**КОНТРОЛЬНАЯ РАБОТА**

**По дисциплине «Иностранный язык»**

**Направления 15.03.02 «Технологические машины и оборудование»**

**2 семестр**

**(полный курс)**

**Вариант 1**

**I. Прочитайте и переведите текст (письменно).**

**Fire and Water**

The pages of history are full of conflagrations and disasters caused by fire.

The industrial revolution at the end of the nineteenth century resulted in higher economic efficiency; it also created greater fire risks and more damage from fire.

Another challenge in the fight against fire has been set by newly developed materials that decompose in a fire to products that pollute the environment. It shows the link between fire protection and environmental protection.

Automatic fire fighting with the use of sprinkler systems has been known since the middle of the nineteenth century. Henry S. Parmelee, American piano builder, had the pioneering idea which was to revolutionize fire protection. His invention, the automatic “Sprinkler System”, was taken up by t he engineer Wilhelm Walther as early as 1884, and this led to the construction of the first system in Germany.

In order to protect the environment, fire protection specialists have set themselves the task of preventing or restricting the influence of contaminated extinguishing water.

The Micro Drop extinguishing process is a major step towards the optimum use of water as an extinguishing agent.

The breakthrough was achieved by transforming the extinguishing water into a fog-likecloud of droplets distributed in space.

contaminated – загрязненный extinguishing – гасящий, тушащий

Micro Drop – микрокапельный

a sprinkler system – противопожарная система

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

The industrial revolution at the end of the nineteenth century resulted in …

a)industrial fire protection laboratories

b)reducing the damage caused by fire

c)higher economic efficiency

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.What are the pages of history full of?

2.The industrial revolution at the end of the nineteenth century resulted in reducing the damage caused by fire, didn’t it?

3.Who had the idea to revolutionize fire protection?

4.What is the major step towards the optimum use of water?

5.How is the extinguishing water transformed in the Micro Drop system?

**Вариант 2**

**I.Прочитайте и переведите текст (письменно).**

**Traffic Problems Can Be Solved**

Advertisements for cars don’t show the reality of driving. Cities and towns all over the world have a huge problem: traffic jams. Of course cars are symbols of freedom and wealth. They represent a personal choice to travel when and where you want to but when you are stuck in a traffic jam; all cars are just little metal boxes to sit in.

There are millions of cars on the road today. How do cities cope with this? Some of them have found solutions to their traffic problems.

The city Curitiba in Brazil has very few traffic jams. This is because the authorities have developed an efficient bus network to transport people rapidly around the city. Main roads have special lanes for buses only, so that they do not get caught in traffic jams.

In Milan, cars need a permit to enter the city center. Only residents and some employers can obtain a permit, so very little traffic now drives in or out. Nearly everyone parks on the edge of the restricted area and heads for the center on foot. As a result, Milan now has many pedestrian-onlyshopping streets.

In Athens, car owners are only allowed to drive into the city centre every other day. They must match the final number of their car number plate to the day’s date

– if the date is an even number, and so is the fina l number of the number plate, then they can enter the inner-cityarea. The same goes for odd number plates and odd dates. This means that 50 per cent of all cars must stay at home each day.

a traffic jam – дорожная пробка to be stuck – застревать

to cope – справляться

a bus network – сеть автобусных маршрутов a lane – полоса движения

residents – постоянные жители an employer – предприниматель on foot – пешком

every other day – через день

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

Only residents and some employers can obtain a permit, so …

a)car owners are only allowed to drive into the city centre every other day

b)very little traffic now drives in or out

c)they do not get caught in traffic jams

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.What is a huge problem of cities and towns all over the world?

2.Have some cities found solutions to their traffic problems?

3.Why does the city Curitiba have very few traffic jams?

4.Milan now has many pedestrian-onlyshopping streets, hasn’t it?

5.How many cars must stay at home each day in Athens?

**Вариант 3**

**I.Прочитайте и переведите текст (письменно).**

**Cars: Passion or Problem**

For some people, the car is a convenient form of transportation. But for others, the car is an exciting hobby. Some people spend their lives collecting valuable cars. Others drive them in races. For many people cars are more than transportation: they are a source of passion and pleasure. Yet cars can also be a source of many problems.

In 1903, Henry Ford began selling Model T car for $825. His company, Ford Motors, was the first to produce cars in large numbers. This made the car available to large numbers of people and helped them to travel long distances quickly and easily. The car has brought people much closer to places of work, study, and entertainment. Many people also work in car-related industries: fixing cars, washing cars, advertising cars, and selling car products such as stereos and cellular phones.

Most Americans buy a new car every five or six years. This means that one American may own a dozen cars in a lifetime. In fact, there are more cars than people in the United States. In New York City, 2.5 million cars move in and out of the city each day. In this traffic, the average speed is sometimes 8.1 miles per hour. This speed could easily be reached by riding a horse instead of driving a car. But New Yorkers continue to drive, just as people do in California, where freeways are often crowded. Many people are unhappy with car traffic and pollution, as well as with the use of beautiful land for building new roads.

Cars are important to nearly everyone, including engineers, businesspeople, environmentalists, and even poets. Poet Curt Brown believes that cars are part of our passion for new places and new experiences. According to Brown, this “very, very comfortable flying chair” will continue to bri ng us travel and adventure, no matter how it changes the future.

fixing cars - ремонт автомобилей a cellular phone - сотовый телефон a freeway - автострада

crowded - перегружены an environmentalist - эколог

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

For many people, cars are more than transportation: …

a)many people also work in car industries

b)they are a source of passion and pleasure

c)many people are unhappy with car traffic and pollution

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.Is the car a convenient form of transportation?

2.Can cars also be a source of many problems?

3.What company was the first to produce cars in large numbers?

4.What are many people unhappy with?

5.Who are cars important to?

**Вариант 4**

**I.Прочитайте и переведите текст (письменно).**

**Town planning**

The purpose of a town plan is to give the greatest possible freedom to the individual. The new development absorbs or modifies an existing environment, and so before it can be designed it is necessary to find out about that environment. It is also necessary to do research of population growth, the distance from work to home, the preferences for different types of dwelling, the amount of sunshine in rooms, the degree of atmospheric pollution and so on. After the survey is complete a forecast of future development is made in the form of a map: the master plan or development plan. The plan of the city must be flexible so that it may extend and renew its dwellings, reconstruct its working places, complete its communications and avoid congestion in every part.

The plan is never a complete and fixed thing, but one that is continually being adapted to the changing needs of the community for whom it is designed. The flexible plan, preceded by a survey, is one of the most revolutionary ideas that man has ever had about the control of his environment.

Most towns today have a characteristic functional pattern as follows: a central core containing the principal shopping centre, business zones, surrounded by suburbs of houses. Most town planners accept the traditional town pattern. In the preparation of a master plan they are preoccupied with the definition of the town centre, industrial areas, and the areas of housing; the creation of open space for recreation, the laying down of a pattern of main roads which run between the built up areas.

The master plan thus has to define the ultimate growth of the town, but though the master plan is a diagram, and even a flexible one, it is the structure upon which all future development is to take place.

forecast – прогноз

a master plan – генеральный план застройки congestion – перенаселенность, скопление a pattern – образец

suburbs – окраинные районы housing – жилищное строительство recreation – отдых

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

Before a town plan is designed, it is necessary ...

a)to renew and extend the dwellings

b)to make a forecast of future development in the form of a map

c)to find out about existing environment

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.What is the purpose of a town plan?

2.When is a forecast of future development made?

3.Why must the plan of the city be flexible?

4.Most towns today have a characteristic functional pattern, haven't they?

5.What does the master plan define?

**Вариант 5**

**I.Прочитайте и переведите текст (письменно).**

**Energy and Its Sources**

The consumption of energy is expected to grow. The amount of energy consumed by a country is closely connected with its degree of technological development and industrialization, which are in turn related to the people's standard of living.

Energy can be classified according to its sources. Coal, oil, and natural gas are «fossil fuels» which are extremely useful raw materials. But when they are burned for fuel, harmful pollution may result and there is a great waste of natural resources.

Wood was the main source a hundred years ago. The growth of coal usage in the early 1900s is associated with rapidly increasing industrial development. There followed a great expansion in the consumption of natural gas and fuel oil for heating, electrical generation and especially transportation.

Several conclusions can be made: research and development work to find new sources of energy and ways of increasing efficiency are needed; the new sources of fuels must be fully developed and utilized. Natural gas is a popular source of energy because of its convenience for use and cleanliness in burning. It is generally believed that gas will be the first fossil fuel to be in short supply, and the cost of oil extraction is high.

To these sources we can add the energy obtained from water motion and the sun. Solar power is often mentioned as the logical alternative. The amount of radiant energy that reaches the earth's surface is more than what is needed. For the generation of electricity, there are serious problems to be solved. To collect and concentrate the energy by reflectors and converters of present efficiency is the major difficulty. There remain many technological problems in this area.

Man is consuming the remaining resources at a rate that they may last only a few centuries. Efforts to eliminate the extravagant waste of energy are needed. Several conclusions can be made: research and development work to find new sources of energy and ways of increasing efficiency are needed; the new sources of fuels must be fully developed and utilized. And we must give a serious consideration nuclear energy, i.e. the energy from nuclear reactions, the burning of nuclear fuel.

consumption - потребление

fossil fuels – ископаемое топливо pollution - загрязнение convenientlyлегко, просто, удобно generation – поколение

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

The amount of energy consumed by a country is closely connected with …

a)its degree of technological development and industrialization, which are in turn related to the people's standard of living

b)its sources

c)research and development work

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.What is the amount of energy consumed by a country connected with?

2.What kinds of fuels can you name?

3.What alternative sources of energy do you know?

4.To collect and concentrate the energy by reflectors and converters of present efficiency is the major difficulty, isn’t it?

5. What conclusions can be made to find new sources of energy?

**Вариант 6**

**I.Прочитайте и переведите текст (письменно).**

**Water**

Water can appear in three phases. It takes many different forms on Earth: water vapor and clouds in the sky; seawater and rarely icebergs in the ocean; glaciers and rivers in the mountains; and aquifers in the ground.

Water can dissolve many different substances, giving it different tastes and odors. Water fit for human consumption is called drinking water or potable water. Water that is not potable can be made potable by distillation (heating it until it becomes water vapour, and then capturing the vapour without any of the impurities it leaves behind), or by other methods (chemical or heat treatment that kills bacteria).

This natural resource is becoming scarcer in certain places, and its availability is a major social and economic concern. Currently, about one billion people around the world routinely drink unhealthy water. Most countries accepted the goal of halving by 2015 the number of people worldwide who do not have access to safe water. Water, however, is not a finite resource (like petroleum is), but rather recirculated as potable water in precipitation in quantities many degrees of magnitude higher than human consumption. Therefore, it is the relatively small quantity of water in reserve in the earth. Water-poorcountries use importation of goods as the primary method of importing water (to leave enough for local human consumption), since the manufacturing process uses around 10 to 100 times products' masses in water.

The problem of protecting natural water resources has grown very pressing for many countries since the beginning of the second half of the 20th century. The development of human society, the growth of civilization and social and technical progress have resulted in the changing of the composition of natural water resources. The rivers, lakes and ground-waterscontain today the products of mechanical, chemical and biological pollution.

dissolve - растворять

consumption – потребление

potable – годный для питья quantity - количество

**II. Закончите предложение, выбрав соответствующий вариант окончания.**

The problem of protecting natural water resources has grown very pressing for many countries since…

a)nowadays

b)the beginning of the second half of the 20th century

c)the beginning of the second half of the 19th century

**III. Перепишите вопросы к тексту и письменно ответьте на них.**

1.What forms does water take on Earth?

2.What is called drinking water or potable water?

3.Water as natural resource is becoming scarcer in certain places, isn’t it?

4.What do water-poorcountries use as the primary method?

5.Why has changed the composition of natural water resources?

**Требования к выполнению контрольной работы**

Контрольная работа выполняется письменно в рабочих тетрадях. Титульный лист и регистрация обязательны.