Министерство образования РФ
Восточно-Сибирский государственный технологический университет
кафедра иностранных языков

Английский язык
Методические указания и контрольные задания
по английскому языку № 3
для студентов заочного факультета всех специальностей.
(переработанная и дополненная)

Составитель: Тугарина В.П.
Улан-Удэ
2003

Контрольное задание 3.

Методические указания направлены на то, чтобы помочь студенту-заочнику приобрести умения самостоятельно читать литературу и извлекать информацию из иноязычных источников.

Контрольное задание представляет собой грамматические упражнения, тексты для чтения и перевода, предтекстовые и посттекстовые задания в виде вопросов с множественным выбором ответов в соответствии с содержанием текстов и построены на аутентичном материале, заимствованном из оригинальных публикаций.

Выполняя данные задания студент должен:
- уметь узнавать грамматические формы в предложениях и текстах;
- уметь самостоятельно раскрывать значения незнакомых слов по их элементам;
- уметь выделять отдельные факты, основную мысль текста, соотносить отдельные факты между собой.

Для того чтобы успешно выполнить контрольное задание 3, Вам необходимо повторить и усвоить следующие разделы английского языка:
1. Видо-временные формы глагола групп Indefinite; Continuous, Perfect (Active; Passive Voice).
2. Модальные глаголы и их эквиваленты.
2. Неличные формы глагола: Participle I; Participle II, Gerund и их функции в предложении.

Инструкции к выполнению контрольных заданий.
Контрольные задания № 1 - 3 составлены в пяти вариантах и выполняются в соответствии с последней цифрой зачетной книжки студента. Если последняя цифра вашей зачетной книжки оканчивается 1-2, Вы выполняете вариант 1, 3 – 4 –
вариант 2, 5 – 6 – вариант 3, 7 – 8 – вариант 4 и 9 – 0 вариант 5.
Выполняйте контрольные задания в отдельной тетради. На обложке пишите свою фамилию, номер контрольной работы и шифр.
Материал контрольных заданий следует располагать в тетради по следующему образцу:

<table>
<thead>
<tr>
<th>Поля</th>
<th>Левая страница</th>
<th>Правая страница</th>
<th>Поля</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Английский текст</td>
<td>Русский текст</td>
<td></td>
</tr>
</tbody>
</table>

Если контрольные задания выполнены без соблюдения указаний и не полностью, то они возвращаются обратно студенту без проверки.

Требования на зачете и экзамене.

Зачет. К зачету допускаются студенты, выполнившие контрольные работы и прошедшие собеседование по данным контрольным работам.
Для получения зачёта студент должен уметь:
а) прочитать со словарем незнакомый текст на английском языке, содержащий изученный грамматический материал. Форма проверки – письменный или устный перевод.
Норма перевода 600-800 п. з. за 60 мин. Письменного или 1000 – 1200 п. з. за 60 мин. Устно.
б) прочитать без словаря текст, содержащий изученный грамматический материал и 5-8 незнакомых слов на 500-600 п. з.

Форма проверки понимания – передача содержания прочитанного на русском языке. Время подготовки 8-10 минут.

Экзамен. К экзамену допускаются студенты, имеющие зачет за I курс, и выполнившие контрольные работы за II курс и прошедшие собеседование по контрольным работам. На экзамене проверяются умения:
а) читать со словарем текст по специальности.
Форма проверки понимания – письменный перевод. Норма перевода 100 п. з. за 60 мин.;
б) читать без словаря текст, содержащий изученный грамматический материал и 5-8 незнакомых слов на 600-800 п. з.
Форма проверки понимания и передача содержания прочитанного на русском языке.
Время подготовки 8-10 минут.
Вариант 1

1. Переведите и подчеркните слово, не соответствующее синонимическому ряду.
Образец: large – big – great – small

1. quantity - amount - number - quality
2. difficult – complex – easy - complicated
3. to produce - to manufacture - to sell - to make
4. to spend - to apply - to use - to employ
5. to convert - to change - to get - to transform

II. Перепишите и соотнесите следующие слова с их значениями.

1. source a. road, direction or course of action
2. energy b. beam of light
3. shortage c. collecting or keeping for future use
4. fuel d. power
5. electricity e. material for producing heat or energy
6. storage f. deficiency
7. charge g. place from which something comes
8. ray h. loading
9. way i. current

III. Образуйте сочетания слов. Запишите и переведите их на русский язык.

Образец: global warming – глобальное потепление

global, main, generating possible, expensive, major perpetual, practicable, necessary, present warming, amount purpose type, energy, problem, rate, source, storage, collection, system.

<table>
<thead>
<tr>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
<td>5.</td>
<td>6.</td>
<td>7.</td>
<td>8.</td>
<td>9.</td>
</tr>
</tbody>
</table>

IV. Перепишите следующие предложения: подчеркните Participle I и Participle II. Определите их функции в предложении. Переведите предложения на русский язык.

Образец: 1. Every atom contains particlpe carrying electricity.
Participle I, определение.
Каждый атом содержит частицы, несущие электричество.

When burning substances combine with oxygen Participle I, обстоятельство.
При горении вещества соединяются с кислородом.

Having obtained the necessary results, they stopped their experiment. Perfect Participle, обстоятельство.
Получив необходимые результаты, они прекратили эксперимент.

2. The used method is complex enough.
Participle II, определение.
Применяемый метод – достаточно сложный.

When heated the molecules move more intensively
Participle II, обстоятельство
Нагреваясь (при нагревании) молекулы двигаются интенсивнее

1. When cooled water becomes ice.
2. The work done took much time.
3. Being invited too late me friend couldn’t come
4. A magnet attracts only things containing iron.
5. He bought the recommended book.
6. When writing a telegram we must use as few words as possible.
7. Having waited for him half an hour they went home.

V. Завершите следующие предложения, употребляя герундий. Переведите предложения на русский язык.
Образец: This book is worth (read) – This book is worth reading.

1. (have) good friends is important.
2. I don't mind (wait).
3. They were afraid of (miss) the train.
4. Is (learn) a second language difficult?
5. I thought of (take) a trip to Lake Baikal.

VI. а) Прочитайте текст и ответьте на вопрос:
What source of energy does the world need in the near future?

SOLAR ENERGY

1. Shortage of energy is major world problem and experts predict that the present rate of increase in energy use could exhaust the supply of fuels in the twenty-first century. What the world needs is a source of perpetual energy.

2. Potentially, we have a source of perpetual energy shining down on us. The sun. On clear day in the tropics, the intensity of solar energy can be more than a kilowatt per square metre at mid-day. That amount of energy falling on an area of sixty-four square kilometres is about as much as the whole of the British electricity generating system produces.

3. There is no charge for the energy that flows so freely from the sun.

4. Unfortunately its collection and storage can be both difficult and expensive. Some form of storage is necessary because the sun's rays do not reach us on cloudy days or at night. None the less, solar energy is now an economic and practicable solution and is widely used in many countries.

5. It is possible to convert solar energy directly to electricity by the use of photoelectric cells but for most practicable purposes this is too expensive a way to produce electricity. Today’s solar energy systems are of two main types, based on the flat plate collector and the focusing collector. The flat plate collector is simpler and cheaper. In its simplest form, the sun's rays fall onto a panel.

Pipes carrying water are embedded in the panel. The sun heats the water, which is then available for use. Modern flat plate collectors are carefully designed to absorb the maximum possible amount of energy and to prevent heat loss to the surroundings. They are mainly used for the provision of domestic hot water. They are commercially available and are in use in many countries including Australia, Japan, Cyprus, Brazil and Israel.

6. Focussing systems enable a much higher proportion of the sun’s energy to be trapped and also produce much higher temperatures. Temperatures up to 4,000°C have been reached in the solar-powered Odeillo furnace in the Pyrenees. The principle has been known for along time, Archimedes used it in 212 B.C. when he used focussing mirrors to set fire to the Roman fleet.
6) Прочитайте текст еще раз. Выберите правильный ответ, соответствующий содержанию текста.

1. Modern flat plate collectors are used mainly for:
   a) the storage of energy
   b) a conventional use
   c) a domestic use

2. Focussing systems have been known for a long time and have been used by:
   a) Japan scientists
   b) The British electricity generating system
   c) Archimedes in 212 B.C.

3. The use of photovoltaic cells is:
   a) too difficult to produce electricity
   b) undesirable to produce electricity
   c) too expensive to produce electricity

VII. Перепишите и письменно переведите 2, 3 и 4 абзацы текста

Вариант 2

I. Перепишите и подчеркните слово, не соответствующее синонимическому ряду.

О образец: different - various – unlike – the same.

1. artificial – man – maid – natural - synthetic
2. to make - to produce - to manufacture - to replace
3. to change - to modify - to complete - to transport
4. great – huge – large - tiny

5. partial – entire – complete - whole

II. Перепишите и соотнесите следующие слова с их значениями.

1. mould a. force of pressing
2. product b. thing produced by nature or man
3. plastics c. man-made material
4. chemist d. person who is an expert in chemistry
5. heat e. something created or designed
6. pressure f. hotness, warmth
7. gas g. the smallest unit of an element
8. liquid h. air-like substance
9. atom i. hollow form
10. invention j. substance like water

III. Образуйте сочетания слов. Запишите и переведите их на русский язык

Образец: global warming - глобальное потепление

<table>
<thead>
<tr>
<th>global, modern, chemical</th>
<th>warming, temperature, advantages, shades, colours, resins, plastics, state substance, chemistry, characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>man-made, various liquid</td>
<td>different, available, certain tremendous, greatest, material</td>
</tr>
<tr>
<td>synthetic</td>
<td></td>
</tr>
</tbody>
</table>

1. ____________________  6. ________________
2. ____________________  7. ________________
3. ____________________  8. ________________
4. ____________________  9. ________________
5. ____________________ 10. ________________
11. ____________________
III. Перепишите следующие предложения, подчеркните Participle I и Participle II. Определите их функции в предложении. Переведите предложения на русский язык.

Образец: 1. Every atom contains participles carrying electricity.
   Participle I, определение.
   Каждый атом содержит частицы, несущие электричество
   While burning substances combine with oxygen
   Participle I, обстоятельство.
   При горении вещества соединяются с кислородом.
   Having obtained the necessary results, they stopped their experiment.
   Perfect Participle, обстоятельство
   Получив необходимые результаты, они прекратили опыт

2. The used method is complex enough.
   Participle II, определение
   Применяемый метод – достаточно сложный
   When heated the molecules move more intensively
   Participle II, обстоятельство
   Нагреваясь (при нагревании) молекулы двигаются интенсивнее.

IV. Завершите следующие предложения, употребляя герундий (gerund). Переведите предложения на русский язык.

Образец: This book is worth (read). This book is worth reading. Эту книгу стоит прочитать.

1. He avoided (make) decisions.
2. He was busy (work) on the new project.
3. She is fond of (play) piano.
4. (play) tennis is fun.
5. Is (ride) a horse easy?

V. а) Прочитайте текст и ответьте на вопрос

What are the greatest advantages plastics may give the world?

THE WONDERLAND OF PILASTICS

1. Plastics or «synthetic resins» as they are sometimes called, are entirely the product of modern chemistry and are like no other substances found on the earth or in the sea. The discovery of plastics has at last opened the road which will lead man to victory over nature and make him independent of nature's products.
2. But what is a plastics and why are the chemists so enthusiastic over them? Synthetic plastics are man-made substances which not only change their shape when moulded under great heat and pressure, but change their chemical state as well.
3. They are light, hard and amber-like, being produced by mixing together a number of gases and liquids. A synthetic-or man-made-product must necessarily be both better and cheaper in order to justify its manufacture at all. This is essentially true of the various plastics when compared to the material they are to replace.
4. As for plastics themselves, there are two kinds—those which are affected by heat and those which are not, or cast plastics and moulded plastics. Cast plastics are manufactured as liquid resins and are then cast in the desired forms. Cast resins can be coloured before being poured. The resulting plastics can be produced in all sorts of colours, more than three hundred different shades and colours, being now available in the cast plastics.

5. Moulded plastics are usually mixed with “fillers” to strengthen the finished material and give it certain characteristics. The mixed materials are subjected to tremendous pressure and temperature until they flow and fill the mould. Since the great heat used destroys dyes, moulded plastics can be in only a few shades, usually black.

6. The greatest advantages which plastics are expected to give the world is that they will make the people no longer dependent upon nature for their materials. Chemists look upon the invention of plastics as marking the beginning of the time when they will be able to control more fully the atoms and molecules which compose all material things.

Вариант 3

I. Перепишите и нарисуйте слово, не соответствующее синонимическому ряду.

Однако: large – small – big – great

1. application – usage – utilization – production
2. quantity – amount – quality – number
3. complex – difficult – easy – complicated
4. enterprise – plant – factory – theatre
5. to realize – to think – to believe – to go

II. Перепишите и соотнесите следующие слова с их значениями.

1. component a. methods and machines to save labour
2. term b. consisting of related parts; composite
3. density c. a part of an object
4. complex d. relation of weight to volume (in physics)
5. automation e. a person who makes plans something sketches, models
6. mind f. a plant or a factory
III. Образуйте сочетания слов. Запишите и переведите их на русский язык.
Образец: global warming - глобальное потепление

<table>
<thead>
<tr>
<th>global, statistical, complex, transportation, processing, telecommunication, transmission, marvelous, essential, interconnection fundamental, entire electronic</th>
<th>warming, measure, speed, volume, method, expansion, instruments, instruments, world, difficulties, relation, body, art, system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>7.</td>
</tr>
<tr>
<td>2.</td>
<td>8.</td>
</tr>
<tr>
<td>3.</td>
<td>9.</td>
</tr>
<tr>
<td>4.</td>
<td>10.</td>
</tr>
<tr>
<td>5.</td>
<td>11.</td>
</tr>
<tr>
<td>6.</td>
<td>12.</td>
</tr>
</tbody>
</table>

IV. Перепишите следующие предложения; подчеркните Participle I и Participle II. Определите их функции в предложении. Переведите предложения на русский язык.
Образец: 1. Every atom contains participles carrying electricity.
Participle I, определение.
Каждый атом содержит частицы, несущие электричество.
While burning substances combine with oxygen

1. While working with electricity everyone must be very attentive.
2. Being asked the student answered perfectly well.
3. Matter consists of one or a number of elements occurring in nature.
4. When hammered magnets loose some of their magnetism.
5. I’ve just read the book written by Nabokov.
6. The results received were of great importance for future work.
7. Having made a decision to break of with Greg, she felt better.

V. Завершите следующие предложения, употребляя gerundий (gerund). Переведите предложения на русский язык.
Образец: This book Is worth (read) - This book is worth reading. Эту книгу стоит прочитать.

1. (walk) alone in this part of the city is dangerous.
2. She avoided (express) her opinion in public.
3. It's no use (wait).
4. (write) English is easier than. (speak) English.
5. Please, go on (talk) to her.

VI. Прочитайте текст и ответьте на вопрос:
What will help man to cope with the growing amount of information?

MICROELECTRONICS

I. Our present age is characterized by its growing complexity - almost any statistical measure demonstrates such behaviour. The densities of men and machines are higher, and yet we go farther and faster away from each other. As a result, population density, transportation speed, telecommunications volume, and information - processing volume are growing exponentially. There is no indication that this growth is turning over; hence we may expect the complexity of our existence to increase still further. Man's attempt to cope with this increasing complexity has been more through electronics, through complex computers, transmission method and automation. It is becoming a marvelous extension of man’s senses and mind. It provides the essential instruments man needs to cope with the amount of information he must process to control his complex world.

2. Early large-scale systems primarily were extensions of small simpler systems. This led to a detailed specification of the elemental components by the user. Very often these statements of requirements without knowledge of the component development possibilities led to unforseen compatibility and interconnection difficulties when the components were assembled into systems. The component designer has often developed components only in terms of his own specialized components of the future system application.

3. In the past microminiaturization in electronics has been largely a practical enterprise guided by experiences, however, now fundamental relation in this field are emerging. It should first be made clear what the term “microelectronics” implies, since the name appears in many forms – microminiaturization, integrated electronics, microsystem electronics, etc., and since the term is in itself somewhat misleading. Microelectronics surrounds the entire body of the electronic art which is connected with, or applied to, the realization of electronic circuits, subsystems, or the entire systems from extremely small electronic parts (devices)

б) Прочитайте текст еще раз. Выберите правильный ответ, соответствующий содержанию текста:
1. Man’s attempts to cope with the increasing complexity has been made through:
   a) space research
   b) biological investigation
   c) electronics and automation

2. Microelectronics is connected with:
   a) electronic circuits and subsystems
   b) industrial enterprises
   c) electronics

3. Microelectronics helps a man:
   a) to explore the outer space
   b) to develop industry
   c) to control his complex world

VII. Перепишите и переведите на русский язык 1 и 2 абзацы текста

Вариант 4
I. Перепишите и подчеркните слово, не соответствующее синонимическому ряду.
Образец: large – small – big – great
1. to use – to apply – to employ – to combine
2. to make – to do – to perform – to consume
3. main – major – usual - principle
4. opportunity – chance – loss – possibility
5. precise – accurate – inaccurate – exact

II. Перепишите и соотнесите следующие слова с их значениями.
1. clay a. a material made of a very thin threads
2. brick b. a substance rubbed to dust
3. straw c. strong floor covering
4. concrete d. board made of thin layers of wood
5. linoleum e. building material made by mixing cement with sand and gravel
6. plywood f. material for making, for example, summer hats
7. powder g. blocks used for building purposes
8. fibre h. stiff, sticky earth

III. Образуйте сочетания слов. Запишите и переведите их на русский язык.
Образец: global warming - глобальное потепление

| global, composite, notable | warming, exception, material needs, technology, fibre, rate, combination, task structure, plastics |

IV. Перепишите следующие предложения; подчеркните Participle I и Participle II. Определите их функции в предложении. Переведите предложения на русский язык.
Образец: 1. Every atom contains participles carrying electricity. Participle I, определение. Каждый атом содержит частицы, несущие электричество
2. The used method is complex enough. Participle II, определение. Применяемый метод – достаточно сложный

1. While burning substances combine with oxygen. Participle I, обстоятельство. При горении вещества соединяются с кислородом.

2. Having obtained the necessary results, they stopped their experiment. Perfect Participle, обстоятельство. Получив необходимые результаты, они прекратили эксперимент
1. The devices tested in the lab are reliable.
2. When invented the steam locomotive played an important part in transportation.
3. Physics is a science dealing with phenomena of matter and energy.
4. The plastic articles are difficult to repair when broken.
5. Being taken from the library the books must be returned in time.
6. While translating a foreign text we often use a dictionary.
7. Having locked the garage, he went into the house.

V. Завершите предложения, употребляя герундий (Gerund). Переведите предложения на русский язык.

1. This proposal is worth (consider). 2. (Spend) money is easier than (make) money. 3. He thought of (leave) this job. 4. He likes (play) chess and hates do lessons. 5. My mother is fend of (garden).

VI. а) Прочитайте текст и ответьте на вопрос:
What developments marked the beginning of the modern era of composite materials?

ADVANCED COMPOSITE MATERIALS

1. Composite materials are among the oldest and newest of structural materials. Men discovered early that when two or more materials are used together as one, the combination often behaves better than each of the materials alone. Following this principal they combined clay and straw to make bricks. Then with some notable exceptions, the further potentialities of composite materials remained virtually untapped for centuries while monolithic materials, such as iron and copper, served the major needs of an advancing technology. Even in the more recent times with coming of reinforced concrete, linoleum, plasterboard and plywood panels were somewhat out of mainstream of materials development and technology.

2. During this 1930’s and 1948’3, however, light-weight honey-comb structures, machine parts from compressed metal powders and plastic reinforced with glass fibers became commercial realities. These developments marked the beginning of the modern era of composite engineering materials. The use of composite materials is steadily growing. The consumption of the fibre reinforced plastics, for example, is increasing at the phenomenal rate of 25 per cent annually.

3. There are two major reasons for the current interest in composite materials. The first is simply the demand for materials that will outperform the traditional monolithic materials. The second, and the more important in the long run, is that composites offer engineers the opportunity to design totally new materials with the precise combination of properties needed for a specific task and use them more sparingly because of their superior quality.

б) Прочитайте текст еще раз. Выберите правильный ответ, соответствующий содержанию текста:

1. Man discovered that composite materials served:
   a) the needs of advanced technologies
   b) man for centuries
   c) to combine several materials

2. The development of compressed metal powders marked:
a) the increase of material production  
b) the increase of material consumption  
c) the beginning of the modern era of composite materials

3. The major reason for the current interest in composite materials is that:
   a) they are easily combined  
   b) they offer engineers the opportunity to design new materials 
   c) they are more expensive

VII. Перепишите и письменно переведите 2, 3 абзацы текста.

Вариант 5

I. Перепишите и подчеркните слово соответствующее синонимическому ряду.
   Образец: large - big - great - small

1. large – huge – big - tiny
2. similar – like - the same - opposite
3. to spend - to apply - to use - to employ
4. to change - to vary - to transform – to make
5. to effect - to influence - to deteriorate - to exercise

II. Перепишите и соотнесите следующие слова с их значениями.

1. environment a. easy and quick movement
2. mobility b. strong – smelling smoke, gas or raptor (e. g. petrol fumes)
3. fume c. combination of two or more substances
4. insect d. surroundings affecting lines
5. vegetable e. plant used for food (potato, cabbage etc)
6. mixture f. use less, not used for any purpose
7. waste g. sort of small animal (e.g. a fly)

III. Образуйте сочетания слов. Запишите и переведите их на русский язык.

Образец: global warming - глобальное потепление

<table>
<thead>
<tr>
<th>global, bronchial, large-scale, poisonous, technological, powerful, ugly, rural, dangerous, exhaust, high-rise.</th>
<th>warming, use, jet-aircraft, complaints, fumes roads, areas, effect, building, flats progress.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. __________________</td>
<td>6. __________________</td>
</tr>
<tr>
<td>2. __________________</td>
<td>7. __________________</td>
</tr>
<tr>
<td>3. __________________</td>
<td>8. __________________</td>
</tr>
<tr>
<td>4. __________________</td>
<td>9. __________________</td>
</tr>
<tr>
<td>5. __________________</td>
<td>10. __________________</td>
</tr>
</tbody>
</table>

IV. Перепишите следующие предложения; подчеркните Participle I и Participle II. Определите их функции и предложения. Переведите предложения на русский язык

Образец: 1. Every atom contains participles carrying electricity.
   Participle I, определение.
   Каждый атом содержит частицы, несущие электричество
   While burning substances combine with oxygen
Having obtained the necessary results, they stopped their experiment.

Perfect Participle, обстоятельство

Получив необходимые результаты, они прекратили эксперимент

2. The used method is complex enough.

Participle II, определение

Применяемый метод – достаточно сложный

When heated the molecules move more intensively

Participle II, обстоятельство

Нагреваясь (при нагревании) молекулы двигаются интенсивнее

1. The device worked well when tested.
2. Reading a scientific articles you get a lot of information.
3. The question discussed concerned the theory of relativity.
4. Being busy he refused to come,
5. The work done took much time.
6. When invented the steam locomotive played an important part in transportation
7. Having asked a question, she got a detailed answer.

VI. Прочитайте текст и ответьте на вопрос:
Why has the motor car been responsible for many changes in the environment?

PRESERVING THE ENVIRONMENT

1. Recently more and more attention has been focused on the problem of preserving the environment.
2. Over the past thirty years or so the quality of many people's lives has deteriorated in some respects because of technological progress. Those people living near airports are constantly assailed by the noise of increasingly larger and more powerful jet aircraft taking off and landing. We have ugly buildings which have sprung up in towns and cities. Some of these are blocks of flats-high-rise buildings built because of the high price of land, which seem more like boxes than houses where people have space to live.
3. The motor car has been responsible for many changes in the environment. On the one hand and has brought mobility to millions of people but on the other it has led to the construction of more and more noisy and dangerous roads and has polluted the atmosphere with exhaust fumes.
4. While towns and cities have become larger and uglier and more densely populated, the rural areas have lost most of their population owing to the need for fewer workers in agriculture. The countryside has also been affected by the large-scale use of insecticides. For one thing the killing of insects has resulted in a loss of balance in the ecology. Insects, although a nuisance to farmers, provide food for birds. Many people are afraid that fruit and vegetables sprayed with chemicals may have some poisonous effect upon the people who eat them. Many people with bronchial
complaints became very ill or died through the effects of a mixture of smoke, fog and fumes known as «smog». Rivers which used to be fouled up with industrial chemical waste are being cleaned, and fish which could not live there a few years ago can be caught again.

б) Прочитайте текст еще раз. Выберите правильный ответ соответствующий содержанию текста:

1. The quality of many people’s lives has deteriorated because of
   a) ugly buildings
   b) technological progress
   c) powerful plants

2. The motor cars has been responsible for:
   a) the construction of noisy and dangerous roads
   b) the mobility of millions of people
   c) many changes in the environment

3. The killing of insects has resulted in:
   a) an increase of food for birds
   b) a loss of balance in the ecology
   c) a large scale use of chemicals

VII. Перепишите и письменно переведите 2, 3 абзацы текста.

THE MENACE OF THE MICRO

Hardly a week goes by without some advance in technology that would have seemed incredible 50 years ago. Over the past 20 years computers have completely revolutionized our lives. Yet we can expect the rate of change to accelerate rather than slow down within our lifetimes. The next 25 years will see as many changes as have been witnessed in the past 150. These developments in technology are bound to have a dramatic effect on the future of work. By 2010, new technology will have revolutionized communications. People will be transmitting messages down telephone lines that previously would have been sent by post. A postal system which has essentially been the same since the Pharaohs will virtually disappear overnight. Once these changes are introduced, not only postmen but also clerks and secretaries will vanish in a paper-free society. All the routine tasks they perform will be carried on a tiny silicon chip. As soon as this technology is available, these people will be as obsolete as the horse and cart after the invention of the motor car. One change will make thousands, if not millions, redundant.

Even people in traditional professions, where expert knowledge has been the key, are unlikely to escape the effects of...
new technology. Instead of going to a solicitor, you might go to a computer which is programmed with all the most up-to-date legal information. Indeed, you might even come up before a computer judge who would, in all probability, judge your case more fairly than a human counterpart. Doctors, too, will find that an electronic competitor will be able to carry out a much quicker and more accurate diagnosis and recommend more efficient courses of treatment.

In education, teachers will be largely replaced by teaching machines far more knowledgeable than any human being. What's more, most learning will take place in the home via video conferencing. Children will still go to school though, until another place is created where they can make friends and develop social skills through play.

What, you may ask, can we do to avoid the threat of the dole queue? Is there any job that will be safe? First of all, we shouldn't hide our heads in the sand. Unions will try to stop change but they will be fighting a losing battle. People should get computer literate as this just might save them from professional extinction. After all, there will be a few jobs left in law, education and medicine for those few individuals who are capable of writing and programming the software of the future. Strangely enough, there will still be jobs like rubbish collection and cleaning as it is tough to programme tasks which are largely unpredictable.

If we accept that people have the need to work, then an option might well be to introduce compulsory job sharing and to limit the length of the working week. Otherwise, we could find ourselves in an explosive situation where a technocratic elite is both supporting, and threatened by, vast numbers of the unemployed. Whether the future is one of mass unemployment or greater freedom and leisure will depend on how change is managed over this difficult period and how the relationship between work and reward is viewed.
dams across rivers, forming large lakes and putting thousands of acres of land under water. The water flowing over the dams turned turbines to generate electricity. Today giant power tines carry electricity to distant cities. Some scientists say that these power lines are dangerous because of the electromagnetic fields they produce. More and more people object to hydroelectric power because it seriously changes the balance of nature.

2. Thermonuclear power, or nuclear power, comes from the splitting of atoms. It is a widely used and inexpensive form of energy. However, it is possibly the most dangerous because there are health risks from radiation.

3. Coal, one type of fossil fuel, is one of the dirtiest kinds of energy used. It heats homes and runs factories. Other fossil fuels that come from the earth are petroleum products: gasoline, which is used for most vehicles, and natural gas, which is used for some vehicles, but mostly for heating and cooking. At the present time, some New York City buses run on natural gas, which is cleaner and cheaper than regular gasoline.

4. Alcohol is quite commonly used as fuel in Brazil. It comes from one of Brazil's main crops, sugar cane, which is easily processed into alcohol. Methane gas, another source of fuel, comes from garbage, but it is not widely used. From under the ground, Iceland gets geothermal energy, which provides most of the country's heat and hot water. Other sources of energy include the wind and the sun. In Hawaii, for example, the strong winds in some locations turn giant propellers to produce electricity. In many parts of the world the sun fulfills many energy needs. Solar panels heated by the sun produce electricity. Solar energy already provides many homes with heat and hot water.

5. What about future sources of energy? Ralph Hansen, a NASA engineer and the author of Sun Power, proposed a plan to use solar-powered satellites to capture the power of the sun in space, where the sun shines 24 hours a day, 365 days a year. His plan would provide low-cost, nonpolluting energy for the entire world. An additional energy source to be developed is fusion energy, the process that powers the sun and the stars. Nuclear fusion, or fusion, represents an unlimited source of energy. In fusion, nuclei combine to form bigger nuclei while releasing energy. Not much is known about how to make it usable, but it seems promising, and millions of dollars of government money will help develop it. Although these sources of energy seem easily available, their high cost is a problem. They are expensive to develop. As a result, they are not as widely used as cheaper forms of fuel.

6. Energy is needed to warm us, cool us, light our way, carry us from one place to another, and process our food. If the world population increases as expected, resources for the kinds of energy we use today may be insufficient. We will have to look closer at different energy sources, such as fusion and solar power. When will we decide to spend the money necessary to develop these energy sources? Who will pay for it? These questions will need to be answered before we can meet our growing energy needs.

II. Reading for main ideas.

1. Underline the word or phrase that will complete a true statement
   a. Fossil fuels include (a) nuclear energy (b) hydroelectric power (c) petroleum/coal
   b. Natural sources of energy come from (a) wind, (b) fusion (c) alcohol.
   c. The problem with most alternative sources of energy is (a) the technology is not ready (b) the costs are too high (c) they are limited.

2. What is your opinion? Basing your opinion on the facts in the article tell what makes solar energy a promising source of energy.
CARS: PASSION OR PROBLEM?

I. Before reading.
1. Read the headline of the article and say what it will be about using the choice below:
   a. the development of cars
   b. the benefits cars can give people
   c. the danger of cars
2. Read the article and say if your predictions were correct.

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, including the Mille Miglia in Italy, the Carrera Panamericana in Mexico, and the world-famous Indianapolis 500. 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 the 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 very crowded.

Some environmentalists believe that forms of public transportation such as buses and trains have not been fully developed in the United States. They try to teach others that public transportation saves fuel and helps to protect the environment. Many people are unhappy with car traffic and pollution, as well as with the use of beautiful land for building new roads. One environmentalist, Jan Lundberg, left his Mercedes-Benz in Los Angeles and moved to the forests of northern California. There he works on the Auto-Free Times, a newspaper that teaches people how to live without driving. Lundberg travels on foot, on bicycle, or by bus. Before he decided to live without a car, Lundberg worked for the oil companies, studying the prices of gasoline.

Lundberg and other environmentalists dream of turning parking lots into parks and replacing cars with bicycles, but most people around the world believe that the car is a necessary part of life in today's world. Still, there is an important question that must be answered: What kind of fuel will we use when gasoline is no longer available? Lundberg believes that by the year 2021, there will no longer be oil for gasoline makers to use. To solve this problem, car companies in Korea, Japan, Europe, and the United States are trying to develop an electric car that will not require gasoline at all.

The electric car is not a new idea. In had success with American women in the early 1900s. Women liked electric cars because they were quiet and did not pollute the air. Electric cars were also easier to start than gasoline-powered ones. But gasoline-powered cars were faster, and in the 1920s they became much more popular.

The electric car was not used again until the 1970s, when there were serious problems with the availability of oil. Car
companies began to plan for a future without gasoline. The General Motors Company had plans to develop an electric car by 1980; however, oil became available again, and this car was never produced.

Today there is a new interest in the electric car, which is partly related to a passion for speed and new technology. In 1977, engineer Paul MacCready, designed a human-powered airplane that successfully completed a three-mile flight. A similar airplane crossed the English Channel in 1977, followed by a solar-powered airplane. In 1987, the Sunraycer, a solar-powered car, won a 2,000-mile race in Australia. As a result of this success, the General Motors Company began new work on the development of the electric car. The Toyota Company recently decided to spend $800 million a year on the development of new car technology. Many engineers believe that the electric car will lead to other forms of technology being used for transportation.

Cars may change, but their importance will not. 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 bring us travel and adventure, no matter how it changes in the future.

II. Reading for main ideas.
1. Number the following main ideas in the right order.
   a. To some people cars are more the transportation
   b. Cars will always be important
   c. People in the US need cars to go to school, work, places of entertainment.
   d. Soon there will be no oil to fuel cars.
   e. Cars can cause different various problems.
   f. Some people think of how to live without cars.
   2. Read the following statements and cross out the details that are not included in the article.
   a. There are more cars then people in the world today
   b. Two and a half million cars pass through New York City each day.
   c. Travel is sometimes slow because of traffic.
   d. Cars were first produced in large numbers by Ford Motors.
   e. The first electric cars were faster then gasoline-powered cars.
   f. The General Motors Company produced an electric car.

Text 4
THE MIND MACHINE?
I. Before reading.
1. Read the headline of the article and say what it will be about using the choice below:
   a. the work of the brain
   b. the experiments on the brain
   c. the problems with the brain
   d. brain and computer
   2. Read the article and say if your predictions were correct.

Although intelligence has been studied, and the brain has been studied, there is little understanding of how the brain works to produce intelligence. This has something to do with the fact that the brain contains around 100 billion cells (about the number of stars in the Milky Way).

One of the continuing myths about the relationship between intelligence and the brain is that the brains of very clever people are somehow physically different from those of ordinary people. At the beginning of the century an American scientist called E.A.
Spitzka produced a list of the weights of the brains of important, well-known men. The heaviest brain on the list was that of Turgenev, the Russian novelist, at 2000g. However, the brain of another great genius, Walt Whitman, weighed only 1282g.

There are no significant differences between the intelligence levels of males and females. However, girls under seven score a little higher than boys in IQ tests and the highest IQ recorded is that of Marylin vos Savant at 230. However, men and women do differ in the way they think. Generally, women are more skilled verbally and men do better on visual-spatial tasks.

Interestingly, the fibres which join the two halves of the brain have been found to be larger in women than in men. This supports the theory that women can change from 'practical' to 'emotional' thinking more quickly than men.

People with mental problems have often been treated extremely badly. Two hundred years ago, the mentally ill were swung around in revoking chairs, or holes were drilled in their skulls to release evil spirits. From the 1930s, the mentally ill were subjected to electric shock therapy and lobotomy - the removal of part of their brain. In the 1960s and 70s, thousands of people were given drugs to cope with anxiety and then became addicted to them.

The brain needs ten times as much blood as other organs of the body, as it can't store glucose for later use. This is different to muscles and other organs and although the adult brain makes up only two per cent of the body weight, its oxygen consumption is twenty per cent of the body's total.

There are similarities between brains and computers. Computers can do complicated calculations at incredible speeds. But they work in a fixed way, because they can't make memory associations. If we need a screwdriver and there isn't one, we will think laterally and use a knife or coin instead. Computers can't do this. In fact, it is claimed that when it comes to seeing, moving and reacting to stimuli, no computer can compete with even the brain power of a fly.

Most of our mental processes are deeply formed habits. Challenging your brain to do things differently helps it develop. Try changing routines as often as you can: take a bus instead of going by car, sit in a different chair. An extreme but useful exercise is to read something upside down — you can actually feel your brain at work.

Exercise more. Good health and fitness levels give you overall improved energy which leads to better concentration.

Cooking is a good all-round mental exercise. It needs mathematical, organisational and scientific skills as well as challenging memory and creative ability. Use recipes at first and then learn to guess amounts, combinations, reactions of ingredients and timing.

Do puzzles and play games. Teach yourself to work out codes and expand your vocabulary at the same time.

II. Reading for main ideas.
1. Read the article and choose the most suitable headings given below for each paragraph.
   a. Need for blood
   b. Do we know much?
   c. The super computer
   d. Is bigger better?
   e. Make your brain work
   f. The battle of males and females.
   g. A horrifying history.
2. Read the article again to name more exciting facts on this topic the first has been done for you
1. The girls under seven score a little higher than boys in IQ
2. __________
3. __________
4. __________

Text 5
LEADERS OF THE PAK
I. Before reading.
1. Read the headline of the article and say what it will be about using the choice below:
   a. The revolution in the field of food industry
   b. The founders of the Pak Company
   c. New products of the Pak Company
2. Read the article and say if your predictions were correct.

Gad and Hans Rausing are among the richest men in Britain, their wealth surpassing even that of the Queen. These Swedish brothers, who came to Britain in 1983 have made their millions from one product - TetraPak, the aluminium and plastic laminated container for milk and fruit juice found all over the world.

One evening, near Christmas 1944, a young Swedish economist called Ruben Rausing was watching his wife Elisabeth making sausages in the small kitchen of their home in the university town of Lund, Sweden. He was impressed by the manner in which the sausages were contained in a skin and kept fresh by pressing shut each end. So, he began questioning his wife about the method she used. Their conversation that evening was to lead to the invention that would revolutionise lives throughout the world, and make the couple - and their family - billionaires.

For Ruben was to apply the principle to milk, inventing the low-cost, germ-free packaging system, which he called TetraPak - a roll of cardboard twisted to make a pocket and sealed into a rectangular carton. Today if you buy milk or orange juice at virtually any supermarket from Dublin to Peking it will have come from Rausing's idea that day in his kitchen.

This is the legend of TetraPak. However, it seems that the reality could be rather different. It is certainly true that Ruben realised the huge potential if a form of germ-free sealed packaging could be found for household items such as milk. But the alternative version of the story suggests that at this point he approached Erik Wallenberg, a young research scientist working for his company. Wallenberg claims that he is in fact the person who designed the first TetraPak, working from an idea originated by Ruben.

Now aged 78, he recalls the day Ruben Rausing came to him. Rausing told him that he had bought a herd of cows which needed milking, and wanted a container made to package the milk.

'I was under a lot of pressure to find a solution,' Wallenberg said, 'but strangely it was while I was at home with flu that I came up with the idea of the tetrahedron-shaped milk package.'

Rolling up a piece of paper to demonstrate the process, he continued. 'I made up my mind that a cylinder - a tube - should be made and that it should be pressed together at one end. I decided it should also be pressed together at the other end. However, to avoid getting a flat cushion-like package which could contain only a small amount of liquid, I decided to make the second pressing together in a plane at right angles to the first one ... that is simply how the TetraPak was born. I went back to the laboratory and we began testing.'

Wallenberg said Ruben had early doubts about the possible success of the idea, 'but we tested it by putting water inside for
several days and, when there was no leakage, he was convinced. I think that Ruben Rausing realised its potential immediately. He bought the patent and all rights from me for 3,000 kronor (a little less than £300), which to some people was a half a year's wages at that time. Obviously, at the time those in the company knew of my work but after a while another story began to emerge of the invention — that it had all been the work of Mr Ruben Rausing. Yet although clearly among the world's most successful businessmen, they pride themselves on their secrecy.

Whatever is the reality, by 1952 the first TetraPak containers were being successfully produced, and in a few years Ruben had built up a huge business.

By the late fifties, all three of Ruben's sons had joined their father within the company. But it was already clear that Hans would play the leading role in the company.

'He was,' says Wallenberg, 'extremely able and, like his father, single-minded. He only seemed to have one interest and that was to make money.'

Despite their enormous wealth, today both Hans and Gad live modestly, and as far as Hans is personally concerned, in a recent interview he admitted, 'I have no idea how much money I have. You can't measure money in lists.'

II. Reading for main ideas.
1. Numbers the following in the order they appear in the article.
   a. It was Eric Wallenberg who designed the first Pak.
   b. In 1950s Ruben Rausing produced the first Pak containers and built up a huge business.
   c. Soon Hans Rausing headed the company because he was extremely talented businessman.
   d. Ruben Rausing bought the patent and all rights from Wallenberg for a little less than three hundred pounds.
   e. The method used by Ruben's wife in making home sausages led him to the invention of Pak and made the couple very rich.
   f. The alluminium and plastic laminated container allowed the Swedish brothers made their fortune.
2. In a word answer the following questions about what the main idea tells:
   a. Who?____
   b. Where?____
   c. When?____
   d. What?____
Аннотация

Контрольное задание представляют собой грамматические упражнения, тексты для чтения и перевода, предтекстовые и послетекстовые задания в виде вопросов с множественным выбором ответов в соответствии с содержанием текстов и построены на аутентичном материале, заимствованном из оригинальных публикаций.