and laboratories.

Assembles and tests experimental motor-control devices, switch panels, transformers, generator windings, solenoids, and other electrical equipment and components according to engineering data and knowledge of electrical principles.

Modifies electrical prototypes to correct functional deviations under direction of Electrical Engineer.

Diagnoses cause of electrical or mechanical malfunction or failure of operational equipment and performs preventative and corrective maintenance.

Develops wiring diagrams, layout drawings, and engineering specifications for system or equipment modifications or expansion, and directs personnel performing routine installation and maintenance duties.

Plans, directs, and records periodic electrical testing, and recommends or initiates modification or replacement of equipment which fails to meet acceptable operating standards.

#### 4.3.6 Power System Electrical Engineer

Power engineer Designs power system facilities and equipment and coordinates construction, operation, and maintenance of electric power generating, receiving, and distribution stations, transmission lines, and distribution systems and equipment.

Designs and plans layout of generating plants, transmission and distribution lines, and receiving and distribution stations. Directs preparation of, or prepares drawings and specific type of equipment and materials to be used, in construction and equipment installation.

Estimates labor, material, construction, and equipment costs. Inspects completed installations for conformance with design and equipment specifications and safety standards. Observes operation of installation for conformance with operational standards.

Coordinates operation and maintenance activities to ensure optimum utilization of power system facilities and meet customer demands for electrical energy. May also compile power rates and direct others in evaluating properties and developing utilities in new territories.

May also be designated according to type of engineering functions as Engineer, Design-And-Construction, Engineer, Operations-And-Maintenance.

#### 4.3.7 Protection Engineer

Plans layout and oversees maintenance of protection equipment of an electric power distribution system to minimize interruption to service and danger to lives and equipment from abnormalities, for example overload, no load, and short circuits.

Studies drawings of power system and makes complex calculations to determine type, number, location, and correlation of protectors, for example relays, circuit breakers, fuses, and grounding devices.

Plans adjustments and additions to protective system necessitated by increased demands in development of new residential areas and unusual requirements of heavy industry.

Coordinates testing, repair, and installation of equipment. Studies new developments to determine suitability of their application to protection system.

May also program and direct computer analyses of system operating characteristics, for example power flow under normal and short-circuit conditions, system stability, and voltage and load limitations to obtain data used for such purposes as timing major system changes and additions, and analyzing interconnecting system problems.

May also be designated according to specialization as Grounding Engineer, Relay Engineer.

#### 4.3.8 Electronics Engineering Manager

Directs and coordinates activities of engineering department to design, manufacture, and test electronic components, products, and systems.

Directs department activities, through subordinates, to design new products, modify existing designs, improve production techniques, and develop test procedures.

Analyzes technology trends, human resource needs, and market demand to plan projects.

Confers with management, production, and marketing staff to determine engineering feasibility, cost effectiveness, and customer demand for new and existing products.

Forecasts operating costs of department and directs preparation of budget requests. Directs personnel activities of department, for example recruitment, hiring, performance evaluations, and salary adjustments. May also direct field testing of products and systems performed by field staff.

#### 4.3.9 Geodesist Job Description

Make exact measurements and determine property boundaries. Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

A job as a Geodesist falls under the broader career category of Surveyors.

What do geologists do?

Analyze survey objectives and specifications to prepare survey proposals or to direct others in survey proposal preparation.

Calculate heights, depths, relative positions, property lines, and other characteristics of terrain.

Compute geodetic measurements and interpret survey data to determine positions, shapes, and elevations of geomorphic and topographic features.

Coordinate findings with the work of engineering and architectural personnel, clients, and others concerned with projects.

Determine longitudes and latitudes of important features and boundaries in survey areas using theodolites, transits, levels, and satellite-based global positioning systems (GPS).

Develop criteria for survey methods and procedures.

Direct or conduct surveys to establish legal boundaries for properties, based on legal deeds and titles.

Establish fixed points for use in making maps, using geodetic and engineering instruments.

Prepare and maintain sketches, maps, reports, and legal descriptions of surveys to describe, certify, and assume liability for work performed.

Prepare or supervise preparation of all data, charts, plots, maps, records, and documents related to surveys.

Record the results of surveys including the shape, contour, location, elevation, and dimensions of land or land features.

Search legal records, survey records, and land titles to obtain information about property boundaries in areas to be surveyed.

Train assistants and helpers, and direct their work in such activities as performing surveys or drafting maps.

Verify the accuracy of survey data including measurements and calculations conducted at survey sites.

Write descriptions of property boundary surveys for use in deeds, leases, or other legal documents.

Plan and conduct ground surveys designed to establish baselines, elevations, and other geodetic measurements.

Adjust surveying instruments to maintain their accuracy.

Conduct research in surveying and mapping methods using knowledge of techniques of photogrammetric map compilation and electronic data processing.

Survey bodies of water to determine navigable channels and to secure data for construction of breakwaters, piers, and other marine structures.

Direct aerial surveys of specified geographical areas.

Locate and mark sites selected for geophysical prospecting activities such as efforts to locate petroleum or other mineral products.

Determine specifications for photographic equipment to be used for aerial photography, as well as altitudes from which to photograph terrain.

Develop criteria for the design and modification of survey instruments.

#### 4.3.10 City Surveyor Job Description

Make exact measurements and determine property boundaries.

Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes. A job as a City Surveyor falls under the broader career category of Surveyors.

#### 4.3.11 Land Surveyor Manager Job Description

Make exact measurements and determine property boundaries.

Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes. A job as a Land Surveyor Manager falls under the broader career category of Surveyors

#### 4.3.12 Topographical Surveyor Job Description

Make exact measurements and determine property boundaries.

Provide data relevant to the shape, contour, gravitation, location, elevation, or dimension of land or land features on or near the earth's surface for engineering, mapmaking, mining, land evaluation, construction, and other purposes.

A job as a Topographical Surveyor falls under the broader career category of Surveyors

#### 4.3.13 Professional Technical and Managerial Jobs

This job category consists of jobs regarding to the theoretical or practical aspects of such fields of human endeavor as art, science, engineering, education, medicine, law, business relations, and administrative, managerial, and technical work. Most of these jobs require substantial educational preparation (usually at the university, junior college, or technical institute level).

#### 4.3.14 Jobs in Architecture Engineering And Surveying

This job division consists of jobs regarding to the practical application of physical laws and principles of engineering or architecture for the development and utilization of machines, materials, instruments, structures, processes, and services.

Typical specializations are research, design, construction, testing, procurement, production, operations, and sales. Also consists off preparation of drawings, specifications, and cost estimates, and participation in verification tests.

#### 4.3.15 Jobs in Mathematics and Physical Sciences

This job division consists of jobs regarding to research pertaining to the physical universe, and the application of established mathematical and scientific laws and principles to specific problems and situations.

#### 4.3.16 Environmental Analyst: Environmental Scientist

Conducts research studies to develop theories or methods of abating or controlling sources of environmental pollutants, utilizing knowledge of principles and concepts of various scientific and engineering disciplines:

Determines data collection methods to be employed in research projects and surveys.

Plans and develops research models, using knowledge of mathematical, statistical, and physical science concepts and approaches.

Identifies and analyzes sources of pollution to determine their effects.

Collects and synthesizes data derived from pollution emission measurements, atmospheric monitoring, meteorological and mineralogical information, and soil or water samples.

Prepares graphs, charts, and statistical models from synthesized data. Uses knowledge of mathematical, statistical, and engineering analysis techniques.

Analyzes data to assess pollution problems, establish standards, and develop approaches for control of pollution.

May also be designated according to aspect of environment in which engaged as Air Pollution ,Analyst, Soils Analyst , Water Quality Analyst.

#### 4.3.17 Computer Programmer: Applications Programmer, Business Programmer

Converts data from project specifications and statements of problems and procedures to create or modify computer programs:

Prepares, or receives from System Analyst detailed workflow chart and diagram to illustrate sequence of steps that program must follow and to describe input, output, and logical operations involved.

Analyzes workflow chart and diagram, applying knowledge of computer capabilities, subject matter, and symbolic logic.

Confers with supervisor and representatives of departments regarding to program to resolve questions of program intent, data input, output requirements, and inclusion of internal checks and controls.

Converts detailed logical flow chart to language processable by computer.

Enters program codes into computer system.

Inputs test data into computer. Observes computer monitor screen to interpret program operating codes.

Corrects program errors, using methods for example modifying program or altering sequence of program steps.

Writes instructions to guide operating personnel during production runs.

Analyzes, reviews, and rewrites programs to increase operating efficiency or to adapt program to new requirements.

Compiles and writes documentation of program development and subsequent revisions.

May also train workers to use program. May also assist Computer Operator.

#### 4.3.18 Computer Systems Hardware Analyst

Alternate titles: computer systems engineer, information processing engineer, methods analyst, data processing

Analyzes data processing requirements to plan data processing system that will provide system capabilities required for projected work loads, and plans layout and installation of new system or modification of existing system:

Confers with data processing and project managers to obtain information on limitations and capabilities of existing system and capabilities required for data processing projects and projected work load.

Evaluates factors for example number of departments serviced by data processing equipment, reporting formats required, volume of transactions, time requirements and cost constraints, and need for security and access restrictions to determine hardware configurations.

Analyzes information to determine, recommend, and plan layout for type of computers and peripheral equipment, or modifications to existing equipment and system, that will provide capability for proposed project or work load, efficient operation, and effective use of allotted space.

May also enter data into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements.

May also specify power supply requirements and configuration.

May also recommend purchase of equipment to control dust, temperature, and humidity in area of system installation.

May also specialize in one area of system application or in one type or make of equipment.

May also train users to use new or modified equipment.

May also monitor functioning of equipment to ensure system operates in conformance with specifications.

#### 4.3.19 Soil Scientist

Studies soil characteristics and maps soil types, and investigates responses of soils to known management practices to determine use capabilities of soils and effects of alternative practices on soil productivity.

Classifies soils according to standard types.

Conducts experiments on farms or experimental stations to determine best soil types for different plants.

Performs chemical analysis on micro-organism content of soil to determine microbial reactions and chemical and mineralogical relationship to plant growth.

Investigates responses of specific soil types to tillage, fertilization, nutrient transformations, crop rotation, environmental consequences, water, gas or heat flow, industrial waste control and other soil management practices.

Advises interested persons on rural or urban land use.

May also specialize in one or more types of activities relative to soil management and productivity and be designated Soil Fertility Expert

#### 4.3.20 Wood Technologist

Conducts research to determine composition, properties, behavior, utilization, development, treatments, and processing methods of wood and wood products.

Analyzes physical, chemical, and biological properties of wood.

Studies methods of curing wood to determine best and most economical procedure.

Develops and improves methods of seasoning, preservation, and treating wood with substances to increase resistance to wear, fire, fungi, insects, and marine borers.

Conducts tests to determine ability of wood adhesives to withstand water, oil penetration, temperature extremes, and stability, strength, hardness and crystallinity of wood under variety of conditions.

Evaluates and improves effectiveness of industrial equipment and production processes.

Investigates processes for converting wood into commodities, for example alcohol, veneer, plywood, wood plastics, and other uses.

Determines best type of wood for specific application, and investigates methods of turning waste wood materials into useful products.

May also specialize in research, quality control, marketing and sales, materials engineering, management or administration, manufacturing, production, or process development.

#### 4.3.21 Forester

Manages and develops forest lands and resources for economic and recreational purposes:

Plans and directs forestation and reforestation projects.

Maps forest areas, estimates standing timber and future growth, and manages timber sales.

Plans cutting programs to assure continuous production of timber or to assist timber companies achieve production goals.

Determines methods of cutting and removing timber with minimum waste and environmental damage.

Suggests methods of processing wood for various uses

Directs suppression of forest fires and conducts fire-prevention programs.

Plans and directs construction and maintenance of recreation facilities, fire towers, trails, roads, and fire breaks.

Assists in planning and implementing projects for control of floods, soil erosion, tree diseases, and insect pests in forests.

#### 4.3.22 Entomologist, Plant Pathologist, Soil Conservationist

Advises landowners on forestry management techniques and conducts public educational programs on forest care and conservation.

May also participate in environmental studies and prepare environmental reports.

May also supervise activities of other forestry workers.

May also patrol forests, enforce laws, and fight forest fires.

May also administer budgets.

May also conduct research to improve knowledge of forest management.

May also specialize in one aspect of forest management.

May also be designated Forestry Supervisor , Woods Manager.

#### 4.3.23 Forest Ecologist

Conducts research in environmental factors affecting forests.

Carries out studies to determine what conditions account for prevalence of different varieties of trees.

Studies classification, life history, light and soil requirements, and resistance to disease and insects of different species.

Investigates adaptability of different species to new environmental conditions, for example changes in soil type, climate, and altitude.

#### 4.3.24 Soil Conservation Technician

Provides technical assistance to land users in planning and applying soil and water conservation practices, utilizing basic engineering and surveying tools,

instruments, and techniques and knowledge of agricultural and related sciences, for example agronomy, soil conservation, and hydrology.

Analyzes conservation problems of land and discusses alternative solutions to problems with land users.

Advises land users in developing plans for conservation practices, for example conservation cropping systems, woodlands management, pasture planning, and engineering systems, based on cost estimates of different practices, needs of land users, maintenance requirements, and life expectancy of practices.

Computes design specification for particular practices to be installed, using survey and field information technical guides, engineering field manuals, and calculator.

Submits copy of engineering design specifications to land users for implementation by land user or contractor.

Surveys property to mark locations and measurements, using surveying instruments.

Monitors projects during and after construction to ensure projects conform to design specifications.

Periodically revisits land users to view implemented land use practices and plans.

#### 4.3.25 Economist, Economic Analyst

Plans, designs, and conducts research to aid in interpretation of economic relationships and in solution of problems arising from production and distribution of goods and services:

Studies economic and statistical data in area of specialization, for example finance, labor, or agriculture.

Devises methods and procedures for collecting and processing data, utilizing knowledge of available sources of data and various econometric and sampling techniques.

Compiles data relating to research area, for example employment, productivity, and wages and hours.

Reviews and analyzes economic data in order to prepare reports detailing results of investigation, and to stay abreast of economic changes.

Organizes data into report format and arranges for preparation of graphic illustrations of research findings.

Formulates recommendations, policies, or plans to aid in market interpretation or solution of economic problems, for example recommending changes in methods of agricultural financing, domestic, and international monetary policies, or policies that regulate investment and transfer of capital.

May also supervise and assign work to staff.

May also testify at regulatory or legislative hearings to present recommendations.

May also specialize in specific economic area or commodity and be designated Agricultural Economist, Commodity-Industry Analyst, Financial Economist,

Industrial Economist, International-Trade Economist, Labor Economist, Price Economist, Tax Economist.

#### 4.3.26 Market Research Analyst

Researches market conditions in local, regional, or national area to determine potential sales of product or service:

Establishes research methodology and designs format for data gathering, for example surveys, opinion polls, or questionnaires.

Examines and analyzes statistical data to forecast future marketing trends.

Gathers data on competitors and analyzes prices, sales, and methods of marketing and distribution.

Collects data on customer preferences and buying habits.

Prepares reports and graphic illustrations of findings.

#### 4.3.27 Employment Research and Planning Director

Directs activities of personnel engaged in compiling, analyzing, and presenting data on employment problems, unemployment compensation benefits, and labor market activities:

Plans and directs research projects and surveys to develop data for administration of federal or state laws governing employment service activities.

Directs analysis of statistical data for implementing employment service programs and for supplying information to legislative bodies in revising employment legislation.

Confers with government officials, employers, labor leaders, and other parties to disseminate and secure information on employment problems and assist in formulating policies to meet demonstrated needs.

Advises legislators on implications of employment and training planning and program activities.

## UNIT 5 SCIENCE IN THE REPUBLIC OF KAZAKHSTAN

### 5.1 Text A. Science in the Republic of Kazakhstan

#### 5.1.1 Read and translate the text.

Despite some economic hardships, scientific-and-technical potential of sovereign Kazakhstan is impressive enough. The Republic numbers some 300 research institutions, over 1,000 doctors of science, 11,000 candidates of science and nearly 30,000 research and technical personnel. There have been created conditions favouring infrastructural development of various sciences within the framework of research-and-technical programmes and projects. Besides, much is being done to enhance shaping up of information media and introduction of up-to-date informational technologies.

National Academy of Sciences of the Republic of Kazakhstan is involved in a number of priority areas vital for the country. The Academy embraces 43 research entities including 38 institutes with 400 doctors of science and 1,500 candidates of science working there. They are engaged in conducting fundamental research under 30 programmes dealing with space, nuclear physics, high energy physics, informatics, radioelectronics, biotechnology and some other areas.

Equally successful is the activity of the Academy of Agricultural Sciences and the Engineering Academy. Collective members of the Engineering Academy are nearly 120 largest state-owned concerns, companies and enterprises, the National Academy of Sciences, technical universities. The Academy's scientific potential is effectively supported by almost 30 academicians, 80 correspondence members and 120 academic advisers. The Engineering Academy has quite a number of remarkable achievements like utterly new types of machines which design stems from top-class mechanisms, plasmic techniques of processing and obtaining new materials, fairly effective wind engine plants, and information technologies in petrochemical industry.

To implement national target-oriented research-and-technical programmes scholars resort to altogether new forms of organizing scientific research, i. e. setting up national research centres which incorporate structural elements of the complete "science-production". There are as many as 4 such centres:

- National Nuclear Centre conducts fundamental research in the field of nuclear physics: radiation safety, radioecological and medical research, safety in atomic power engineering
- National Centre for Comprehensive Utilization of Mineral Raw Materials implements fundamental research, elaboration and introduction into industry highly effective resource-sparing technologies in mining-and-smelting complex.
- National Centre for Radio-Electronics and Communication co-ordinates fundamental and applied research in the field of radio-electronics and communications. It launches new science-consuming and import-

supplementing industries, masters new technologies in the field of radio-electronics.

- National Centre for Biotechnology is responsible for developing highly effective biotechnological processes and large - scale industries.

### 5.1.2 The objectives and priorities of the development of science in Kazakhstan:

#### Long-term objectives

1. Making science and new technologies key economic and political resource of the state.
2. Achieving basic scientific and technological safety and self-sufficiency of the state.
3. Implementing science as the state's political resource.
4. Implementing science and new technologies as the state's key economic resource.

#### Long-term priorities

1. Accomplishing the competitiveness of domestic science and technologies.
2. Direct investments in a high technology sphere.
3. Transition from large scientific - organizational institutions to mobile and flexible research groups.
4. Customer- centered orientation of research.
5. Overcoming inertia of a usual scientific and technical sphere.
6. Retaining the home market for domestic technologies.
7. Being competitive on the world market if high technologies.
8. Improving the priority science and technology personnel training.

### 5.1.3 Stages of scientific development in Kazakhstan

- 1 Zero (overcoming the crisis) (1998-2000)
- 2 First (transition to stable development) (2001-2010)
- 3 Second (stable economic growth) (2011-2020)
- 4 Third (transition to competitiveness) (2021-2030)

## **5.2 Text B. Science and Technological Progress in Modern Society**

### 5.2.1 Read and translate the text.

Science is the main characteristic feature distinguishing the present civilization from the other civilizations from the past. It is not much of exaggeration to say that we live in a world that materially and intellectually has been created by science.

It is easy to illustrate on the material level. One merely needs to mention the telephone, the radio, the television, the computer, the automobile and the aircraft, or

any of the countless devices invented by the application of science. The means of communication bind the continents into a single community, without modern sanitation it would be impossible to have large cities; without modern industry and agriculture it would be impossible to feed, to clothe, and to provide “abundant life” to our large population. All the developments mentioned above are but the results, the outcomes of intellectual activity.

Recent time has brought a number of technical innovations (computers, cellular phones, etc.) which are taken so much for granted that it is as they have always existed. The technological innovations, we are to experience during the next twenty years, may well surpass our wildest fantasies.

Science occupies a central position in modern society. It dominates man’s whole existence. Research and innovations in technology should improve the life of the society, its working conditions and remedy the negative effects of technical and social changes.

## UNIT 6 ENGLISH AS A LANGUAGE OF WORLD COMMUNICATION

### 6.1 Text A. English as a World Language

#### 6.1.1 Read and translate the text.

Today, when English is one of the major languages in the world, it requires an effort of the imagination to realize that this is a relatively recent thing - that in Shakespeare's time, for example, only a few million people spoke English, and the language was not thought to be very important by the other nations of Europe, and was unknown to the rest of the world.

English has become a world language because of its establishment as a mother tongue outside England, in all the continents of the world. This exporting of English began in the seventeenth century, with the first settlements in North America. Above all, it is the great growth of population in the United States, assisted by massive immigration in the nineteenth and twentieth centuries, that has given the English language its present standing in the world.

People who speak English fall into one of three groups: those who have learned it as their native language; those who have learned it as a second language in a society that is mainly bilingual; and those who are forced to use it for a practical purpose - administrative, professional or educational. One person in seven of the world's entire population belongs to one of these three groups. Incredibly enough, 75% of the world's mail and 60% of the world's telephone calls are in English.

#### 6.1.2 Basic Characteristics

**Simplicity of form.** Old English, like modern German, French, Russian and Greek, had many inflections to show singular and plural, tense, person, etc., but over the centuries words have been simplified. Verbs now have very few inflections, and adjectives do not change according to the noun.

#### 6.1.3 Flexibility

As a result of the loss of inflections, English has become, over the past five centuries, a very flexible language. Without inflections, the same word can operate as many different parts of speech. Many nouns and verbs have the same form, for example **swim, drink, walk, kiss, look, and smile**. We can talk about **water** to drink and **to water** the flowers; **time** to go and **to time** a race; **a paper** to read and **to paper** a bedroom. Adjectives can be used as verbs. We **warm** our hands in front of a fire; if clothes are **dirtyed**, they need to be **cleaned** and **dried**. Prepositions too are flexible. A sixty-year old man is nearing retirement; we can talk about a **round of golf, cards, or drinks**.

#### 6.1.4 Openness of vocabulary

This involves the free admissions of words from other languages and the easy creation of compounds and derivatives. Most world languages have contributed some words to English at some time, and the process is now being reversed. Purists of the

French, Russian, and Japanese languages are resisting the arrival of English in their vocabulary.

### 6.1.5 The future of English

Geographically, English is the most widespread language on Earth, second only to Mandarin Chinese in the number of people who speak it. It is the language of business, technology, sport, and aviation. This will no doubt continue, although the proposition that all other languages will die out is absurd.

### 6.1.6 Words with interesting origins - from other languages.

English has taken over words from most of the other languages with which it has had contact. It has taken many expressions from the ancient languages, Latin and Greek, and these borrowings usually have academic or literary associations. From French, English has taken lots of words to do with cooking, the arts, and a more sophisticated lifestyle in general. From Italian come words connected with music and the plastic arts. German expressions in English have been coined either by tourists bringing back words for new things they saw or by philosophers or historians describing German concepts or experiences. The borrowings from other languages usually relate to things which English speakers experienced for the first time abroad.

There are borrowings from a wide range of languages. For example, from Japanese, tycoon, karate, origami, judo, futon and bonsai. From Arabic, mattress, cipher, alcove, cafe, algebra, harem, mufti and yashmak. From Turkish, yoghurt, jackal, kiosk, bosh [nonsense (colloquial)], tulip and caftan; from Farsi, caravan, shawl, taffeta, bazaar and sherbet, and from Eskimo, kayak, igloo and anorak.

The map of Europe below shows the places of origin of some English words and expressions borrowed from some other European languages. Use a dictionary to check the meanings of any words you are not sure about.

### 6.1.7 The Difference between British and American English

When English people go to America, or when Americans come to England, they usually have no difficulty in understanding one another. Still, there is a certain difference between the English language as it is spoken in these two countries. And the difference is not only in the pronunciation and intonation, but also in the vocabulary, and even in the grammar.

Anyone reading American literature will notice that there are also some differences in spelling, as for example color, favor, harbor, honor, labor which in the British spelling are written with the suffix

-our. In America good-bye is written without the e, and the words centre, metre, theatre, and others like them are written center, meter, theater. The simplified spelling of through and although as thru and altho is used by some American magazines and newspapers.

If you have listened to Americans speaking, you have probably noticed that they pronounce such words as ask, class, glass, grass, last, pass, past, with the sound [æ]. Americans also pronounce answer, dance, plant, aunt, as [ænsə],

[dæns], [plænt], [ænt]. The American pronunciation of either, neither as ['i: er], ['ni: er] may be difficult to understand at first.

A marked difference between American and British English is the reading of the letter r. As you know, the English read such words as **worker** and **murmur** without the sound [ r ], while an American reads all the r's , only the sound is different in quality.

The differences in grammar are few in number, as for example the use of **will** instead of **shall** in the Future Indefinite tense forms, and the extensive use of the auxiliary verbs **do, does, did** with the verb **have**. Where an Englishman would say **I have no money** or **I haven't got any money**, an American would say **I don't have any money**.

The use of prepositions also varies in the two countries. In England people say **at school, at the corner of the street**, while in America people say **in school and on the corner**. In England one lives **in the street**, but in America one lives **on the street**. An Englishman looks at his watch and says **It is twenty-five to five**, where an American would say **It is twenty-five of five**.

It is an interesting fact that many British writers use some American written forms and some British written forms are used by many American authors. Though the difference in pronunciation and spelling are important , modern linguists are of the opinion that the most important difference between British and American English lies in the field of vocabulary.

Meeting birds, animals and fish for which there were no English names, the first settlers took words from American Indian languages. From the Indians were taken many geographical names of rivers, mountains and lakes. In later years new ideas and new things led to new expressions and new meanings for old words.

When you come to America and want to continue your trip by **railroad** (not **railway** as the British call it), you won't buy your tickets at the **booking office** but at the **ticket-window**.

You walk out on the **platform** which is here, in America, called **track**. The train is already waiting and you quickly get into a **car** which in England you would call a **carriage**. If you want to meet your friend, it will be best to **call him up**. This is the same as to **telephone** him. He will tell you how to get to his hotel. Perhaps you will have to go there by **subway** by which the **underground railway** is understood. Or had you better take the **trolley car**? By the way, it is also called the **street car**. When you come to the hotel, you will surely get into the **elevator** (that is the **lift**) which will take you up to your friend's room. Your friend will possibly take you out for a walk to have a look at the **shops** or **stores** as they call them in America. And, then, I think, you will go to one of the **movies** which means in America the **cinema**.

During the last few decades, however, many changes have taken place in British English, especially in the vocabulary. The influence of American English is strongly felt, due to the large number of books, magazines and films, radio and television broadcasts coming from America.

American	British	Russian
apartment	flat	Квартира
bath tub	bath	Ванна
elevator	lift	Лифт
faucet	tap	Кран
Can	Tin	Консервная банка
Candy	Sweets	Конфеты
Cookie	Biscuit	Печенье
Corn	Maize	Кукуруза
French fries	Chips	Жареная картошка
Oatmeal	Porridge	Овсяная каша
Grade	Form	Класс
Kindergarten	Infants' school	Детский сад
Subway/metro	Tube/underground	Метро
Restroom	Public toilet	Общественный туалет
The movies	The cinema	Кинотеатр
Store	Shop	Магазин
Gasoline	Petrol	Бензин
Truck	Lorry	Грузовик
Sidewalk	Pavement	Тротуар
Line	Queue	Очередь
Highway	Motorway	Шоссе
mailman	Postman	Почтальон
Mailbox	Postbox	Почтовый ящик
Soccer	Football	Футбол
Vacation	Holiday	Каникулы, отпуск
Last name	Surname	Фамилия
Mom	Mum	Мама
Pants	Trousers	Брюки
Sneakers	Trainers/Gymshoes	Кроссовки
Fall	Autumn	Осень
billion	milliard	миллиард (тысяча миллионов)
corporation	company	объединение, корпорация
Downtown	City/town center	деловая часть города, бизнес-центр
Intersection	Cross-roads	перекресток
Railroad	Railway	железная дорога
Schedule	Time-table	График, режим
First floor	Ground floor	Первый этаж
Second floor	First floor	Второй этаж
Two weeks	Fortnight	Две недели

## 6.2 Text B. English is the Language of Communication

### 6.2.1 Read and translate the text.

“Do you speak English?” – with this phrase begins the conversation between two people, that speak different languages and want to find a common language.

It’s very good when you hear: “Yes, I do”. And start talking. People of different countries and nations have to get along well with the progress in world trade and technology as well as with each other.

So it is very useful to learn foreign languages. Knowledge of foreign languages helps us to develop friendship and understanding among people.

English is very popular now. It’s the language of computers, science, business, sport and politics. It’s spoken all over the world. It is the official language of the United Kingdom, Ireland, the United States of America, Canada, Australia. There are more than 750 million speakers of English in the world.

Speaking a foreign language you can read papers, magazines and original books by great writers, watch satellite TV programs. If you like traveling you can go anywhere without being afraid that other people will not understand you. English is very important to find a good job.

Three-quarters of the world’s mail, and its telexes, and cables, are in English. So are more than half the world’s technical and scientific periodicals: it is the language of technology from Silicon Valley to Shanghai. English is the medium for 80 per cent of the information stored in the world’s computers. Nearly half of all business deals in Europe are conducted in English. It is the language of sports and glamour: the official language of the Olympics and the Miss Universe Competition. The largest broadcasting companies in the world (CBS, NBS, ABC, BBC) transmit in English to audiences that regularly exceed one hundred million.

### 6.2.2 US English

English in the USA differs considerably from British English. Pronunciation is the most striking difference but there are also a number of differences in vocabulary and spelling as well as slight differences in grammar. On the whole, British people are exposed to a lot of American English on TV, in films and so on and so they will usually understand most American vocabulary.

American spelling is usually simpler. For example, British English words ending in *-our* and *-re*, end in *-or* and *-er* in American English, e.g. *colour/color*, *centre/center*. There are differences in individual words too, e.g. British *plough* becomes *plow*. The American spelling usually tries to correspond more closely to pronunciation.

## UNIT 7 THE USA: GEOGRAPHICAL POSITION

**7.1 Text A. The USA: Geographical Position**

## 7.1.1 Read and translate the text.

The vast and varied expanse of the United States of America stretches from the heavily industrialized, metropolitan Atlantic seaboard, across the rich flat farms of the central plains, over the majestic Rocky Mountains to the fertile, densely populated west coast, then halfway across the Pacific to the semi-tropical island-state of Hawaii. Without Hawaii and Alaska the continental U.S. measures 4,505 kilometers from its Atlantic to Pacific coasts, 2,574 kilometers from Canada to Mexico; it covers 9,372,614 square kilometers. In area, it is the fourth largest nation in the world (behind the Soviet Union, Canada and China).

The sparsely settled far-northern state of Alaska, is the largest of America's 50 states with a land mass of 1,477,887 square kilometers. Alaska is nearly 400 times the size of Rhode Island, which is the smallest state; but Alaska, with 521,000 people, has half the population of Rhode Island.

Airlines service 817 cities throughout the country. A flight from New York to San Francisco takes five-and-a-half hours. Train service is also available: The most frequent service is between Washington, D.C., New York and Boston in the East; St. Louis, Chicago and Milwaukee in the Midwest; and San Diego, Los Angeles and San Francisco in the West. A coast-to-coast trip by train takes three days. The major means of intercity transportation is by automobile. Motorists can travel over an interstate highway system of 88,641 kilometers, which feeds into another 6,365,590 kilometers of roads and highways connecting virtually every city and town in the United States. A trip by automobile from coast to coast takes five to six days.

America is a land of physical contrasts, including the weather. The southern parts of Florida, Texas, California, and the entire state of Hawaii, have warm temperatures year round; most of the United States is in the temperate zone, with four distinct seasons and varying numbers of hot and cold days each season, while the northern tier of states and Alaska have extremely cold winters. The land varies from heavy forests covering 2,104 million hectares, to barren deserts, from high-peaked mountains (McKinley in Alaska rises to 6193.5 meters), to deep canyons (Death Valley in California is 1,064 meters below sea level).

The United States is also a land of bountiful rivers and lakes. The northern state of Minnesota, for example, is known as the land of 10,000 lakes. The broad Mississippi River system, of great historic and economic importance to the U.S., runs 5,969 kilometers from Canada into the Gulf of Mexico—the world's third longest river after the Nile and the Amazon. A canal south of Chicago joins one of the tributaries of the Mississippi to the five Great Lakes—making it the world's largest inland water transportation route and the biggest body of fresh water in the world. The St. Lawrence Seaway, which the U.S. shares with Canada, connects the Great Lakes with the Atlantic Ocean, allowing seagoing vessels to travel 3,861 kilometers

inland, as far as Duluth, Minnesota, during the spring, summer and fall shipping season.

America's early settlers were attracted by the fertile land along the Atlantic coast in the southeast and inland beyond the eastern Appalachian mountains. As America expanded westward, so did its farmers and ranchers, cultivating the grasslands of the Great Plains, and finally the fertile valleys of the Pacific Coast. Today, with 1,214 million hectares under cultivation, 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 northwestern states are known for apples, pears, berries and vegetables.

Underground, a wealth of minerals provides a solid base for American industry. History has glamorized the gold rushes to California and Alaska and the silver finds in Nevada. Yet America's yearly production of gold (\$2,831,000,000) is far exceeded by the value of its petroleum, natural gas, clays, phosphates, lead and iron, even its output of sand, cement and stone for construction. Production value of crude oil alone is about 4.2 thousand million annually, pumped from petroleum reserves that range from the Gulf of Mexico to Alaska's North Slope.

### 7.1.2 Population Trends

America has long been known as an ethnic "melting pot." Its current population is 252.5 million, made up of immigrants or their descendants from virtually every country in the world. It is believed that the first people to arrive—from Siberia, more than 10,000 years ago—were the Native Americans or the American Indians. Today, nearly 1.5 million American Indians and Eskimos live in the United States, many on tribal lands set aside for them in 31 states.

Europe, the major source of U.S. immigration, began sending colonists to America in the early 17th century, primarily from northern and western Europe. Immigration peaked in the period from 1880 to 1920, when tens of millions of immigrants entered the United States, with the largest percentage during that period coming from southern and eastern Europe.

Black Americans, who today number 30.79 million, constitute the largest single ethnic minority in the country. They were first brought to the New World as slaves in the 17th, 18th and early 19th centuries. In the 20th century large numbers of blacks, who historically lived in the South, migrated to the large industrial cities of the North in search of jobs and a better way of life. Hispanics, who number 20.5 million and live primarily in the Southwest, are the next largest ethnic minority group in the United States. Sixty percent are Mexican-Americans with the remainder from Central and South America. The Hispanic community is extremely varied, and includes large Puerto Rican populations in many eastern cities as well as a growing Cuban-American presence in Miami, Florida. The United States' population has also absorbed nearly 6.5 million Asians (from China, Hong Kong, Japan, Laos, the Philippines, Vietnam, South Korea, Cambodia and Thailand.) Many Asian Americans live in Hawaii, where more than two-thirds of the population claim an Asian or Polynesian heritage.

Once a nation of farmers, the United States has become increasingly urban since the turn of the century. Today, 77 percent of the population lives in or near cities, and only 1.9 percent of the population lives on farms. In 1988, the United States counted 10 metropolitan areas of over one million people, and 175 cities with 100,000 or more people

Since 1930, suburbs have grown faster than the cities (as middle-class residents have left the crowded living conditions of most large cities). Suburbs are defined as residential areas within commuting distance to large cities. Most people who live in suburbs own their own homes and commute to work in the city, or they work in nearby offices and factories that have relocated to the suburbs.

Americans as a nation tend to be quite mobile. Over a five year period, one family in 10 moves to a new state. In general, the population currently is shifting south and westward. California has passed New York as the most populous state, although the metropolitan area of New York City (population: 18.1 million) remains the nation's largest, with Los Angeles second (13.7 million), and Chicago third (8.181 million).

During the period from 1945 to 1964, the number of children born in the United States increased dramatically; a total of 76 million babies were born during this period. This sharp increase became known as the "baby boom." As this group, known as the baby boomers, has grown to adulthood, it has brought significant economic, cultural and social changes to the American population.

## **7.2 Text B. The United States of America.**

### 7.2.1 Read and translate the text.

The United States of America is the fourth largest country in the world. It occupies the northern 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 half million square kilometers. The USA borders on Canada in the north and on Mexico in the south. It also has a sea-border with Russia.

The landscape of the country is not the similar everywhere, so we can see both lowlands and mountains there. The highest mountains are the Rocky Mountains, the Cordillera and the Sierra Nevada. Many rivers cross the country and the most important of them are Mississippi, the Missouri, the Rio Grande and the Columbia. The Great Lakes on the border with Canada are the largest and the deepest in the USA.

Due to the huge size of the country its climate varies greatly from one part of the country to another. The coldest climate is in the northern part; the climate of Alaska is arctic; the climate of the central part is continental whereas the South has a subtropical climate.

The USA is highly developed industrial country with the population about 250 million. It is the world leading producer of copper and oil; and the world's second producer of iron ore and coal. Among the most important manufacturing industries are aircraft, cars, textiles, radio and television sets, armaments, furniture and paper industries.

The largest cities of the USA are New-York, Los-Angeles, Chicago, Philadelphia, Detroit, San-Francisco, Washington and others.

The USA is a federal Union of 50 states; each of them has its own government. The seat of the central government is Washington D.C. According to the US Constitution, the government is divided into three branches: the executive, headed by the President, the legislative, exercised by the Congress and the judicial. The Congress consists of the Senate and the House of Representatives. There are two main political parties in the USA: the Republican and the Democratic.

## Unit 8 POLITICAL SYSTEM AND ECONOMY OF THE USA

**8.1 Text A. Political System and Economy of the USA**

8.1.1 Read and translate the text.

**The USA Political System.**

The nation's capital, Washington, D.C., has the 10th largest metropolitan population in the country, with a population of over 3.9 million. Laid out by the French architect Pierre L'Enfant in the late 18th century, it was the world's first city especially planned as a center of government.

The city of Washington, in the District of Columbia along the Potomac River, is the capital of a federal union of 50 states. When the United States declared its independence from Great Britain on July 4, 1776 (now celebrated as a national holiday), there were 13 original states—each one sovereign, each wanting to control its own affairs. The states tried to keep their sovereignty and independence within a loose confederation, but their attempt proved ineffectual. Therefore, in 1789, they adopted a new Constitution establishing a federal union under a strong central government.

The original 13 states were grouped along the Atlantic Coast. As the frontier moved westward, large areas of what is now the continental United States were added by purchase, treaty and annexation. As each state was settled, governments were first organized as territories and later entered the Union as states when their territorial legislatures petitioned the Congress for admission. There are now 50 states. Alaska and Hawaii, the last states to enter the Union, did so in 1959.

Under the Constitution, the states delegated many of their sovereign powers to this central government in Washington. But they kept many important powers for themselves. Each of the 50 states, for example, retains the right to run its own public school system, to decide on the qualifications of its voters, to license its doctors and other professionals, to provide police protection for its citizens and to maintain its roads.

In actual practice, and in line with the American tradition of keeping government as close to the people as possible, the states delegate many of these powers to their political subdivisions—counties, cities, towns and villages. Thus, at the lowest political level, residents of small American communities elect village trustees to run their police and fire departments, and elect a board of education to run their schools. On the county level, voters elect executives who are responsible for roads, parks, libraries, sewage and other services, and elect or appoint judges for the courts. The citizens of each state also elect a governor and members of the state legislature.

In addition to the 50 states and the District of Columbia, citizens of the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, Guam, the Virgin Islands and American Samoa vote in federal elections. United States possessions include the Pacific Islands of Wake, Midway, Jarvis, Howland, Baker, Johnston Atoll and Kingman Reef. The United States administers the Republic of Palau under United Nations auspices. Two entities, The Federated States

of Micronesia and the Republic of the Marshall Islands, have become sovereign self-governing states in free association with the United States.

Under the Constitution, the federal government is divided into three branches, each chosen in a different manner, each able to check and balance the others.

The Executive Branch is headed by the President, who, together with the Vice President, is chosen in nationwide elections every four years (in every year divisible by four). The elective process for a U.S. President is unique. Americans vote for slates of presidential electors equal to the number of Senators and Representatives each state has in Congress (a total of 535 persons). The candidate with the highest number of votes in each state wins all the electoral votes of that state. The presidential candidate needs 270 electoral votes to be elected; if no candidate has a majority, the House of Representatives makes the decision. (In all other state and local elections, voters cast their votes directly for the candidate or referendum on that particular ballot.) Any natural-born American who is 35 years old or older may be elected to this office. The President proposes bills to Congress, enforces federal laws, serves as Commander-in-Chief of the Armed Forces and, with the approval of the Senate makes treaties and appoints federal judges, ambassadors and other members of the Executive Departments (the Departments of State, Defense Commerce, Justice, etc.). Each Cabinet head holds the title of Secretary and together they form a council called the Cabinet.

The Vice President, elected from the same political party as the President, acts as chairman of the Senate, and in the event of the death or disability of the President, assumes the Presidency for the balance of his term.

The Legislative Branch is made up of two houses: the Senate and the House of Representatives. The 435 seats in the House of Representatives are allocated on the basis of population, although every state has at least one representative. Each state elects two members of the 100-member Senate; a Senator's term of office is six years.

Both houses must approve a bill for it to become law, but the President may veto or refuse to sign it. If so, Congress reconsiders the bill. If two-thirds of the members of both houses then approve it, the bill becomes law even without the President's signature.

The Judicial Branch is made up of Federal District Courts (at least one in every state), 11 Federal Courts of Appeals and, at the top, the Supreme Court. Federal judges are appointed by the President with the approval of the Senate; to minimize political influences, their appointments are for life. Federal courts decide cases involving federal law, conflicts between states or between citizens of different states. An American who feels he has been convicted under an unjust law may appeal his case all the way to the Supreme Court, which may rule that the law is unconstitutional. The law then becomes void.

In order to amend the Constitution, Congress must pass the proposed amendment by a two-thirds majority vote in each house, and three-fourths of the states must concur. In more than 195 years, the Constitution has been amended 26 times. The first 10 Amendments—the Bill of Rights—guarantee individual liberties: freedom of speech, religion and assembly, the right to a fair trial, the security of one's

home. Later amendments chronicle America's struggle for equality and justice for all of its people. These amendments abolish slavery, prohibit any denial of rights because of race, grant the vote to women and to citizens of the District of Columbia and allow citizens to vote at age 18.

### 8.1.2 Economy of the USA

The American economy is a free enterprise system that has emerged from the labors of millions of American workers; from the wants that tens of millions of consumers have expressed in the marketplace; from the efforts of thousands of private business people; and from the activities of government officials at all levels who have undertaken the tasks that individual Americans cannot do.

The nation's income and productivity have risen enormously over the past 70 years. In this period, the money for personal consumption tripled in real purchasing power. The gross national product per capita quadrupled, reflecting growth in worker productivity.

Together, all sectors of the American economy produce almost \$4,000 billion dollars worth of goods and services annually, and each year they turn out almost \$190,000 million more. The consumption of these goods and services is spread widely. Most Americans consider themselves members of the middle economic class, and relatively few are extremely wealthy or extremely poor. According to U.S. Census Bureau figures, 9.6 percent of all American families make more than \$50,000 a year, and 7.7 percent of all American families have incomes less than \$10,000; the median annual income for all American families is about \$28,906.

Americans live in a variety of housing that includes single detached homes (62 percent) with a median cost of \$112,500. They also live in apartments, townhouses and mobile homes. Three-fourths of all married couples own their own homes. The size of all dwelling units has increased in living space. The median number of rooms occupied in each dwelling unit has increased from 4.9 rooms per unit in 1960 to 5.2 rooms today, despite the shrinking family size. About 3.6 percent of all Americans live in public (government-supplied or subsidized) housing.

The government plays an important role in the economy, as is the case in all countries. From the founding of the Republic, the U.S. federal government has strongly supported the development of transportation. It financed the first major canal system and later subsidized the railroads and the airlines. It has developed river valleys and built dams and power stations. It has extended electricity and scientific advice to farmers, and assures them a minimum price for their basic crops. It checks the purity of food and drugs, insures bank deposits and guarantees loans.

America's individual 50 states have been most active in building roads and in the field of education. Each year the states spend some \$33.31 billion on schools and provide a free public education for 29.1 million primary-school pupils and 11.4 million youth in secondary schools. (In addition, 8.3 million youths attend private primary and secondary schools.) Approximately 60 percent of the students who graduate from secondary schools attend colleges and universities, 77.2 percent of which are supported by public funds. The U.S. leads the world in the percentage of the

population that receives a higher education. Total enrollment in schools of higher learning is 13.4 million.

Despite the fact that the United States government supports many segments of the nation's economy, economists estimate that the public sector accounts for only one-fifth of American economic activity, with the remainder in private hands. In agriculture, for example, farmers benefit from public education, roads, rural electrification and support prices, but their land is private property to work pretty much as they desire. More than 86.7 percent of America's 208.8 million farms are owned by the people who operate them; the rest are owned by business corporations. With increasingly improved farm machinery, seed and fertilizers, more food is produced each year, although the number of farmers decrease annually. There were 15,669,000 people living on farms in 1960; by 1989 that total had decreased to 4,801,000. Farm output has increased dramatically: just 50 years ago a farmer fed 10 persons; today the average farmer feeds 75. America exports some 440.9 thousand million worth of farm products each year. The United States produces as much as half the world's soybeans and corn for grain, and from 10 to 25 percent of its cotton wheat, tobacco and vegetable oil.

The bulk of America's wealth is produced by private industries and businesses ranging from giants like General Motors, which sells \$96,371 million worth of cars and trucks each year—to thousands of small, independent entrepreneurs. In 1987, nearly 233,710 small businesses were started in the U.S. Yet by one count, some 75 percent of American products currently face foreign competition within markets in the United States. America has traditionally supported free trade. In 1989, the U.S. exported \$360,465 thousand million in goods and imported \$475,329 thousand million.

In 1990, 119.55 million Americans were in the labor force, representing 63.0 percent of the population over the age of 16. The labor force has grown especially rapidly since 1955 as a result of the increased number of working women. Women now constitute more than half of America's total work force. The entry of the "baby boom" generation into the job market has also increased the work force. Part-time employment has increased as well—only about 55 percent of all workers have full-time, full-year jobs—the rest either work part-time, part-year or both. The average American work week was 41 hours in 1989.

American industries have become increasingly more service-oriented. Of 12.6 million new jobs created since 1982, almost 85 percent have been in service industries. Careers in technical, business and health-related fields have particularly experienced employee growth in recent years. Approximately 27 million Americans are employed in selling. Another 19.2 million work in manufacturing and 17.5 million work for federal, state and local governments.

Recently, unemployment in the United States was calculated at about seven percent. The government provides short-term unemployment compensation (from 20 to 39 weeks depending upon economic conditions) to replace wages lost between jobs. About 80 per cent of all wage and salary earners are covered by unemployment insurance. In addition, both the government and private industry provide job training to help unemployed and disadvantaged Americans.

## **8.2 Text B. Political System and Economy of the USA**

### 8.2.1 Read and translate the text.

#### **Political System**

The United States of America, a federation of 50 states was set up by the Constitution in 1787. Under the Constitution, the federal government is divided into three branches.

The legislative power is vested in Congress. It is made up of two houses: The Senate and the House of Representatives. There are 100 senators and 435 members in the House of Representatives. Both houses must approve the bill for it to become a law. But before each bill is sorted by a committee. There are 16 standing committees in the Senate and 20 in the House of Representatives.

The executive branch is headed by the President, who proposes bill to Congress, enforces federal laws, administers, national government, makes treaties, serves as a commander-in-chief of the armed force overrule him.s and appoints higher officers. The President can veto a bill unless Congress by a two-thirds vote shall overrule him. The President is the head of the Cabinet which today has eleven members.

The judicial branch is made up of Federal District Courts, 11 Federal Courts and the Supreme Court. Federal judges are appointed by the President for life. Federal Courts decide cases involving federal law conflicts between states or between citizens of different states. The Supreme court may rule the law to be unconstitutional.

The Senators are elected by popular vote for a term of six years two from each state, the Representatives are elected for two-year terms.

The President is chosen in nation-wide elections every four years together with the Vice President.

### 8.2.2 Economy of the USA

The United States has been the world's leading industrial nation since early in the 20-th century. Until the second half of the 19-th, agriculture remained the dominant US economic activity. After the Civil War, great advances were made in the production of basic industrial goods. By World War 1, export of manufactured goods had become more important than the export of raw materials; as manufacturing grew, agriculture became increasingly mechanized and efficient, employing fewer and fewer workers. The most important development in the economy since World War II has been the tremendous growth of service industries, such as government services, professional services, trade, and financial activities. Today, service industries are the most important sector of the economy, employing almost three quarters of the workforce. Manufacturing employs approximately 17 % of the labour force and agriculture less than 3 % of the workers.

Beginning in the 1930s, the government of the United States played an increasingly active role in the economy. Even though the US economy in the 1990s was based on free enterprise, the government regulated business in various ways. Some government regulations were drawn up to protect consumers from unsafe

products and workers from unsafe working conditions; other were designed to reduce environment pollution.

The US economy consists of three main sectors – the primary, secondary and tertiary. Primary economic activities are those directly involving the natural environment, including agriculture, forestry, fishing, and mining. Secondary economic activities involve processing or combining materials into new products, and include manufacturing and construction. Tertiary economic activities involve the output of services rather than goods. Examples of these activities include wholesale and retail trade, banking, government and transport.

The USA remains the world's leading producer of goods and services, although its margin of superiority is diminishing as other countries become more competitive in the world's market.

Industrial and technological position of the states is very high. The USA is the leading producer of electrical energy, aluminum, copper, and paper, and one of the top producers of natural gas and automobiles.

Technological advancement has accelerated changes in American agriculture. Farming is highly mechanized and commercialized, but at the same time it requires much investment.

Besides agricultural products the most part of the U. S. export occupy machinery, automotive products, aircraft and chemicals. The leading U. S. imports are petroleum products, food and beverages, iron and steel products. The USA is the world's largest importer and exporter.

As a leading producer and exporter of technology the USA contributes to the worldwide economic growth. It exports more machinery and invests more money in technological research than any other country. American businesses and industries operate all over the world.

## UNIT 9 CULTURE OF THE USA

### 9.1 Text A. Culture of the USA

#### 9.1.1 Read and translate the text.

#### Behavior and Main Characteristics of American People. Individualism

Most people in the US believe that the ideal person is independent and self-reliant, and most people think of themselves this way. People in the US do not think of themselves as representatives of their families, communities, or social class. Some international students see this attitude as "selfish". You can see examples of individualism in the classroom as well. Teachers expect students to be independent and individualistic, to work alone, and to produce original work.

#### 9.1.2 Equality

The Declaration of Independence states that "all men are created equal". In many ways people believe this; you can see equality in such common practices as "waiting in line". When you go to the bank, to the post office, or to immigration, you will be asked to take a number and wait. Regardless of how important or trivial your need is, you will be treated like everyone else; first come, first served. You can also see equality in the classroom. All students are the same in the eyes of professors, and many professors view students (particularly graduate students) as their equals. Professors may ask students to call them by their first names.

#### 9.1.3 Informality

Although equality is ignored in some parts of life, it is followed closely in others. For example, people treat one another very informally, even in the presence of great differences in age or social status. This is not a "lack of respect," this is the custom in the United States.

#### 9.1.4 Punctuality

Many people in the US are very punctual and organize their activities around schedules. Being late is rude. If you cannot be on time, tell the people who are waiting for you. For business appointments, you should arrive a few minutes early. For social appointments, you should arrive 10-15 minutes after the appointed time. It is not a good idea to arrive early for social invitations.

#### 9.1.5 Materialism

Success in the United States is often measured in dollars. Many people think about money and material possessions as much as time. As a result, you may think that people ignore more important things in life, like love and friendship. This is not true; like people in every country, most people in the US value friendship more than wealth. US individualism shows in **Attitudes Toward Children**.

In many societies, it is important to have many children. In the US, a few religious groups emphasize the importance of large families, but most people think

one or two children are enough, and many couples have no children. Because taking care of a child is very costly financially, emotionally, and socially, many couples view large families as a disadvantage. Having many children would restrict the freedom and individualism of the parents as well as the other children in the family.

Parents teach individualism by the way they raise their children. They want to create a self-reliant, independent child, who can make it on her own by age eighteen. Parents begin teaching this self-reliance early, asking the child to do things on her own and praising her when she does. As a result, children are more talkative and assertive than children of other cultures. If they seem rude, it is because they have been taught to be assertive.

Parents want their children to be healthy and happy, and to have a better life than the parents. Families spend a lot of money to give their children what they want: nice clothes, many toys, adequate health and dental care, and a good education. Strangely enough, many parents give up time with their children to pay for these things. In most two-parent households, both parents work to support this life-style, leaving their children with babysitters and child care programs for eight, nine or ten hours a day.

Many parents want to expose their children to a variety of situations. They bring their children with them to church, to sporting events, to stores, and to social events. However, many places, such as expensive restaurants and live theater productions, do not welcome children. Most formal social gatherings, those with written invitations do not welcome children either. If you are going to such a place, you should leave your children at home with a friend or babysitter.

Children, especially boys are expected to be energetic and assertive. That does not mean, though, that they are allowed to "run wild" in public. Parents are expected to keep their children under control at all times, particularly in public places and in the homes of others. When a child misbehaves, only the child's parents may discipline him. Other adults should not interfere unless the child is doing something which may be harmful to himself. Most parents discipline their children by rewarding good behaviors, not by punishing bad behaviors. While a spanking, a slap to the child's buttocks, is acceptable to some people, any punishment that wounds the child or leaves a mark is considered child abuse and is against the law.

Perhaps the most difficult situation facing international families is how much US culture they want their children to learn. Many of the attributes which are valued in the US, and which your child will unconsciously learn, will not be valued when the child returns home. You will need to give this issue serious thought and discuss it with your spouse.

### 9.1.6 Common Misjudgements

Internationals often think that people in the United States are incapable of deep conversation or thought. Many people are able to think and talk deeply, they are just reluctant to do so with strangers.

People in the US often think that internationals who speak rarely or quietly are too shy, too formal, or just dumb.

Arguing may alarm some people. They expect violence or long-lasting anger to follow such encounters.

Many people are easily embarrassed by religion, and politics, and may assume that those who mention such topics are rude.

### 9.1.7 Some Different Customs

People in the United States have no taboo associated with the left hand; they touch you or hand you objects with either the left or the right hand.

People in the US have no negative association with the soles of the feet or the bottom of the shoes.

A common way to greet children is to pat them on their heads.

People point with their index finger.

Respect for someone is shown by looking her in the face.

Relaxed postures, whether sitting or standing, are very common; do not think your listener is inattentive because she is relaxed.

People are uncomfortable with silence.

The doors of rooms are usually open unless there is a specific reason to close them.

### 9.1.8 Relationship with Other People. Meeting People in the United States.

Meeting people in the United States is not easy. Internationals sometimes stick together and avoid contact with people who live here. The best way to learn more about the United States is to meet and talk to new people. Still there are some tips which can help to associate with Americans and form good relationship with them.

### 9.1.9 Social Gatherings

Social gatherings are quite informal in the US. Most people do not use parties to show wealth or taste. Parties are opportunities for people to gather, converse, and relax. As a result, the host-guest relationship, which is quite formal in many cultures, is very informal. Your host wants you to "feel at home." You may be greeted at the door with "Make yourself at home." This means you may have to serve yourself.

Invitations are usually informal and often oral, but tell the time and place: "Will you come over Tuesday evening at 8:00?" A statement such as "come and see me sometime" or "drop in" is not an invitation. It means that you must telephone before you drop in. If you accept an invitation, it is important that you go and be punctual. The host expects you to call as soon as possible if you must cancel. It is considered rude to simply not show up. If you are not interested in the invitation, it is better to politely refuse the date or appointment in the beginning. Refusing a date is not considered rude in the United States.

Student gatherings are much less formal. What time you arrive makes little difference, because people are coming and going all the time. Many student parties are "BYOB" (bring you own beverage). You will make enemies rapidly if you go to parties and drink other people's beverages. If a party is BYOB , then you should BYOB!

### 9.1.10 Gifts for Hosts

It is not necessary to bring flowers, candy or a gift to a dinner host. However, it is a nice thing to do. You should always say "thank you" when you leave. It is also polite to write a note or telephone the next day and repeat your thank you. Overnight house guests usually bring a small, inexpensive gift to the host, such as a souvenir from your home country or other small remembrance.

### 9.1.11 Table Etiquette

When you are at the dinner table and are asked if you would like something, do not refuse out of politeness. The host or hostess probably won't ask you a second time. After you have had enough, it is all right to politely decline additional servings.

### 9.1.12 Shaking Hands

Men usually shake right hands when they first meet. Men do not usually shake hands with a woman unless she offers her hand first. Shake hands the first time you meet someone, but not the second. Do not squeeze too lightly or too strongly, and do not prolong the handshake by refusing to let go; that is social death in the US.

### 9.1.13 Names and Titles

Most people in the United States have three names: a given name, a middle name, and a last (family or surname) name. In conversation and in writing, the given name usually comes first. For example, "Hello, my name is Tom Cruise." People often use first names. Do not assume from the use of given names that there is no respect for status or age. There are many non-verbal habits that show respect. Young people generally talk less in the presence of their elders and are less assertive. Young people and people of lower status are less likely to use slang around their "superiors".

It is all right to use the first name of someone your same age and status, or someone younger. A woman or man older than yourself is often addressed as Ms., Miss, Mrs., or Mr. with the family name until the individual requests that you use his or her first name or until you get to know the individual better.

### 9.1.14 Relationships

At social gatherings people readily welcome new people, and the warmth expressed is genuine and sincere but confined to that occasion and may not always continue. Close friendships do develop as a result of repeated interactions and shared interest between individuals. So, when people seem warm and open with new acquaintances, this does not mean that close friendships are forming.

Another barrier to forming relationships is that the definition and expectations of "friend" are different in different cultures. Friendships in the United States tend to be shorter and shallower than those of other cultures. People have different groups of friends: "work friends," "school friends" and so on.

### 9.1.15 Making Conversation

"Small talk" includes topics, such as sports, weather, jobs, or past experiences. Most people do not talk about religion, politics, or personal feelings with strangers.

This emotional distance does not mean people dislike you, but personal lives are discussed only with close friends and family.

There are few "ritualistic" exchanges in English, but you should know that "How are you?" and "How's it going?" are greetings, not questions about your life. "See you later," or "See you soon," are ways of saying good-bye, not appointments.

People in the US are curious. They will ask you a lot of questions. Some of their questions may appear ridiculous, uninformed and elementary, but try to be patient in answering them. You may be the first person from your country whom they have met, and they will have very little understanding of your life. Most people are sincerely interested in learning about you.

Loud conversations usually mean people are angry. Most conversations are moderate in volume with few gestures. Do not speak too loudly or too quietly, and keep your hands under control.

When you have communication difficulties, you may think it is because of spoken or written language. However, many misunderstandings happen because of non-verbal communication, or body language.

#### 9.1.16 Eye Contact

During a conversation, the speaker looks briefly into the listener's eyes, briefly away, and then back at the listener's eyes. The listener should look at the speaker's eyes constantly. If you do not look into the eyes of your conversation partner, he will think you are not listening, or that you are not trustworthy.

#### 9.1.17 Touching

Touching people often makes them uncomfortable. Men are especially nervous when touched by another man. Women who are good friends may walk arm-in-arm, but only rarely.

You do not have to touch people to make them nervous. People expect others to be at least an arm's length away from them. If you get closer than this, people will move away from you; they do not dislike you; you are "in their space."

## 9.2 Text B. US Culture

### 9.2.1 Read and translate the text.

#### Holidays

Each of the 50 states establishes its 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. Holidays for all federal offices, most state and local government offices, and many but not all businesses are:

New Year 's Day (January 1)

Martin Luther King's Birthday (third Monday in January)

Washington's Birthday sometimes called "President's Day" (third Monday in February)

Memorial Day (last Monday in May)

Independence Day (July 4)  
Labor Day (first Monday in September)  
Columbus Day (second Monday in October)  
Veteran's Day (November 11)  
Thanksgiving Day (fourth Thursday in November)  
Christmas Day (December 25)

Most states have holidays which are "observed" but are not necessarily "legal". The name of the holiday (e.g. Confederate Memorial Day) goes on the calendar (last Monday in April) for a state (Alabama, Mississippi), yet this does not mean that businesses are always closed or children let out of school. There are also special days in most states (e.g. Volunteer Fireman Day, second Sunday in January in New Jersey) which are proclaimed but have no effect otherwise. This is also true at the national level. The President or Congress might proclaim a special day or week (e.g. National Employ the Handicapped Week, first week in October) in order to bring attention to a certain concern, interest group, or problem.

Many religious holidays such as Good Friday, Hanukkah, or Ramadan are observed, of course, by the religious, but they have no national or official legal status. Rather, each state sets its own law, and whether or not an employee is given time off also depends on labor agreements.

There are many traditional holidays, observed by a large number of Americans which are also neither legal nor official. Among these are Groundhog Day, Valentine's Day, St. Patrick's Day (not just people with Irish ancestry will "wear the green" on March 17), Mother's Day, and Halloween (the last day of October).

The tree holidays which were first observed in the U.S. but have now spread elsewhere are Labor Day (usually observed on May 1 elsewhere), Thanksgiving (in Canada) and Mother's Day (wherever there are florists, greeting-card companies, candy manufacturers, and mothers).

Perhaps the two "most American" of the holidays are the Fourth of July – Independence Day and Thanksgiving. The fourth of July is like a big nationwide birthday party. Yet it's a party that takes place in neighborhoods, on beaches or in parks, or in suburban lawns throughout the country. Some towns and cities have parades with bands and flags, and most politicians will try to give a patriotic speech or two, should anyone be willing to listen. But what makes the Fourth of July is the atmosphere and enjoyment of, for instance, the family beach party with hot dogs and hamburgers, volleyball and softball, the fireworks and rockets at night (and, often, a sunburn and a headache the next morning). The nation's birthday is also the nation's greatest annual summer party.

Like Christmas, Thanksgiving is a day for families to come together. Traditional foods are prepared for the feast – turkey or ham, cranberry sauce and corn dishes, breads and 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.

## UNIT 10 GEOPOLITICAL STATUS OF THE REPUBLIC OF KAZAKHSTAN

### 10.1 Text A. Foreign Policy of Kazakhstan

#### 10.1.1 Read and translate the text.

The Republic of Kazakhstan began to pursue the certain foreign policy after acquiring independence on December 16, 1991. Since that time Kazakhstan has come out into the world arena as a subject to the international law of full value. In March, 1992 Kazakhstan became a member of the United Nations Organization enjoying full rights.

Kazakhstan occupies an important geopolitical position and strategic space connecting Europe and the Asian Pacific region. That is why the special matter is the relations of Kazakhstan with Russia and China. In 1992 an agreement with Russia about mutual help, friendship and cooperation in the economical, military and political spheres was signed. Some agreements and treaties with the Republic of China were also concluded.

Kazakhstan traditionally has close connections with the nearest neighbours — Azerbaijan, Uzbekistan, Kirgiziya, Turkmenia. Common borders, high level of integration during the existence of the USSR, ethnically related nations oblige to keep good relations with these states further.

Since there were nuclear weapons on the territory of Kazakhstan the world carefully watched which policy the country would pursue after the proclamation of sovereignty. Kazakhstan made the first step, i.e. closed the Semipalatinsk range, which had influenced the big territory in a negative way for 40 years. Kazakhstan ratified the Treaty of non-spreading the nuclear weapons, prohibition of nuclear tests. The country joined the Convention of prohibition of chemical weapons, the convention of prohibition of projects and accumulation of bacteriological weapons and toxins supplies.

In 1996 Kazakhstan regularly participated in the meetings of the Shaghai Five countries. This organization includes Kazakhstan, Kirgiziya, China, Russia and Tajikistan. The total territory of these five states makes up three-fifths of the territory of Eurasia, and the population - one-fourth of the world population. That is why the cooperation of the Five and common policy pursued by them have great meaning not only for the people of these countries but for the whole mankind. In 2001 Uzbekistan joined this international union and after that its members have been called the Shanghai Organization of Cooperation. During that time the important agreements with China have been made. Concerning the problem of controversial territories the countries made the agreement that 57% of controversial land (about 1000 square km) would belong to Kazakhstan and 43% — to China. Kazakhstan and Russia came to the agreement on matters concerning the usage of the Baikonur cosmodrom, oil extraction, manufacturing and transportation, adopted the Declaration of everlasting friendship and cooperation between two countries.

During ten years of sovereignty the relations with Turkey developed especially well. Many joint enterprises have been founded on the territory of Kazakhstan. Hundreds of students from Kazakhstan study at the universities of Istanbul and Ankara. The scientists of both countries take the most active part in the conferences on different levels.

The Kazakhstan diplomacy pays much attention to the development of the relations with such countries as Iran and India. The link with these countries has deep historical roots.

The great attention is devoted to the relations with the mightiest world power — the United States of America. Founding business relations with the USA had a great meaning because this state is one of the main investors of the Kazakhstan economical system. The USA also help in the spheres of culture and education. On the basis of the Bolashak program Kazakhstan students get education at the universities of the USA and Europe.

The Friendly relations with European countries have also been founded. In 1992 President N.Nazarbayev visited Germany where he met with chancellor G.Kol. In France there was a meeting with F.Mitteran. The agreement of mutual understanding and cooperation with this country was signed.

Kazakhstan has also made business contacts with Hungary, Bulgaria, Chekhia, Rumania.

The great perspectives are suggested by the relations of Kazakhstan with the countries of ASEAN (Association of South East Asian Nations) the countries of Northern Eastern Asia — Japan, Northern and Southern Koreas and Mongolia.

Besides cooperation with other states, Kazakhstan has close connexions with international organizations. Therefore, during a little period of membership in the UNO, since 1992, Kazakhstan has managed to occupy a noticeable position in the Organization. The country actively cooperates with the UNICEF (United Nations International Children's Emergency Fund). The world assistance in the realization of the UNICEF program in Kazakhstan is supplied by the Bobek children's charity fund. The cooperation of Kazakhstan with UNESCO (United Nations Educational, Scientific and Cultural Organization) is also quite successful. In particular the collaboration in the sphere of science was based on attracting UNESCO to the solution of big ecological problems of Kazakhstan - the Aral region, the Caspian Sea and the zones of the Semipalatinsk nuclear range.

The success of pursuing the policy of economical growth depends on the position of the Republic relatively to international and financial organizations. As a result in 1992 Kazakhstan entered the IMF (International Monetary Fund). Kazakhstan has a solid base for cooperation with European Bank. In 1994 the Republic of Kazakhstan entered the Asian Bank of Development. The country occupies the twentieth place in the common list of all participating countries. Nowadays there is a solid and reliable basis for collaboration of Kazakhstan with the Islamic Bank of Development.

One of the main tasks of Kazakhstan is its joining the WTO (World Trade Organization). By entering the WTO the country acquires a real chance to participate in making up decisions on important international trade matters actively.

It especially concerns the matters included in the sphere of vital ones for the Republic.

The Republic of Kazakhstan builds up economical and trade ties with foreign states on the basis of treaties of mutual profit with observing the principles of rights equality. The country independently solves the matters of foreign trade activity.

Kazakhstan is located in the center of Eurasia, a region, which takes a special place on the modern political map. It is equidistant from all the most populated politically and economically important regions - Europe, the Near and Middle East, Southern Asia, the Asian-Pacific region and Russia's developed areas. It happened that due to its geographic and climatic peculiarities, Central Asia connects all these regions and at the same time separates them.

All the most easily accessible routes, directly connecting the neighboring areas, cross the region. Therefore, current political, trade, economic and demographic characteristics determine whether the regions can have mutual contacts through the center of Eurasia or they will use their strategic advantages provided by the latter for mutual opposition. "The founders of geopolitical science have already paid their attention to this geographical feature determining the regional military, political and economic peculiarities. Thus, Sir Halford Mackinder in his work "The geographical axis of history" wrote that from the planetary point, Eurasia is located in the world center and in its center lays the "heart of the world". According to Mackinder, the heartland is the focus of the continental masses of Eurasia, as the most suitable base to control the world.

This context of development of the international relations and geopolitical position at the turn of Asia and Europe as well as the natural and human potential determine the place of Kazakhstan in the system of global politics. This also determine the principal postulates of its foreign policy doctrine aimed at creating a zone of good-neighborliness based on the principals of equal security, respect for sovereignty, territorial integrity, political pluralism, economic and social stability. Achievement of this goal is directly associated with the strategic objective of Kazakhstan's harmonic integration into the global system of international relations as stable regional power. Clear vision of the principal tendencies of global and regional development by RK President Nursultan Nazarbayev made a basis of his foreign policy concept having a pronounced integration nature. Quintessential model of the integration views of the President was his initiative to set up the Eurasian Union.

Nowadays, the Eurasian idea can be found in the foreign policy of Kazakhstan to full extent. It can be also found in stable development of the Eurasian Union idea initiated by RK President Nursultan Nazarbayev in 1994, in creation of the Eurasian Economic Union (EEU), in successful promotion of the initiative to convoke the Conference for Interaction and Confidence-building in Asia (CICA), in development of relations with the CIS nations and foreign countries. Another notable example of promoting the EEU idea is formation of the Central Asian Cooperation Organization. The economic space, forming up within its scope, stipulates a coordinated legal mechanism to regulate the relations in the fields of economy, business and financial interaction.

For many centuries, various civilizations in Eurasia had been interacting and enriching each other. That was a complicated and many-sided process, the outcomes of which are still being assessed in different ways. Some people mention a unique synthesis of western and eastern principals, the other speak of prevailing impact of the West.

The latter can be considered the most theoretically developed option of the concept. The Eurasian centers appeared in Prague, Belgrade, Brussels and Paris. The Eurasian concept was a political organization and movement, within their frames the idea itself was developed as a basis of new development concept opposing the Bolshevism and restorational ideas of the "white emigration".

The Eurasian concept is an idea of organic unity of the nations living in Northern (continental) Eurasia, connected by history, geography and culture and forming one powerful state based on the Slavic and Turkic synthesis.

Thus, the concept is focused on the Eurasian cultural space. The founders of the Eurasian concept based themselves on Russia's middle position between Europe and Asia, winch is a determining aspect of its specific immateriality and historical destiny.

Prince Trubetskoi wrote: "Eurasia is the geographical, economic and historical whole. Fates of the Eurasian nations are deeply intertwined becoming one gigantic clew, which already cannot be untwined, as tearing away any nation from the whole can be done by violating the nature only and will lead to sorrow..."

L. Gumilyov had contributed much to comprehension and development of the Eurasian concept. Having conducted a number of studies on the subject, he also based his concept on the cultural and geographical aspects.

Thus, regardless of somewhat unbalanced nature of the Eurasian visions of the late 19th - early 20th centuries, it is impossible to ignore importance of the issues addressed by those people.

The ideas of Eurasia and integration based mainly on the principals of equality and respect for national sovereignty are running all through the foreign policy of Kazakhstan towards the CIS and foreign countries.

In his speech at the session of the Russian Academy of Social Science, Nursultan Nazarbayev noted: "Integrationism, which is not based on understanding of equality, has no future. Integrationism based on equality, voluntariness and pragmatic interest is deserved future of Eurasia, which only in this case can become a global factor of world economy and policy of the 20th century."

The end of the "Cold War" and the collapse of such a huge superpower as the Soviet Union caused a change in the general situation in the world. Some of the consequence of this disintegration led to the formation of the New Independent States (NIS), the transition to market economies, democratization, and the rearrangement of geopolitical forces. All the great powers and different regional organizations take an interest in each of the NIS countries. The world develops with its diversity and seeks for a new point of balance in three global dimensions: geopolitics, geostrategy and geoeconomy. Political, economic, social, environmental and demographic factors move this development. Kazakhstan cannot develop apart

or in isolation from worldwide process. The Kazakh nation needs reliable economic and political partners.

Kazakhstan does not intend to carry out a unilaterally oriented foreign policy toward one country, especially toward great power such as Russia, China, or the United States. An unilateral orientation is, therefore, a dangerous risk to the sovereignty of Kazakhstan. Therefore, the United States conducts its policy in Kazakhstan, taking into account the national interests of this country. Balancing foreign policy of Kazakhstan coincides with the geostrategic interests of the United States. A coincidence of interests of these two countries is seen in partnership relations. Thus, the United States is getting a hopeful and stable ally in Central Asian and Eurasian regions that promotes both the keeping and strengthening its position in Europe, Middle East, and Asian Pacific.

## **10.2 Text B. Geopolitical Status of Kazakhstan**

### 10.2.1 Read and translate the text.

Kazakhstan is situated in Central Asia, deep in the Eurasian continent. Kazakhstan borders upon the following states: China, Kyrgyzstan, Turkmenistan, Uzbekistan and the Russian Federation.

The territory of the Republic stretches on from the Volga in the West to the Altai mountains in the East, from West Siberian lowland in the North to the desert of Kyzylkum and the mountain range of Tien Shan in the South. Yet remoteness of the country from oceans and vastness of its territory determine climatic conditions. The climate of the country is sharply continental.

Kazakhstan is rich with commercial minerals. In terms of chromium, vanadium, bismuth and fluorine reserves Kazakhstan knows no second in the world while in resources of iron, chromite, lead, zinc, tungsten, molybdenum, phosphorite, copper, potassium and cadmium the country holds one of the leading places. On the territory of the country they have discovered nearly 160 deposits of oil and gas.

The territory of Kazakhstan affords infinite resources of salt and construction materials. The already prospected deposits serve a fine basis for the development of mining, coal-mining, metallurgy, oil-and-gas and chemical industries.

Kazakhstan affords all opportunities of securing its effective development. First, it affords immense resources of commercial minerals, vast farming areas and a remarkable industrial potential.

Sure enough, non-ferrous and ferrous metallurgy refers to industries of paramount significance. Owing to their high quality Kazakhstani copper, lead, zinc and cadmium enjoy high demand and are sufficiently compatible in world markets.

Kazakhstan is an important fuel and power engineering region. As to oil reserves Kazakhstan is far ahead of many oil-producing countries. The development of oil- and gas pipeline systems to provide the Republic's refineries with Kazakhstani oil and the major industrial and administrative centers - with gas there has been launched construction of exporting oil pipelines which would enable exports of Kazakhstani oil to world markets.

Essentially, Kazakhstan can afford all the conditions favouring reliable prerequisites of successful development of its foreign economic relations.

## UNIT 11 GEOPOLITICAL STATUS OF THE USA

### 11.1 Text A. The USA: Geopolitics

#### 11.1.1 Read and translate the text.

The after-war world was bipolar in principle - two powers dominated in it and competed with one another: America with its allies and the USSR with its sphere of influence. The "third world" was just their battlefield. Terrorist activity in that system was an extreme form of confrontation between two civilizations. Thus, terrorist organizations set up at that time, were not quite independent. Special services of the conflicting parties were standing behind them.

The bipolar (Yalta) system broke up in the 90s. Eurasia is narrowing its zone of influence. Numerous terrorist groups, which appeared on Soviet initiative, have lost their "master." At the same time, terrorist organizations previously controlled by America (including al-Qaida of bin Laden set up by the US special services to oppose the USSR in the Afghan war) have become derelict. So, this "terrorist international" once created by super-powers was left to its purchase. This should be taken into consideration when speaking about possible organizers of and participants in the acts of terrorism that shook America on September 11.

Unipolar globalization was the main global process on the eve of terrorist acts. Globalization in the shape it took and realized lately, was precisely Americanization - the evidence of an unconditional strategic, geopolitical, economic, cultural and civilizational hegemony of the USA.

Deprived of an equal rival, America has strengthened and broadened the NATO, announcing almost the whole world a "zone of its national interests." On the other hand, a number of countries (especially Russia and China) offered an alternative model of the world system - multipolarity - that does not envisage a universal leader.

Thus, CIS countries, India, Iran (for ideological and strategic considerations), the Arab part of "Islamic world" (for religious and cultural reasons), small countries of the "third world" (so as to get rid of a severe domination of the West in a peace and evolutionary way), even formal allies of the US - Europe and Japan (for economic reasons) are also against unipolar globalization.

With its seeming welfare, the American economy was also on verge of a serious crisis. Disproportion between the virtual capital at stock exchanges and the capital working in real sector could play a fatal role for America. Many experts believe that destructive processes capable of undermining American might may start in the US economy soon. For example, the quotation of stocks of the companies engaged in the so-called "new economy" (NASDAQ index) have begun sloping down and nearly reached a critical level. The basic parameter - the index of business activity at the New York stock exchange - was also a source of serious concern.

## 11.2 Text B.Geopolitics

### 11.2.1 Read and translate the text.

Geopolitics is the analysis of geographic influences on power relationships in international politics. Geopolitical theorists have sought to demonstrate the importance in the determination of national policy of such considerations as the acquisition of natural boundaries, access to important sea routes, and the control of strategically important land areas.

The term geopolitics was coined by the Swedish political scientist Rudolf Kjellén in his *Staten som Lifsform* (1916; “The State as an Organism”). The term spread throughout central Europe between World Wars I and II and came into worldwide use during the latter. Between the wars, geopolitical arguments came to be employed in special pleading to promote the interests of particular nations or ideologies.

In the past, a nation's sphere of influence has been determined primarily by geopolitical factors. Such factors have, however, become relatively less significant in the foreign policies of states because of the improvements in communications and transportation that have enabled states to overcome the limitations imposed on them by geographic location or barriers.

## UNIT 12 INTERNET

### 12.1 Text A. The Internet

#### 12.1.1 Read and translate the text.

The Internet is computer-based worldwide information network. The Internet is composed of a large number of smaller interconnected networks. These networks may link tens, hundreds, or thousands of computers, enabling them to share information with each other and to share various resources, such as powerful supercomputers and databases of information. The Internet has made it possible for people all over the world to effectively and inexpensively communicate with each other.

Unlike traditional broadcasting media, such as radio and television, the Internet is a decentralized system. Each connected individual can communicate with anyone else on the Internet, can publish ideas, and can sell products. The Internet has brought new opportunity for businesses to offer goods and services online. In the future, it may have an equally dramatic impact on higher education as more universities offer Internet-based courses.

The networks from which the Internet is composed are usually public access networks, meaning that the resources of the network can be shared with anyone logging on to, or accessing, the network. Other types of networks, called intranets, are closed to public use. Intranets are the most common type of computer network used in companies and organizations where it is important to restrict access to the information contained on the network.

The Internet grew tremendously during the latter half of 1990s. Each year during that time period, more people used the Internet to access ever-increasing amounts of information. One survey found that there were 61 million Internet users worldwide at the end of 1996, 148 million at the end of 1998, an estimated 320 million in 2000, and more than 700 million people in 2001.

#### 12.1.2 Uses of the Internet

From the late 1960s to the early 1990s, the Internet was a communication and research tool used almost exclusively for academic and military purposes. This changed radically with the introduction of the World Wide Web (WWW) in 1989. The WWW is a set of programs, standards, and protocols governing the way in which multimedia files (documents that contain a combination of text, photographs, graphics, video, and audio) are created and displayed on the Internet. The difference between the Internet and the WWW is similar to the distinction between a computer and a multimedia program that runs on the computer. Many analysts attribute the explosion in use and popularity of the Internet to the graphics-intensive nature of the WWW.

Today individuals, companies, and institutions use the Internet in many ways. Businesses use the Internet to provide access to complex databases, such as financial databases. Companies carry out electronic commerce, including advertising, selling,

buying, distributing products, and providing after-sales services. Businesses and institutions use the Internet for voice and video conferencing and other forms of communication that enable people to telecommute, or work from a distance.

The use of electronic mail over the Internet has greatly speeded communication between companies, among coworkers, and between other individuals. Media and entertainment companies use the Internet to broadcast audio and video, including live radio and television programs. They also offer online chat groups, in which people carry on discussions using written text, and online news and weather programs. Scientists and scholars use the Internet to communicate with colleagues, to perform research, to distribute lecture notes and course materials to students, and to publish papers and articles. Individuals use the Internet for communication, entertainment, finding information, and to buy and sell goods and services.

### 12.1.3 The Internet Topology

Connecting individual computers to each other creates networks. The Internet is a series of interconnected networks. Personal computers and workstations are connected to a Local Area Network (LAN) by either a dial-up connection through a modem and standard phone line or by being directly wired into the LAN. Other modes of data transmission that allow for connection to a network include T-1 connections and dedicated lines. Bridges and hubs link multiple networks to each other. Routers transmit data through networks and determine the best path of transmission.

The Internet is based on the concept of a client-server relationship between computers, also called a client/server architecture. In a client/server architecture, some computers act as information providers (servers), while other computers act as information receivers (clients). The client/server architecture is not one-to-one—that is, a single client computer may access many different servers, and a single server may be accessed by a number of different client computers.

Prior to the mid-1990s, servers were usually very powerful computers such as mainframe or supercomputers, with extremely high processing speeds and large amounts of memory. Personal computers and workstations, however, are now capable of acting as Internet servers due to advances in computing technology. A client computer is any computer that receives information from a server. A client computer may be a personal computer, a pared-down computer (sometimes called a Web appliance), or a wireless device such as a handheld computer or a cellular telephone.

To access information on the Internet, a user must first log on, or connect, to the client computer's host network. A host network is a network that the client computer is part of, and is usually a local area network (LAN). Once a connection has been established, the user may request information from a remote server.

If the information requested by the user resides on one of the computers on the host network, that information is quickly retrieved and sent to the user's terminal. If the information requested by the user is on a server that does not belong to the host LAN, then the host network connects to other networks until it makes a connection with the network containing the requested server. In the process of connecting to

other networks, the host may need to access a router, a device that determines the best connection path between networks and helps networks to make connections.

Once the client computer makes a connection with the server containing the requested information, the server sends the information to the client in the form of a file. A special computer program called a browser enables the user to view the file. Examples of Internet browsers are Mosaic, Netscape, and Internet Explorer. Multimedia files can only be viewed with a browser. Their pared-down counterparts, text-only documents, can be viewed without browsers. Many files are available in both multimedia and text-only versions. The process of retrieving files from a remote server to the user's terminal is called downloading.

One of the strengths of the Internet is that it is structured around the concept of hypertext. The term hypertext is used to describe an interlinked system of documents in which a user may jump from one document to another in a nonlinear, associative way. The ability to jump from one document to the next is made possible through the use of hyperlinks—portions of the hypertext document that are linked to other related documents on the Internet. By clicking on the hyperlink, the user is immediately connected to the document specified by the link. Multimedia files on the Internet are called hypermedia documents.

#### 12.1.4 Accessing the Internet

Access to the Internet falls into two broad categories: dedicated access and dial-up access. With dedicated access, the computer is directly connected to the Internet via a router, or the computer is part of a network linked to the Internet. With dial-up access, a computer connects to the Internet with a temporary connection, generally over a telephone line using a modem—a device that converts a computer's digital signals into signals that can be transmitted over traditional telephone lines.

#### 12.1.5 Electronic Mail

The most widely used tool on the Internet is electronic mail, or e-mail. E-mail messages are generally sent from and received by mail servers—computers that are dedicated to processing and directing e-mail.

E-mail is the basis of much organized exchange between groups of individuals. List servers, for example, make it possible to address a list of subscribers either in one-way communication, as in keeping interested people up-to-date on a product, or two-way communication, as in online discussion groups.

Another use of e-mail is Usenet, in which discussions on a particular subject are grouped together into newsgroups. There are thousands of newsgroups covering an extremely wide range of subjects. Messages to a newsgroup are not posted directly to the user, but are accessible in the form of an ordered list on a dedicated local news server. The networking of these servers makes such discussions available worldwide. Associated software not only enables users to choose which messages they want to read, but also to reply to them by posting messages to the newsgroup.

### 12.1.6 History

The Internet is an extension of a computer network originally formed in the United States during the 1960s by the Advanced Research Projects Agency (ARPA). Working under contract to the U.S. Department of Defense, ARPA initially connected computers at the Stanford Research Institute in California, the University of California at Los Angeles (UCLA), the University of California at Santa Barbara (UCSB), and the University of Utah. This original network, the very first computer network, was called ARPANET (ARPA NETwork). Scientists built ARPANET with the intention of creating a network that would still be able to function efficiently if part of the network was damaged. This concept was important to military organizations, which were studying ways to maintain a working communications network in the event of nuclear war.

As ARPANET grew in the 1970s, with more and more universities and institutions connecting to it, users found it necessary to establish standards for the way that data was transmitted over the network. To meet the needs of data transmission standards, computer scientists developed the Transmission Control Protocol (TCP) and the Internet Protocol (IP).

In 1989 English computer scientist Timothy Berners-Lee introduced the World Wide Web. Berners-Lee initially designed the WWW to aid communication between physicists who were working in different parts of the world for the European Laboratory for Particle Physics (CERN). As it grew, however, the WWW revolutionized the use of the Internet. During the early 1990s increasingly large numbers of users who were not part of the scientific or academic communities began to use the Internet, due in large part to the ability of the WWW to easily handle multimedia documents.

### 12.1.7 The Future of the Internet

A major challenge facing the continued growth of the Internet is the difficulty of providing enough bandwidth to sustain the network. As Internet applications become more sophisticated, and as more people around the world use the Internet, the amount of information transmitted across the Internet will demand very high bandwidth connections. While many communications companies are attempting to develop higher bandwidth technologies, it is not known whether the technology will be able to satisfactorily keep up with demand.

In order to accommodate the increasing number of users, the non-profit organization University Corporation for Advanced Internet Development (UCAID) is working on the construction of Internet 2. Internet 2 will add more bandwidth, or available communication lines, to the current information superhighway in order to accommodate larger packets of data. UCAID members include representatives from universities, the government, and the computer industry.

Another important question facing Internet growth is the issue of censorship. Because the Internet has grown so rapidly, governments have been slow to regulate its use and to pass laws regarding what content is acceptable. Many Internet users also see such laws as an infringement on their right to free speech.

Increasing commercial use of the Internet has heightened security and privacy concerns. With a credit or debit card, Internet users can order almost anything from an Internet site and have it delivered to their home or office. Companies doing business over the Internet must have very sophisticated security measures in place so that information such as credit card, bank account, and social security numbers cannot be accessed by unauthorized users. Similarly, government facilities, universities, and institutions must ensure that access to their computers over the Internet is strictly regulated.

## **12.2 Text B. The Internet**

### 12.2.1 Read and translate the text.

The Internet, a global computer network, began in the US in 1969 as a military experiment. It was designed to survive a nuclear war. Information sent over the Internet takes the shortest path available from one computer to another. Because of this, any two computers in the Internet will be available to stay in touch with each other as long as there is a single route between them. Owing to this technology, if some computers on the network are knocked out, information will just route around them.

Most of the Internet computers (more than 50%) are in the US, while the rest are located in more than 100 other countries. Although the number of host computers can be counted quite accurately, nobody knows exactly how many people use the Internet. There are millions, and their number is growing by thousands each month worldwide.

The most popular Internet service is e-mail. Most of the people who have access to the Internet use the network only for sending and receiving e-mail messages. However other popular services are available on the Internet. In many developing countries the Internet may provide businessmen with a reliable alternative to the expensive and unreliable telecommunication systems of these countries. Commercial users can communicate over the Internet with the rest of the world and can do it very cheaply.

## **12.3 Text C. The Opportunities of the Internet**

### 12.3.1 Read and translate the text.

The Internet is the world largest computer network. Millions of people around the world use the Internet to search for and retrieve information on all sorts of topics in a wide variety of areas including the arts, business, government, humanities, news, politics and recreation. People communicate through electronic mail, discussion groups, chat channels and other means of information exchange. They share information and make commercial and business transactions. All this activity is possible because tens of thousands of networks are connected to the Internet and exchange information in the same basic ways.

The World Wide Web (WWW) is a part of the Internet. But it is not the collection of networks. Rather it is information that is connected or linked together like a web. You

access this information through one interface or tool called a Web browser. The number of resources and services are growing extremely fast.

All sorts of things are available on WWW. One can use the Internet for recreational purposes. Many TV and radio stations broadcast live on the WWW. Essentially, if something can be put into digital format and stored in the computer, then it's available on the WWW. You can even visit museums, gardens, cities, throughout the world, learn foreign languages and meet new friends. And, of course, you can play computer games through WWW, competing with partners from other countries and continents.

Still the main goal of Web's freedom is to help in development of education. It is a well-known fact that after third world countries got access to the Internet they became wide represented on the net. They found out a lot of useful information and gave information about themselves there.

On the Internet you can choose the information to your own taste or need. The Internet makes it easier to find books (for example for your research paper) or articles and now even listen and watch famous people. Now teachers, students, professors, scientists, librarians, lawyers and others use Internet to search for useful information because it's the fastest and the most convenient way to do it. We can get data for our research just in seconds after pushing some buttons. This is no small deal, since entire books can be transferred through the Internet in a matter of minutes. Today millions of such files are available to anyone who asks for them. The country where Internet is well developed education level is also very high. It is said that communication allows the research and communication process to speed up because scientists can exchange data with each other very quickly, so they can solve their problems very fast. They can collaborate even being far from each other, being in different countries. That is how the educational level will rise up. This is that the Internet will help to develop our level due to its democracy and freedom.

## UNIT 13 PRESENTING A RESEARCH PAPER AT THE SCIENTIFIC CONFERENCE

### 13.1 Text A. Preparing and Presenting a Speech

13.1.1 Read and translate the text.

#### Preparing and Outlining a Speech

Consider these ten key steps when preparing a talk:

1. **Choose your subject with care:** Be sure the topic is appropriate to the audience, the occasion, the environment and your expertise. Be certain there is enough material available to present an adequate discussion of the subject in the time allotted.

2. **Analyze the audience:** Ask: What is the average age of my listeners? In what range of occupations and social standing are they? What are their customs, prejudices and principal beliefs? Why are they here?

3. **Ascertain your purpose:** Are you speaking chiefly to persuade, entertain, or inform?

4. **Gather materials:** Visit the public library, or use books, objects, examples, etc. from your own collections or experience. Locate sources and/or conduct interviews, and take notes on what you read, hear and think. (Don't be afraid to use some original thoughts and concepts. Add your own color!)

5. **Organize the material** Take several index cards or 3-by-5 pieces of paper, and write on each one a central phrase or sentence, which conveys an important fact, quote, comparison, statistic, or illustration relative to the subject. Lay the cards on a table and study them. Find the basic theme of the talk. Choose a statement, story, question that might make for an interesting opening, then further arrange the cards to form a sequence of facts and examples that support your main point.

Now, expand and formalize your outline. To avoid a cascade of cards during your delivery, write or type your notes on paper.

6. **Divide your speech into an introduction, body, and conclusion.**

a. The introduction should immediately engage attention, good will and respect, as well as lead into the subject matter. Do not promise more in the introduction than you have time to discuss in the body of the speech. An introduction might take any of the following forms:

- An initial, impacting statement. ("The best-kept secret of the fashion industry is that for fifteen years there has been no fundamental change in fashion.")
- A pointed question. ("How have your basic convictions been altered since you were seventeen years old?")
- A brief statement about global events. ("Just what does it mean to the future of the United States that we have become the world's largest debtor nation?")
- A reasonable challenge. ("Give me three good reasons why learning a foreign language can be important for business.")
- An evaluation of a local happening. ("Our community's response to the zoning initiative shows that we value our residential lifestyle more than profits.")

- The body of your talk will reflect your topical knowledge - and your hours of preparation. Use appropriate examples, short stories and quotations to highlight pivotal points. Use your own words to sum up vital information you've gleaned from your research.

c. The conclusion may take many forms - an emotional appeal, a short summary, a challenge, a suggested action to be taken, or a provocative question. You may choose to hark back to the essential point made in your introduction to tie the speech together. Most important, remember that a conclusion is best when it is brief, crisp, and unannounced; and when it leaves a "sweet aftertaste" and fosters a positive attitude.

- Select words carefully. Avoid these lines when wording your speech:
  - "I'll be brief..." Don't lengthen your message (or arouse audience suspicions) by voicing a promise to be brief. It's best to get on with your subject.
  - "I don't know why I was chosen to give this speech ..." Such a statement reduces your credibility and also may embarrass the person who invited you to talk.
  - "I don't want to offend anyone, but ..." If you must use a disclaimer like this, yes, your remarks may offend somebody (or everybody). In addition, avoid these pitfalls – apologies for being an ineffective speaker.
  - Difficult, trite or tiresome words or phrases.
  - Overly abstract or confusing phrases or analogies. (A good story or example is better than a complex, analytical explanation.)
  - Redundancies in descriptions ("a component part," "an icy blizzard," "a terrible disaster ...").
  - Unnecessary descriptiveness. (Is a very big dept larger than a big dept? "Very" is a word that is rarely needed, as are "major," "absolutely", and "completely.")

7. **Use quotations correctly:** Back up your own opinions and ideas with those of experts; but be sure to give proper credit ("In his book *Talking Straight*, Lee Iacocca urges ...").

8. **Employ (on a limited basis) personal references:** Pertinent personal stories, used in an unassuming manner, serve to embellish a talk. Rather than use the expression, "Pardon the personal reference ..." to try to "soften" your words: "It has been my experience ..."

9. **Make your speech your own:** Prepare and deliver your own message in your own words – and let others' stories and examples serve as support and filler material.

10. **Time your speech:** Nothing kills a good speech faster than going overtime.

### 13.1.2 Practicing For Better Delivery

1. Use a recorder to practice your delivery; or, if possible, videotape your rehearsal. Most people don't know how they look or sound when they speak. Identify areas where you can improve. Ask a trusted friend to give you feedback, if you don't mind a critique. Try to pick out nervous habits and poor posture. Examine your eye

contact with the audience, voice inflection, energy of delivery and the speech content itself

2. Practice so that your speech seems alive and real, rather than perfect. Rehearse until you are comfortable. Just thinking about your talk is different than rehearsing. Remember: your rehearsals will almost always be worse than the real thing. Work at creating a sincere, relaxed image.

3. Practice speaking on a "full breath". The primary source of speech projection is in the solar plexus - the upper abdominal region just beneath the rib cage. Powering (and controlling) the voice from this all-important center provides projection, a pleasant pitch, and a sense of authority that a "throaty" voice can't offer.

4. Place more emphasis on key words and phrases. Slow down on, or repeat sentences that capture the essence of your message.

5. Use gestures only to suggest action rather than to imitate it. Let the motivation for your gestures flow from the emotion and meaning of your talk.

### 13.1.3 Presenting Your Speech

Add to your confidence by walking calmly to the podium, breathing slowly and deeply, pausing to establish initial eye contact with three or four friendly faces, then pausing or slowing down again whenever necessary to maintain calm rapport. Above all, remind yourself "I'm glad to be here; I've prepared well and I have something interesting and important to share."

#### DO:

- Dress to enhance attention and self-confidence.
- Smile.
- Make the audience a partner by referring to them and their interests.
- Try to sense the "vibrations" that emanate from the audience.
- Use a minimum of notes.
- Speak loudly enough so that those on the back row can hear.
- Balance yourself on two feet, maintaining good posture.
- Make your closing sentences as loud and vibrant as the rest of your speech. (Many speakers have a tendency to "drop" their last few words.)

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#### DON'T:

- Look at the clock. (Your speech should already be timed.)
- Let distracting mannerisms creep in (clearing your throat, shuffling your feet, fidgeting with the microphone, fumbling with notes, sniffing, nose twitching, lip biting, grimacing).
- Speak to the person next to you immediately after taking your seat.

By engaging in thoughtful preparation and practice, you can't help but be a success.

## 13.2 Text B. Some Rules for Making a Presentation

### 13.2.1 Read and Translate the text.

#### Golden rule.

Human attention is **very** limited. Don't cram too much information, either in each slide, or in the whole talk. Avoid details: they won't be remembered anyway.

### 13.2.2 Organization.

Have a very clear introduction, to motivate what you do and to present the problem you want to solve. The introduction is not technical in nature, but strategic (i.e. why this problem, big idea).

If you have a companion paper, mention it during the talk and recommend it for more details. Don't put all the details in the talk. Present only the important ones.

Use only one idea per slide.

Have a good conclusions slide: put there the main ideas, the ones you really want people to remember. Use only one conclusions slide.

The conclusion slide should be the last one. Do not put other slides after conclusions, as this will weaken their impact.

Having periodic “talk outline” slides (to show where you are in the talk) helps, especially for longer talks. At least one “talk outline” slide is very useful, usually after the introduction.

Don't count on the audience to remember any detail from one slide to another (like color-coding, applications you measure, etc.). If you need it remembered, re-state the information a second time.

Especially if you have to present many different things, try to build a unifying thread. The talk should be sequential in nature (i.e. no big conceptual leaps from one slide to the next).

Try to cut out as much as possible; less is better.

Help the audience understand where you are going. Often it's best to give them a high-level overview first, and then plunge into the details; then, while listening to the details they can relate to the high-level picture and understand where you are. This also helps them save important brain power for later parts of the talk which may be more important.

### 13.2.3 Mechanics

Use a good presentation-building tool, like MS PowerPoint. Avoid Latex, except for slides with formulas.

Humor is very useful; prepare a couple of puns and jokes beforehand (but not epic jokes, which require complicated setup). However, if you're not good with jokes, better avoid them altogether. Improvising humor is very dangerous.

The more you rehearse the talk, the better it will be. A rehearsal is most useful when carried out loud. 5 rehearsals is a minimum for an important talk.

The more people criticize your talk (during practice), the better it will be; pay attention to criticism, not necessarily to all suggestions, but try to see what and why people misunderstood your ideas.

Not everything has to be written down; speech can and should complement the information on the slides.

Be enthusiastic.

Act your talk: explain, ask rhetorical questions, act surprised, etc.

Give people time to think about the important facts by slowing down, or even stopping for a moment.

Do not go overtime under any circumstance.

Listen to the questions very carefully; many speakers answer different questions than the ones asked.

Do not treat your audience as mentally-impaired: do not explain the completely obvious things.

#### 13.2.4 Text

Slides should have short titles. A long title shows something is wrong.

Use uniform capitalization rules.

All the text on one slide should have the same structure (e.g. complete phrases, idea only, etc.).

Put very little text on a slide; avoid text completely if you can. Put no more than one idea per slide (i.e. all bullets should refer to the same thing). If you have lots of text, people will read it faster than you talk, and will not pay attention to what you say.

Don't use small fonts.

Use very few formulas (one per presentation). The same goes for program code (at most one code fragment per presentation).

Do not put useless graphics on each slide: logos, grids, affiliations, etc.

Spell-check. A spelling mistake is an attention magnet.

#### 13.2.5 Illustrations

Use suggestive graphical illustrations as much as possible. Don't shun graphical metaphors. Prefer an image to text. In my presentations I try to have 80% of the slides with images.

Do not put in the figures details you will not mention explicitly. The figures should be as schematic as possible (i.e. no overload of features).

Do not "waste" information by using unnecessary colors. Each different color should signify something different, and something important. Color-code your information if you can, but don't use too many different colors. Have high-contrast colors.

A few real photos related to your subject look very cool (e.g. real system, hardware, screen-shots, automatically generated figures, etc.). Real photos are much more effective during the core of the talk than during the intro. I hate talks with a nice picture during the introduction and next only text; they open your appetite and then leave you hungry.

For some strange reason, rectangles with shadows seem to look much better than without (especially if there are just a few in the figure).

Sometimes a matte pastel background looks much better than a white one.

Exploit animation with restraint. Do not use fancy animation effects if not necessary.

However, there are places where animation is extremely valuable, e.g., to depict the evolution of a complex system, or to introduce related ideas one by one.

Use strong colors for important stuff, pastel colors for the unimportant.

Encode information cleverly: e.g. make arrow widths showing flows proportional to the flow capacity.

Use thick lines in drawings (e.g. 1 1/2 points or more).

### 13.2.6 Results

Don't put useless information in result graphs (e.g. the 100% bar for each application).

Label very clearly the axes of the graphs. Explain the unobvious ones. Use large fonts for labels; the default fonts in Excel are too small.

Discuss the results numbers in detail; "milk" them as much as possible.

## 13.3 Text C. Science Conference.

### 13.3.1 Read and translate the text.

Science is the main characteristic feature distinguishing the present civilization from the other civilizations of the past. It is not much of exaggeration to say that we live in a world that materially and intellectually has been created by science.

Science occupies a central position in modern society. A lot of researches are carried out by scientists in different scientific fields. In order to share their experience with the society many conferences take place all over the world. Our University is not an exception, every spring the science conference is held where many students participate with their scientific reports. A good report requires a lot of preparatory work and each student should know what his script is to consist of.

There are three stages in such work: planning, script and rehearsal. The planning stage is really important, here you should determine the subject matter of the report and its aims, then find out what the audience knows about your subject, whether it is up to date and is interesting for people. At this stage the time of your presentation, length and the format of the report including the use of demonstration material and handouts should be taken into account.

The next stage is so called script stage when you are writing the text of your report. To some extent it is possible to speak about the typical structure of the report that goes along with the typical language used. As far as the structure is concerned, usually we have three main parts in the reports; they are introduction, main body and conclusion. Each part is usually introduced by universal phrases and clichés, which accepted officially all over the world. As for the main body of the report, specialists as a rule do not have difficulty in presenting the problem they are working at.

In any case if you want to have a success you can't do without the last rehearsal stage when you should write your presentation out full and rehearse it from the cards. It is useful to record your presentation on audiotape to check correct speech and on videotape to control your body language. All these actions help to create positive impression on the public and thus contribute to your success and to science

in general. If you wish to take part in scientific activities of EKSTU you are welcome to start investigating.

## UNIT 14 NATIONAL ECONOMIC SECTORS OF THE REPUBLIC OF KAZAKHSTAN

### 14.1 Text A. Economic Groups of Kazakhstan

14.1.1 Read and translate the text.

#### Administrative division

The Republic of Kazakhstan consists of 14 oblasts and 2 cities of republican submission. Nowadays it has 85 cities, 169 regions, 195 settlements and 2150 districts (rural and auls)

#### 14.1.2 Western Kazakhstan

Its territory covers 736 thousand square km. Its population is about 2 mln people. 4 oblasts are situated on the territory of Western Kazakhstan: Western Kazakh, Aktuybinsk, Atyrau and Mangystau. These oblasts belong to different economic groups. Atyrau and Mangystau are big centres of oil and chemical industry; there are deposits of phosphorites here. In the Western-Kazakh area agriculture is developed, mainly grain farming and pasturable sheep breeding. Quite recently the oblast has been given a powerful incentive in the development of industry. It is connected with the development of great Karachaganak gas condensate deposit. Heavy industry is developed in Aktyubinsk oblast — mining, chemical, machinery, oil. There is a chromium deposit in the oblast, which is exploited by the powerful company «Kazchrome».

Cities and administrative centres of Western Kazakhstan have a very interesting historical past. The city of Uralsk used to be called Yaitzky town, it was founded in 1613. It saw ataman Stepan Razin's Cossacks; in the XVIII century it was one of the centres of revolt under Yemelyan Pugachev, after which it was renamed into Uralsk. During the Civi War legendary V.I.Chapaev fought here. Now the city is the administrative centre of Western-Kazakh oblast. The centre of Aktyubinsk oblast was founded in the XIX century as a fortress Aktyube. Gaining the status of a city it began to be called Aktyubinsk. After Kazakhstan had got its independence, the city was renamed into Aktobe. The administrative

centre of Atyrau oblast is the city of Atyrau. The former name of it was Guriev. The city was founded by the Russian merchants Gurievs. At first it was used as a fortification to protect sea-trading ways. Its streets remember ataman Razin's Cossacks. The youngest city is Aktau, former Shevchenko. It appeared and grew due to the oil-extracting industry on the peninsula of Mangystau.

#### 14.1.3 Northern Kazakhstan

This region covers 440 thousand square km. About 2,6 mln people live here. It includes Northern-Kazakh. Akmolinsk and Kostanai oblasts. The capital of Kazakhstan — Astana — is located in this area, with the population of more than 400 thousand people and the city has the status of republican submission.

The powerful stimulus in the growth of its economy and culture was the development of virgin lands in 1954. The region has vast arable lands, favourable to grow various agricultural crops. Tselinograd became the centre of this area, quickly growing town former known as Akmolinsk. Now it is Astana — the capital of Kazakhstan. These days the northern part of Kazakhstan is the main country's supplier of grain, meat and milk. Mechanical engineering is also developed here. During the World War II powerful plants were evacuated from the European part of the USSR. This made the Northern-Kazakh oblast and its administrative centre Petropavlovsk one of the developed economical regions of Kazakhstan.

In the future North Kazakhstan promises to become a great industrial region. So Akmolinsk oblast possesses vast deposits of gold, uranium, diamonds, and iron-ore. «Kazakhstan Aluminium» Company works in Kostanai oblast: iron-ore, dolomite, limestone are extracted in Rudny.

The cities of North Kazakhstan were founded in the XVIII-XIX centuries. Almost all of them used to be fortresses built by the Russians when the Russian Empire came to the borders of Kazakhstan. Petropavlovsk was called St.Peter's fortress and began growing quickly after the High Decree on trade with steppe peoples was passed in 1759.

Kostanai got its status of a city in 1893. It was called Nickolaevsk for 2 years, and then it got back its old name. According to one of the legends there were two sisters named Kos and Tanai who were buried on the hill by the Tobol River.

Kokshetau is the centre of Akmolinsk oblast, former Cossack village. It got its name as the mountains were always surrounded by blue mist. In Kazakh Kokshetau means a blue mountain. This place is one of the most picturesque places in Kazakhstan. The area is full of rivers, lakes with salt and fresh water. This allows building health resorts and sanatoria here. Borovoe is one of the most famous resorts. An outstanding Birzhan-sal - folk singer and poet (akyn) Birzhan Kozhamkulov lived and worked here. Shokan Valikhanov, the first kazakh scientist, geographer, writer, enlightener worked there, too.

#### 14.1.4 Central Kazakhstan

Central Kazakhstan is represented by Karaganda oblast. It is the biggest oblast, covers 428 thousand square kilometres. The population is 1 mln 410 thousand people. The administrative centre is Karaganda city with the population 437 thousand people. Till recently it has been the second biggest city after Almaty. But due to migration it moved to the third place, giving place to the growing new capital Astana. Karaganda was founded on the place of the miner's settlement and in 1932 became the centre.

There are big ferrous and non-ferrous metallurgical enterprises in Central Kazakhstan cities Temirtau and Balkhash. The oblast has great deposits of coal and manganese. There are some difficulties, which the oblast faces today. As in many countries with changing economical situation the demand for coal has fallen down. As a result part of the enterprises in Temirtau and Karaganda stopped working. The Government allowed privatizing all big coal-mining enterprises. As a result of

investments in industry many companies got back their power. Now the situation is stabilized. Among the investors are «Ispat-Karmet» and «Atasuruda» companies.

#### 14.1.5 Eastern Kazakhstan

There are two powerful industrial oblasts in the east of the country—Pavlodar and Ust-Kamenogorsk. Their territory is 408 thousand square km. The population is 2 mln 240 thousand people. Pavlodar oblast is the centre of manufacturing industry (Pavlodar-Ekibastuz industrial centre). Part of the oblast enterprises after the reorganization entered the number of powerful industrial companies. For example, Pavlodar aluminium plant became a branch of «Aluminium of Kazakhstan» company. The administrative centre Pavlodar is a big port on the Irtysh River. The neighbouring oblast — Eastern-Kazakh also has some enterprises of ferrous and non-ferrous metallurgy. One of the working today is a copper centre on the basis of Irtysh copper plant «Ust-Kamenogorsk titanium-magnesium establishment». The centre of the oblast is Ust-Kamenogorsk situated as Pavlodar on the Irtysh River and is a big river port.

Both cities were founded at the beginning of the XVIII century as Koryakovsk advanced post (Pavlodar) and Ust-Kamen fortress (Ust-Kamenogorsk). Agriculture is also developed in Pavlodar oblast, mostly grain growing, cattle breeding and poultry keeping.

#### 14.1.6 Southern Kazakhstan

The south includes 4 oblasts: South-Kazakh, Kyzylorda, Zhambyl, Almaty. The total territory is 711 thousand square km. The population is 5128 thousand people. The third of the republic population live here. This region is characterized by manufacturing industry and agriculture. Kyzylorda oblast develops food and light industries. Rice is grown here. Sheep breeding and fishing industry are concentrated in this area. Zhambyl oblast is the centre of chemical, light and food industries, building industry is well developed too. Karatau possesses mining-chemical plant.

South-Kazakh oblast develops machinery engineering, manufacturing, light and food industries. The region is an agricultural one, too. Cotton growing and vegetable-growing are developed.

In Almaty oblast industry is represented by the enterprises of machinery engineering, light and food industries. Well-known companies are «Ak-Zhip» (spinning factory) and «Kargaly» (woollen factory).

There are deposits of mineral resources in the region. Kumkol is a big oil deposit in Kyzylorda oblast. Non-ferrous metals ores were found in Almaty oblast. Zhambyl oblast is rich in copper and phosphorite reserves. The south of Kazakhstan is mostly interesting for historians and archaeologists. There used to be trading ways here connecting Kazakhstan with the East.

One of the oldest cities in the south is Taraz, known from the V century. In the X-XII centuries it was the capital of Karakhanid State. After this the city changed its name not once. Till 1936 it was known as Aulie-Ata, then it was called Mirzoyan for 2 years, after it became Dzhambul. After getting the independence of Kazakhstan the

city got its ancient name Taraz. Other well-known cities of the south are Shymkent and Turkestan. Shymkent was founded in the XII century. Sheikh Akhniet Yassavi lived in Turkestan. In the XIV century invincible emir Timur known in Europe as Tamerlan built a great mausoleum above Akhmet Yassavi grave. Nowadays Turkestan is considered to be the second Moslem Mekka. In the XV-XVII centuries the city was the capital of Kazakh khanate. The founders of Kazakh state - khans Tevvekel, Dzhangir, Esim, Tauke and Abylai are buried here.

The city of Kyzylorda also changed its name several times. It was founded in 1820 as a fortress of Kokand khanate, known then as Ak Mechet. In 1853 the fortress was seized by the Russian troops under the general Perovsky command and thus renamed into the fort Perovsky later — into the city of Perovsk. After the revolution in 1925 it was called Kyzylorda. From 1925 to 1929 Kyzylorda was the capital of Kazakhstan

#### 14.1.7 Almaty

Some Chinese and Arabic sources tell that on the territory of modern Almaty there were ancient Saks settlements of the III-VI centuries B.C. Over here the archaeologists found the ruins of Saks settlements - early people lived in the first century A.D. In the VIII-X centuries A.D. the town of Almaty served as a stanitsa on the trading way from Europe to China. Then Chingis Khan came and everything was over... In 1854 Russia spreading its economic and political interest to the south founded a military fortification Zailiyskoe there. Soon after it got the name of Vernoe and in 1867 it became a city. In 1921 Verny was renamed into Alma-Ata. And in 1929 Alma-Ata became the capital of Kazakhstan. When Kazakhstan gained its independence the city got its historical name Almaty.

The city is situated at 700-900 metres above the sea level and occupies the territory of about 300 square km. 1200 thousand people live here. As it is located in the seismic zone it felt Vernensk (1887) and Keminsk (1910) earthquakes and powerful mudflows by the Bolshaya (1977) and Malaya (1921, 1973) Almatinka Rivers. Because of the urbanization the city is often covered with smog.

Many unique buildings and constructions were erected in Almaty. Mountain ice spoil centre «Medeu», mountain-skiing centre «Chimbulak», museums, and theatres are here, too. There is National Academy of Sciences, a number of universities and institutes in Almaty. As the capital was transferred to Astana, Almaty got a special status - a political, financial, scientific and social-cultural centre of the state.

Today Almaty is the main transport centre with two railway lines, five motorways; there is an international airport. The chief industry is machinery engineering and food one. Thanks to its unique location — among emerald-blue snow-covered tops of Zailiysky Alatau Mountains — Almaty is really a pearl of Kazakhstan.

### 14.1.8 Astana

Akmolinsk steppes were always the territory of interethnic ties. Even Herodotus mentioned Great Silk way, which lay through these steppes in the middle of the first millennium B.C. Many caravan ways gave life to the cities with flourishing trade.

In the XIX century Akmola was a popular trading and economic steppe centre. Its history started in 1830 when the Russian Empire founded a fortress with this name by the Karaotkel River. From 1832 the fortress began to be called Akmolinsk and by the end of the XIX century it became a town with the population of about 6428 people. It had three churches, 5 schools and colleges and 3 factories.

The next step in the development of this city was cultivating virgin lands. By 1960 the city having the population 100 thousand people became the centre of the north region of Kazakhstan. It was renamed into Tselinograd and became a beautiful modern city with the population 250 thousand people. Many volunteers from the whole USSR came here to build the city and to live there. Many institutes, hospitals, museums, theatres were built here. The virgin area became an agricultural centre with the developed machinery engineering, cattle-breeding and poultry-keeping.

After Kazakhstan gained its independence the city got its former name - Akmola. But in 1988 when the capital was transferred from Almaty, the city got a symbolic name - Astana. The decision to transfer the capital depended on some economic, ecological and geographical factors. The main arguments in choosing the place for the capital were the general condition of the city, territory, and well-developed transport system. Besides it stimulates the flourishing of the northern, central and eastern regions. Even development of the state economy will be reached.

For the last few years Astana has changed. It became a beautiful city of Kazakhstan. The city centre impresses especially. Grand buildings of the Government and Parliament Houses, other administrative establishments meet all modern requirements. Music College, Opera House, the central square are marked by magnificent architectural items. The Republic Avenue is wonderful at night. After a working day citizens and guests love walking along the embankment of the Ishim River with! attractions, parks and cafes working half the night.

## 14.2 Text B. Economic Groups

### 14.2.1 Read and translate the text

Analysing economic situation of different regions of the country is possible to divide it into 6 economic groups. Let's look at them:

1 group includes the oblasts with developed industry, rich in natural mineral resources. There are local mining and manufacturing enterprises using its own raw materials. Also these regions develop light, food industries and machinery engineering. This group includes Eastern-Kazakh, Karaganda and Pavlodar oblasts.

2 group consists of the regions rich in natural resources and vast agricultural lands. It includes Aktyubinsk, Zhambyl, Kostanai and Southern-Kazakh oblasts.

3 group is represented by Atyrau and Mangistau oblasts. They are rich in hydrocarbon mineral resources. Agriculture is not developed here; as for industry

there predominate traditionally developed branches.

4group includes Western-Kazakh and Northern-Kazakh oblasts. Here machinery engineering is mostly developed and there are considerable agricultural areas. All this determines the industrial and agrarian development of the oblasts.

5group consists mostly of agrarian oblasts. They are Akmolinsk, Almaty and Kyzylorda oblasts. Industry is not considerable here. Only machinery engineering, light and food industries are met there.

6group includes 2 cities of republican submission Almaty and Astana. Economy, weakly involved in new spheres of activity, growing financial sector and high specific and technical potential are characteristic for them.

## UNIT 15 PROFESSIONAL FIELDS

### 15.1 Text A. Technical Specialties

#### 15.1.1 Read and translate the text.

Scientific methods of engineering are applied in several fields not connected directly to manufacture and construction. Modern engineering is characterized by the broad application of what is known as systems engineering principles. The systems approach is a methodology of decision-making in design, operation, or construction that adopts (1) the formal process included in what is known as the scientific method; (2) an interdisciplinary, or team, approach, using specialists from not only the various engineering disciplines, but from legal, social, aesthetic, and behavioral fields as well; (3) a formal sequence of procedure employing the principles of operations research.

In effect, therefore, **transportation engineering** in its broadest sense includes not only design of the transportation system and building of its lines and rolling stock, but also determination of the traffic requirements of the route followed. It is also concerned with setting up efficient and safe schedules, and the interaction of the system with the community and the environment. Engineers in industry work not only with machines but also with people, to determine, for example, how machines can be operated most efficiently by the workers. A small change in the location of the controls of a machine or of its position with relation to other machines or equipment, or a change in the muscular movements of the operator, often results in greatly increased production. This type of engineering work is called time-study engineering.

A related field of engineering, **human-factors engineering**, also known as **ergonomics**, received wide attention in the late 1970s and the '80s when the safety of nuclear reactors was questioned following serious accidents that were caused by operator errors, design failures, and malfunctioning equipment. Human-factors engineering seeks to establish criteria for the efficient, human-centered design of, among other things, the large, complicated control panels that monitor and govern nuclear reactor operations.

Among various recent trends in the engineering profession, **licensing** and **computerization** are the most widespread. Today, many engineers, like doctors and lawyers, are licensed by the state. Approvals by professionally licensed engineers are required for construction of public and commercial structures, especially installations where public and worker safety is a consideration. The trend in modern engineering offices is overwhelmingly toward computerization. Computers are increasingly used for solving complex problems as well as for handling, storing, and generating the enormous volume of data modern engineers must work with.

#### 15.1.2 Aeronautical and Aerospace Engineering

Aeronautics deals with the whole field of design, manufacture, maintenance, testing, and use of aircraft for both civilian and military purposes. It involves the knowledge of aerodynamics, structural design, propulsion engines, navigation, communication, and other related areas.

Aerospace engineering is closely allied to aeronautics, but is concerned with the flight of vehicles in space, beyond the earth's atmosphere, and includes the study and development of rocket engines, artificial satellites, and spacecraft for the exploration of outer space. See Space Exploration.

### 15.1.3 Chemical Engineering

This branch of engineering is concerned with the design, construction, and management of factories in which the essential processes consist of chemical reactions. In addition, chemical engineers must organize the unit operations in their correct sequence, and they must consider the economic cost of the overall process.

### 15.1.4 Civil Engineering

Civil engineering is perhaps the broadest of the engineering fields, for it deals with the creation, improvement, and protection of the communal environment, providing facilities for living, industry and transportation, including large buildings, roads, bridges, canals, railroad lines, airports, water-supply systems, dams, irrigation, harbors, docks, aqueducts, tunnels, and other engineered constructions. The civil engineer must have a thorough knowledge of all types of surveying, of the properties and mechanics of construction materials, the mechanics of structures and soils, and of hydraulics and fluid mechanics. Among the important subdivisions of the field are construction engineering, irrigation engineering, transportation engineering, soils and foundation engineering, geodetic engineering, hydraulic engineering, and coastal and ocean engineering.

### 15.1.5 Electrical and Electronics Engineering

The largest and most diverse field of engineering, it is concerned with the development and design, application, and manufacture of systems and devices that use electric power and signals. Among the most important subjects in the field in the late 1980s are electric power and machinery, electronic circuits, control systems, computer design, superconductors, solid-state electronics, medical imaging systems, robotics, lasers, radar, consumer electronics, and fiber optics.

Despite its diversity, electrical engineering can be divided into four main branches: electric power and machinery, electronics, communications and control, and computers.

### 15.1.6 Electric Power and Machinery

The field of electric power is concerned with the design and operation of systems for generating, transmitting, and distributing electric power. Engineers in this field have brought about several important developments since the late 1970s. One of these is the ability to transmit power at extremely high voltages in both the direct current (DC) and alternating current (AC) modes, reducing power losses proportionately. Another is the real-time control of power generation, transmission, and distribution, using computers to analyze the data fed back from the power system to a central station and thereby optimizing the efficiency of the system while it is in operation.

A significant advance in the engineering of electric machinery has been the introduction of electronic controls that enable AC motors to run at variable speeds by

adjusting the frequency of the current fed into them. DC motors have also been made to run more efficiently this way.

### 15.1.7 Electronics

Electronic engineering deals with the research, design, integration, and application of circuits and devices used in the transmission and processing of information. Information is now generated, transmitted, received, and stored electronically on a scale unprecedented in history, and there is every indication that the explosive rate of growth in this field will continue unabated.

Electronic engineers design circuits to perform specific tasks, such as amplifying electronic signals, adding binary numbers, and demodulating radio signals to recover the information they carry. Circuits are also used to generate waveforms useful for synchronization and timing, as in television, and for correcting errors in digital information, as in telecommunications.

Prior to the 1960s, circuits consisted of separate electronic devices—resistors, capacitors, inductors, and vacuum tubes—sembled on a chassis and connected by wires to form a bulky package. Since then, there has been a revolutionary trend toward integrating electronic devices on a single tiny chip of silicon or some other semiconductive material. The complex task of manufacturing these chips uses the most advanced technology, including computers, electron-beam lithography, micro-manipulators, ion-beam implantation, and ultraclean environments. Much of the research in electronics is directed toward creating even smaller chips, faster switching of components, and three-dimensional integrated circuits.

### 15.1.8 Communications and Control

Engineers in this field are concerned with all aspects of electrical communications, from fundamental questions such as “What is information?” to the highly practical, such as design of telephone systems. In designing communication systems, engineers rely heavily on various branches of advanced mathematics, such as Fourier analysis, linear systems theory, linear algebra, complex variables, differential equations, and probability theory.

Engineers work on control systems ranging from the everyday, passenger-actuated, as those that run an elevator, to the exotic, as systems for keeping spacecraft on course. Control systems are used extensively in aircraft and ships, in military fire-control systems, in power transmission and distribution, in automated manufacturing, and in robotics.

Engineers have been working to bring about two revolutionary changes in the field of communications and control: Digital systems are replacing analog ones at the same time that fiber optics are superseding copper cables. Digital systems offer far greater immunity to electrical noise. Fiber optics are likewise immune to interference; they also have tremendous carrying capacity, and are extremely light and inexpensive to manufacture.

### 15.1.9 Computers

Virtually unknown just a few decades ago, computer engineering is now among the most rapidly growing fields. The electronics of computers involve engineers in design and manufacture of memory systems, of central processing units, and of peripheral devices. The field of computer science is closely related to computer engineering; however, the task of making computers more “intelligent” (artificial intelligence), through creation of sophisticated programs or development of higher level machine languages or other means, is generally regarded as being in the realm of computer science.

One current trend in computer engineering is microminiaturization, engineers continue to work to squeeze greater and greater numbers of circuit elements onto smaller and smaller chips. Another trend is toward increasing the speed of computer operations through use of parallel processors, superconducting materials, and the like.

### 15.1.10 Geological and Mining Engineering

This branch of engineering includes activities related to the discovery and exploration of mineral deposits and the financing, construction, development, operation, recovery, processing, purification, and marketing of crude minerals and mineral products. The mining engineer is trained in historical geology, mineralogy, paleontology, and geophysics, and employs such tools as the seismograph and the magnetometer for the location of ore or petroleum deposits beneath the surface of the earth. The surveying and drawing of geological maps and sections is an important part of the work of the engineering geologist, who is also responsible for determining whether the geological structure of a given location is suitable for the building of such large structures as dams.

### 15.1.11 Industrial or Management Engineering

This field pertains to the efficient use of machinery, labor, and raw materials in industrial production. It is particularly important from the viewpoint of costs and economics of production, safety of human operators, and the most advantageous deployment of automatic machinery.

### 15.1.12 Mechanical Engineering

Engineers in this field design, test, build, and operate machinery of all types; they also work on a variety of manufactured goods and certain kinds of structures. The field is divided into (1) machinery, mechanisms, materials, hydraulics, and pneumatics; and (2) heat as applied to engines, work and energy, heating, ventilating, and air conditioning. The mechanical engineer, therefore, must be trained in mechanics, hydraulics, and thermodynamics and must be fully grounded in such subjects as metallurgy and machine design. Some mechanical engineers specialize in particular types of machines such as pumps or steam turbines. A mechanical engineer designs not only the machines that make products but the products themselves, and must design for both economy and efficiency. A typical example of the complexity of modern mechanical engineering is the design of an automobile, which entails not only the design of the engine that drives the car but also all its attendant accessories such as the steering

and braking systems, the lighting system, the gearing by which the engine's power is delivered to the wheels, the controls, and the body, including such details as the door latches and the type of seat upholstery.

#### 15.1.13 Military Engineering

This branch is concerned with the application of the engineering sciences to military purposes. It is generally divided into permanent land defense and field engineering. In war, army engineer battalions have been used to construct ports, harbors, depots, and airfields. In the U.S., military engineers also construct some public works, national monuments, and dams

Military engineering has become an increasingly specialized science, resulting in separate engineering subdisciplines such as ordnance, which applies mechanical engineering to the development of guns and chemical engineering to the development of propellants, and the Signal Corps, which applies electrical engineering to all problems of telegraph, telephone, radio, and other communication.

#### 15.1.14 Naval or Marine Engineering

Engineers who have the overall responsibility for designing and supervising construction of ships are called naval architects. The ships they design range in size from ocean-going supertankers as much as 1300 feet long to small tugboats that operate in rivers and bays. Regardless of size, ships must be designed and built so that they are safe, stable, strong, and fast enough to perform the type of work intended for them. To accomplish this, a naval architect must be familiar with the variety of techniques of modern shipbuilding, and must have a thorough grounding in applied sciences, such as fluid mechanics, that bear directly on how ships move through water.

Marine engineering is a specialized branch of mechanical engineering devoted to the design and operation of systems, both mechanical and electrical, needed to propel a ship. In helping the naval architect design ships, the marine engineer must choose a propulsion unit, such as a diesel engine or geared steam turbine, that provides enough power to move the ship at the speed required. In doing so, the engineer must take into consideration how much the engine and fuel bunkers will weigh and how much space they will occupy, as well as the projected costs of fuel and maintenance.

#### 15.1.15 Nuclear Engineering

This branch of engineering is concerned with the design and construction of nuclear reactors and devices, and the manner in which nuclear fission may find practical applications, such as the production of commercial power from the energy generated by nuclear reactions and the use of nuclear reactors for propulsion and of nuclear radiation to induce chemical and biological changes. In addition to designing nuclear reactors to yield specified amounts of power, nuclear engineers develop the special materials necessary to withstand the high temperatures and concentrated bombardment of nuclear particles that accompany nuclear fission and fusion. Nuclear engineers also develop methods to shield people from the harmful radiation produced by nuclear reactions and to ensure safe storage and disposal of fissionable materials.

### 15.1.16 Safety Engineering

This field of engineering has as its object the prevention of accidents. In recent years safety engineering has become a specialty adopted by individuals trained in other branches of engineering. Safety engineers develop methods and procedures to safeguard workers in hazardous occupations. They also assist in designing machinery, factories, ships, and roads, suggesting alterations and improvements to reduce the likelihood of accident. In the design of machinery, for example, the safety engineer seeks to cover all moving parts or keep them from accidental contact with the operator, to put cutoff switches within reach of the operator, and to eliminate dangerous projecting parts. In designing roads the safety engineer seeks to avoid such hazards as sharp turns and blind intersections, known to result in traffic accidents. Many large industrial and construction firms, and insurance companies engaged in the field of workers compensation, today maintain safety engineering departments.

### 15.1.17 Sanitary Engineering

This is a branch of civil engineering, but because of its great importance for a healthy environment, especially in dense urban-population areas, it has acquired the importance of a specialized field. It chiefly deals with problems involving water supply, treatment, and distribution; disposal of community wastes and reclamation of useful components of such wastes; control of pollution of surface waterways, groundwaters, and soils; milk and food sanitation; housing and institutional sanitation; rural and recreational-site sanitation; insect and vermin control; control of atmospheric pollution; industrial hygiene, including control of light, noise, vibration, and toxic materials in work areas; and other fields concerned with the control of environmental factors affecting health. The methods used for supplying communities with pure water and for the disposal of sewage and other wastes are described separately.

### 15.1.18 Composite Materials

The new era of composite materials will have a profound effect on engineering of the future. Super hard materials from powder are used in electronics, radiotechnical and electrotechnical industries. Powder metallurgy makes it possible to obtain these and other materials.

**Powder Metallurgy** is a technology for manufacturing metallic articles from suitable powders. Powders are squeezed together under high pressure and then heated to temperatures below their melting points. The result is a solid article. Powder metallurgy is preferable to other methods of manufacture such as casting or machining when it is more economical (as in the case of small machine parts) or when a product with the desired qualities can be made only from powders.

Suitable powder particles are one to several hundred micrometers in size. Most powders are made by fragmenting a molten metal or alloy. In one such process, called atomization, narrow jets of water or gas strike streams of molten metal. Other powders are made by milling or otherwise breaking up pieces of solid metal. Still others are produced by means of chemical reactions such as the reduction of powdered oxides to metal or the precipitation of metal particles from an aqueous solution.

A metal product is made by pressing powder into a suitably shaped die or container to obtain a self-supporting compact. In a process called sintering, the compact is heated in a protective gas atmosphere to a high temperature, at which strong bonding occurs between the metal particles. If necessary, the dimensions, density, and mechanical properties can be modified by using additional processes such as re-pressing and heat treatment.

**Composite materials** are produced by the hot compaction method. They are better in their properties, especially in durability, than similar materials.

The operation principle of powder metallurgy is well-known: an item of necessary size is modeled in a mold out of very small grains. After that the item is put into an electrothermic furnace where the grains get sintered together.

The coefficient of the use of metal grows by five times. The time of operation of powder articles increases considerably. The sintered articles have already proved their advantages working in outer space, in deep sea conditions and inside various machines.

#### 15.1.19 Automation

**Automation** is the system of manufacture designed to extend the capacity of machines to perform certain tasks and to control sequences of operations without human intervention. The term **automation** has also been used to describe nonmanufacturing systems in which programmed or automatic devices can operate independently or nearly independently of human control. In the fields of communications, aviation, and astronautics, for example, such devices as automatic telephone switching equipment, automatic pilots, and automated guidance and control systems are used to perform various operations much faster or better than could be accomplished by humans.

**Automation in industry.** Many industries are highly automated or use automation technology in some part of their operation. In communications and especially in the telephone industry, dialing, transmission, and billing are all done automatically. Railroads too are controlled by automatic signaling devices, which have sensors that detect cars passing a particular point. In this way the movement and location of trains can be monitored.

Not all industries require the same degree of automation. Agriculture, sales, and some service industries are difficult to automate. The agriculture industry may become more mechanized, especially in the processing and packaging of foods; however, in many service industries such as supermarkets, for example, a checkout counter may be automated and the shelves or supply bins must still be stocked by hand. Similarly, doctors may consult a computer to assist in diagnosis, but they must make the final decision and prescribe therapy.

Automation has also had an influence on areas of the economy other than manufacturing. Small computers are used in systems called word processors, which are rapidly becoming a standard part of the modern office. This technology combines a small computer with a cathode-ray display screen, a typewriter keyboard, and a printer. It is used to edit texts, to type form letters tailored to the recipient, and to manipulate mailing lists and other data. The system is capable of performing many other tasks that increase office productivity.

### 15.1.20 Architecture and Architectural Technology

We live in a rapidly changing architectural world driven by advancing technology, new legislation, social change and financial constraints. Now architects have to respond to a rapidly changing world in which design competence must be situated within knowledge of current issues such as urban problems, sustainability and a familiarity with the new environment of computer aided design, the Internet and the application of new materials and technology.

The work of the architectural technologist bridges the gap between design theory and construction practice. Modern day architectural technologists are well qualified professionals with practical and creative skills that encompass all the facets of the architectural profession and the construction industry. They are designers who are skilled in analyzing construction problems and in finding attractive and viable solutions.

### 15.1.21 Environmental Science

Environmental Science is concerned with the natural and built environment. It examines the interaction between humankind and the environment as well as problems and concerns resulting from human activities. Concern about many environmental issues such as global climate warming, deforestation, disposal of toxic wastes has prompted the need for more research and better ways of managing our limited resources. The increased awareness of environmental problems and new legislation means that more people are needed who have sound knowledge of science and environmental processes and who can manage interdisciplinary problems.

### 15.1.22 Information Systems

Information technology is absorbing an ever-increasing proportion of organizations' and governments' resources, both in terms of money and human resources. Many countries have made information and communication technologies central to their socio-economic development. As the information economy grows, entire industries are being transformed through the application of information and communication technologies.

At the organizational level, many firms depend on this technology for their key functions, such as production and sales, and there are very few areas untouched by information technology. There is an evident need within industry, government and professions for people educated to understand and assess the complex interactions between information technology and people.

## 15. 2 Text B. Economic Specialties

### 15.2.1. Read and translate the text.

#### Economics

The dictionary defines Economics as "the study of the production of wealth and the consumption of goods and services in a society."

You have only to open a newspaper or switch on a TV to see the relevance of economics in the modern world. The sound knowledge of economics will stand you in

good stead whatever you choose to do after you leave the university. Economics has been well described as "a way of thinking", and its methods of analysis can be applied to questions well beyond the immediately obvious economic ones. As a social science with a strong quantitative element it also helps to develop both the ability to build a reasoned, literate argument, and a good level of numeracy. Both skills are valued by employers.

### 15.2.2 Management

Public and private sector organizations require people with a broad range of management skills and competences, capable of understanding the need for, and having the ability to implement significant change.

There are four key management roles - people, marketing, information and resources. The first section includes team working, communications, recruiting and developing staff, leadership, motivation, delegation and planning.

Marketing covers marketing principles, buyer behaviors, marketing research and customer orientation.

Information tackles the need to manage information.

Finally, the finance section deals with accounting concepts and practices with budgets, cashflow and financial frameworks.

## UNIT 16 CONTRACTS

**16.1 Text A. What Is a Contract?**

16.1. Read and translate the text.

**A Contract**

A contract is an agreement between two or more parties to do, not do, or promise something. Contracts can come in many forms — they can be oral or written, implied or express, and legally enforceable or not. The strongest contract, in terms of enforceability, has an offer, acceptance, consideration for the exchange. It clearly sets out the terms of the agreement without ambiguity and is signed by the involved parties with proper capacity to enter into the contract. Weaker contracts include verbal agreements or contracts drawn up by parties in direct violation of state or federal laws. There are numerous aspects related to valid contracts. In fact, an entire course in law school is often devoted to contract law.

While we tend to think of written contracts when we talk about contracts, the most common type of contract is actually an oral contract. In fact, we pretty much enter into at least one oral contract every day. For example, a parent might tell his or her child that they will get a reward if they behave properly at a certain event. If the child agrees, then you have a type of oral contract — albeit one that isn't legally binding!

Contracts can be implied or express. That is, the entire contract, or one or more of its terms, can be implied or express. Typically, when we think of contracts we think of express contracts. For example, in a contract for a monetary loan, you will likely promise to pay a certain monthly rate at a certain interest rate until the loan is paid off. In addition, you probably will agree to late payment fees as well. These terms are explicitly laid out in an express, written contract.

Sometimes, however, a contract term or the entire contract itself is implied. For example, when you order food at a restaurant you are entering into an implied, oral contract. You and the server do not explicitly state the offer and acceptance for the steak you ordered with a list price of 32 US Dollars (USD) but that agreement is implied. The basic elements of a contract, namely an offer, acceptance of the offer, and consideration for the exchange, are all implied.

Offer and acceptance, sometimes also called “meeting of the minds” is a fundamental part to a contract. Without it, we might bind parties to contracts who did not want or intend to be party to the contract. Consideration, on the other hand, ensures that something is being exchanged. In some cases, the law requires that consideration be adequate, that is, a relatively reasonable price, or nominal, where just a dollar will do. Other times, the requirement of consideration may be waived in the interest of preventing injustice.

Contracts may be enforceable by law or they may not. The example of the agreement between the parent and child would not be enforceable by law whereas the agreement for a loan likely would be enforceable by law. Whether a contract is enforceable by law depends on numerous factors, the primary factor being whether the parties to contract intended the contract to be legally binding or legally enforceable.

A contract may not be legally enforceable for a variety of factors. Problems on the face of the contract can make it void. If one of the parties to the contract has diminished capacity whether it be due to age or mental condition the contract will most likely be unenforceable. Fraud or misrepresentation by a party to a contract can void the contract as can contract terms that violate controlling laws.

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