### ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ПРОФЕССИОНАЛЬНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ АРХАНГЕЛЬСКОЙ ОБЛАСТИ «МИРНИНСКИЙ ПРОМЫШЛЕННО-ЭКОНОМИЧЕСКИЙ ТЕХНИКУМ»

# МЕТОДИЧЕСКИЕ РЕКОМЕНДАЦИИ ДЛЯ ВЫПОЛНЕНИЯ КОНТРОЛЬНЫХ РАБОТ ПО ОГСЭ.03 ИНОСТРАННЫЙ ЯЗЫК В ПРОФЕССИОНАЛЬНОЙ ДЕЯТЕЛЬНОСТИ

(Заочное отделение)

для специальности: <u>08.02.01 Строительство и эксплуатация зданий и</u> сооружений

Методические рекомендации для ОГСЭ.03 Иностранный язык в профессиональной деятельности разработаны для выполнения контрольных работ и составлены в соответствии с рабочей программой и учебным планом по специальности <u>08.02.01</u> «Строительство и эксплуатация зданий и сооружений».

Организация-разработчик: государственное бюджетное профессиональное образовательное учреждение Архангельской области «Мирнинский промышленно-экономический техникум»

Разработчик:

Харитонова А.С., преподаватель техникума

ОДОБРЕНА	Составлены в соответствии с
Цикловой комиссией социально-экономических дисциплин и дисциплин права	требованиями ФГОС по специальности среднего профессионального образования 08.02.01 «Строительство и эксплуатация зданий и сооружений» и учебным планом
Председатель цикловой	Заместитель директора техникума по
комиссии	учебной работе
Е.В. Степанова	М.Н.Венедиктова

#### Содержание:

Требования к оформлению и выполнению контрольных заданий	4
Варианты контрольных работ для I семестра:	5
Вариант 1	5
Вариант 2	8
Вариант 3	11
Вариант 4	14
Вариант 5	17
Варианты контрольных работ для II семестра:	20
Вариант 1	20
Вариант 2	23
Вариант 3	26
Вариант 4	28
Вариант 5	30
Список использованной литературы	32

#### Требования к оформлению и выполнению контрольных работ:

- 1. Студенты выполняют одно контрольное задание в семестр.
- 2. Выполнять письменные контрольные задания следует в отдельной тетради, на обложке тетради напишите свою фамилию, инициалы.
- 3. Контрольные задания должны выполняться чернилами, аккуратно, четким почерком либо выполнены на компьютере (шрифт 14 пт, Times New Roman)
- 4. Если контрольное задание выполнено без соблюдения указаний или не полностью, оно возвращается без проверки.
- 5. Студенты, фамилии которых начинаются с букв от «А» по «Д», должны выполнить 1 вариант контрольной работы, от «Е» по «К» 2 вариант, от «Л» по «Р» 3 вариант, от «У» по «Ч» 4, от «Ш» по «Я» 5. Контрольная работа сдается заблаговременно (за 10-5 дней) перед сдачей зачета по английскому языку.

Для того, чтобы правильно выполнить задания, необходимо усвоить следующие разделы грамматики английского языка:

- 1. Видовременные формы глагола: а) активный залог формы Indefinite (Present, Past, Future); формы Continuous (Present, Past, Future); формы Perfect (Present, Past, Future); б) пассивный залогформы Indefinite (Present, Past, Future)
- 2. Модальные глаголы: a) выражающие возможность: can (could), may и эквивалент глагола can to be able, б) выражающие долженствование: must, его эквиваленты to have to и to be to; should.
- 3. Простые неличные формы глагола: Participle I (Present Participle), Participle II (Past Participle)
- 4. Части речи в английском языке
- 5. Инфинитив и Герундий. Формы и употребление
- 6. Типы вопросов. Построение вопросительных предложений

#### Варианты контрольных работ для 1 семестра Вариант 1

#### 1. Read and translate the text.

#### Timber

Timber belongs to one of the oldest building materials. It has been him ancient times and is still produced from cut wood. Timber has always been highly usable in construction because of its many advantages. To these belong its strength, light weight, cheapness, and high workability. Its other advantage is that it belongs to natural resources and is naturally renewable. It is the more so that about a third of the world is still considered to be covered with forests. Besides, timber is resistant to corrosion produced by chemical substances in the modern polluted atmosphere. One more advantage of timber is that it can be used for many construction purposes. But, naturally, timber has disadvantages and the main ones are that it is not fire-resistant and it easily decays; especially if it is not impregnated. Besides, freshly cut timber contains water that may cause great structural defects. Removal of water from timber is a necessary procedure that should take place before timber is used in practice. It increases strength and workability of the material and, of course, its durability. What is timber mainly used for? Because of its many advantages it is highly used for producing window and floor frames, for flooring and roofing and for other various woodwork. The two main types of timber are hardwoods and softwoods. Of them, hardwoods are popular as materials used for decorative purposes: veneering in furniture and panelling. As to softwoods, they are mainly used for producing window and door frames and other kinds of woodwork.

Timber is wood, suitable for building and structural purposes. There are over 4000 woods in common use throughout the world. In best and most commonly used softwoods popular for structural work in many countries are redwood, whitewood, pine, red cedar, sequoia, beech and some others. As to the hardwoods, the best known ones include beech, birch, blackwood, chestnut, elm, mahogany, maple, myrtle, oak, rosewood, walnut and some others.

#### 2. Ответьте на вопросы.

- 1. What structural materials does timber belong to?
- 2. What is it produced from?
- 3. Why is removal of water from timber useful for construction purposes?
- 4. What are the two main types of timber?
- 5. What are softwoods (hardwoods) used for?
- 6. How much of the world's land surface is considered to be covered with forests?
  - 7. What countries are rich (poor) in forests?
  - 8. What house do you live in? Is it modern or an old one?
  - 9. Is it a multistory building?
  - 10. What materials is it constructed of?
  - 11. What storey (floor) do you live on?
  - 12. What materials are the stairways made of?
  - 13. Is there an elevator (a lift) in your house?
  - 14. Do you have to use it?
  - 15. How many rooms are there in your apartment (flat)?
  - 16. What colors are the walls in the rooms?

#### 3. Переведите предложения, определив функцию инфинитива.

- 1. To increase the productivity of the machine tool one should know the characteristics of the material which is being machined.
- 2. Our plant produces automatic and semiautomatic machine tools to be installed in new large shops.

- 3. To generate electricity by these conventional methods is highly uneconomic.
- 4. The new apparatus was to control all the temperature changes during the experiment.
- 5. The engineer was asked to design a transistor device which will regulate the temperature in the laboratory.

#### 4. Переведите предложения с предлогом FOR.

- 1. It isn't for me to say so.
- 2. The unusual phenomenon occupied the scientist's thoughts for some weeks.
  - 3. I stood aside for us to pass it.
  - 4. I have arranged for you to have a private room.
- 5. Popov always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. Peter meets them at the theatre on Saturday.
- 2. Ren was very glad to meet him yesterday.

### 6. Определите, какой частью речи является слово с окончанием — ing и переведите эти предложения.

- 1. The building of this house will cost much money.
- 2. I remember reading a very clever article on market economy.
- 3. My greatest pleasure is traveling.
- 4. He was writing a letter when I entered the room.
- 5. While translating the text, I looked up many words in the dictionary.

#### 1. Read and translate the text.

#### Foundation

It is a well-known fact that every building needs permanent stability. In order to have stability, buildings should have foundations. We know that the function of a foundation is to transfer the loads of a building into the soil. Foundations keep the walls and the floors of buildings from direct contact with the soil. They guard the walls and the floors against the action of the weather - rain, snow, and wind. They also guard buildings against sinking that may cause cracks in the walls. Foundation design is very special. It may be both rather complex or very simple. It is a common practice that for very small buildings foundation design is usually much simple than for large ones. Why is it so? Firstly, because foundations loads of small buildings are usually low.

What kinds of loads are supported by foundations? A foundation may support different kinds of loads. Among them there are dead loads and live loads. The dead load of a building includes the weights of the ceilings, the frame, the floor, roofs and the walls. Besides, every modern building is known to have water, electricity, heating, ventilation and dispose of waste systems and, accordingly, their equipment. The dead load also include! the weights of this electrical and mechanical equipment and the weight o the foundation itself. As to the live load, it includes the sum of the weight of the people and other living beings, the furnishings, and equipment the) use. The live load also includes snow, ice, and water of the roof.

There exist two basic types of foundations: shallow and deep. Shallow foundations transfer the load to the earth at the base of the column or wall of the substructure. Deep foundations transfer the load at a point far 1 below the substructure. As to the price of these types of foundations, shallow ones are usually less expensive than deep ones.

#### 2. Ответьте на вопросы.

1. For what reason does every building need stability?

- 2. What functions of a foundation do you know?
- 3. What may cause cracking in the walls of buildings?
- 4. What are the loads supported by foundations?
- 5. What parts does dead load (live load) include?
- 6. What house do you live in? Is it modern or an old one?
- 7. Is it a multistory building?
- 8. What materials is it constructed of?
- 9. What story (floor) do you live on?
- 10. What materials are the stairways made of?
- 11. Is there an elevator (a lift) in your house?
- 12. Do you have to use it?
- 13. How many rooms are there in your apartment (flat)?
- 14. What colors are the walls in the rooms?
- 15. Do you like your flat or would you like to change it for another (bigger or smaller) one?
  - 16. For how long have you been living in your house?
  - 17. Are there trees and bushes around it?

#### 3. Переведите предложения, определив функцию инфинитива.

- 1. Toughness is the ability of a material to absorb mechanical energy by permanent deformation without breakage.
- 2. Steam engines were the first to be tried in airplanes but they were too heavy to be of any real use.
  - 3. Steel is the metal to be formed from iron with a definite amount of carbon.
- 4. If steel is heated above critical temperature it becomes softer and much easier to be machined.
  - 5. This alloy is not tough enough to be used in this process.

#### 4. Переведите предложения с предлогом FOR

- 1. It's bad for you to smoke so much.
- 2. There is nothing for me to say.

- 3. The rain can last long enough for us to miss the train.
- 4. The day was much too cold and rainy for anyone to have a good time.
- 5. Einstein always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. We have a wall newspaper in our class.
- 2. He asked me the same question several times.

### 6. Определите, какой частью речи является слово с окончанием – ing и переведите эти предложения.

- 1. The building of this house will cost much money.
- 2. I remember reading a very clever article on market economy.
- 3. My greatest pleasure is traveling.
- 4. He was writing a letter when I entered the room.
- 5 While translating the text, I looked up many words in the dictionary.

#### 1. Read and translate the text.

From the history of metals.

Metals began to be widely used as construction materials not so long ago. Before the beginning of the nineteenth century metals played little structural role in the process of building. Mostly they served for joining parts of buildings. The ancient Greeks and Romans are known to use bronze for joining slabs of stone. It was only in the eighteenth century when the first all-metal structure was built in Europe. It was a cast-iron bridge across the river Severn in England. The strength of the bridge turned out to be so great that no more than two centuries after its construction, it still carries heavy modern traffic across the Severn. In the first half of the nineteenth century cast iron and wrought iron were introduced and used for industrial construction in Europe and North America. Steel was not widely used, being considered a rare and expensive building material. Inexpensive steel first began to be produced and use only with the invention of the Bessemer process, in the 1850s. From that period on, metal started to be used as rather popular and useful building material. The famous Eiffel Tower of Paris was constructed of wrought iron in 1889. By that period several steel frame skyscrapers had already been built in the United States. That was the beginning of the new era; new highly useful and popular construction material had been born an introduced into building industry. The Empire State Building was built in 1931 in the United States of America. Its construction took about two years. The exterior of the skyscraper is supported by a framework produced of steel. It should be note that 60,000 tons of steel were used for its production. The Empire State Building is considered to be one of the tallest and spacious construction the world. It can be attended by 80,000 people simultaneously.

#### 2. Answer the questions given below.

1. For what purposes were metals mostly used before the beginning of the nineteenth century?

- 2. What did ancient Greeks and Romans use bronze for?
- 3. When and where was the first all-metal structure built? What can you say about its present-day condition?
- 4. What kinds of iron were introduced in the first half of the nineteenth century?
  - 5. Why was steel as a building material unpopular for a long period?
  - 6. What is the essence of the Bessemer process?
  - 7. What was the global result of its invention?
  - 8. What material is the famous Eiffel Tower constructed of?
  - 9. In what country were the first skyscrapers built?
  - 10. Are they good to live in? Would you like to live in a skyscraper?
  - 11. What house do you live in? Is it modern or an old one?
  - 12. Is it a multistory building?
  - 13. What materials is it constructed of?
  - 14. What story (floor) do you live on?
  - 15. What materials are the stairways made of?
  - 16. Is there an elevator (a lift) in your house?
  - 17. How many rooms are there in your apartment (flat)?

#### 3. Переведите предложения, определив функцию причастия І.

- 1. A molecule is a compound <u>consisting</u> of two or more atoms.
- 2. <u>Combining</u> hydrogen with oxygen in the proportion of two atoms of hydrogen and one atom of oxygen we produce water.
- 3. When <u>speaking</u> about oxygen it is necessary to say that it is a colorless, odorless gas <u>having</u> density at standard pressure and temperature of about one seven-hundredth that of water. It is soluble in water becoming liquid at about 180 °C.
  - 4. While <u>burning</u> different substances combine with oxygen.
  - 5. The assistant was <u>preparing</u> the solution very carefully.

#### 4. Переведите предложения с предлогом FOR

- 1. It's bad for you to smoke so much.
- 2. There is nothing for me to say.
- 3. The rain can last long enough for us to miss the train.
- 4. The day was much too cold and rainy for anyone to have a good time.
- 5. Einstein always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. He often speaks English in class.
- 2. They always are at school in time.
- 6. Переведите предложения на русский язык; определите, чем являются слова, оканчивающиеся на -ing (причастием, герундием или отглагольным существительным)
- 1. The Earth and the Moon travel together making a complete trip around the Sun once a year.
- 2. Besides using optical telescopes scientists are extensively employing radio telescopes, which are huge antennae, constantly listening to the radio signals corning from our distant neighbors in the universe.
- 3. Astronomers determine the mass of the Sun by calculating its effects on the Earth.
- 4. Knowing how to detect radio signals emitted by the Sun and other heavenly bodies people can greatly enlarge their possibilities of observing the universe.
- 5. The night sky radiation prevents the astronomer from seeing the most distant objects.

#### 1. Read and translate the text.

#### Ferrous and non-ferrous metals

All metals, with the exception of mercury, are hard- and fire- resistant. The common properties of metals being hardness and high fire- resistance, they are widely used in modern construction.

Metals are divided into two main groups: ferrous and non-ferrous. Iron, steel and their various alloys belong to the group of ferrous metals, while the main component of non-ferrous metals is not iron.

All metals have some common properties: they can be pulled, forged and melted. They are also good conductors of electricity.

Ferrous metals are commonly used for construction of supporting members. Steel and other ferrous metals serve as reinforcement in ferro-concrete constructions.

As to non-ferrous metals, their advantage is their being light. They are also good conductors of electricity, copper being the best one. Metal possesses high resistance.

What is steel as a construction material? Steel may be classified as iron with the controlled amount of carbon. The amount of carbon in steel is generally less than 1.7 per cent. Ordinary structural steel should contain less than three tenth of one per cent carbon. This kind of steel also contains small amounts of phosphorus, sulfur, oxygen, nitrogen and silicon. Like iron and its alloys, steel belongs to ferrous metals. It is a hard substance. Accordingly, it can be pulled, forged, and melted. Generally, steel, this strong metal, like other metals, is a good conductor of electricity. Alloyed steel and stainless steel are corrosion-resistant kinds of steel. Corrosion-resistant materials are known to be widely used for plant equipment, furnaces, valves, etc. It should be noted that steel frames as a whole and their separate parts should be carefully designed: their function is to be able to carry the loads imposed on them and supported by them.

#### 2. Answer the questions given below.

- 1. What group of metals does steel belong to?
- 2. What substances can steel contain?
- 3. What amount of carbon does steel generally contain?
- 4. What materials can be used for producing plant equipment?
- 5. What is the construction purpose of steel frames? For what reason must they be carefully designed?
  - 6. What house do you live in? Is it modern or an old one?
  - 7. Is it a multistory building?
  - 8. What materials is it constructed of?
  - 9. What story (floor) do you live on?
  - 10. What materials are the stairways made of?
  - 11. Is there an elevator (a lift) in your house?
  - 12. How many rooms are there in your apartment (flat)?
  - 13. What colors are the walls in the rooms?
- 14. Do you like your flat or would you like to change it for another (bigger or smaller) one?
  - 15. For how long have you been living in your house?
  - 16. Are there trees and bushes around it?

#### 3. Переведите предложения, определив функцию причастия I.

- 1. The solution is boiling.
- 2. The boiling solution has neither color nor odor.
- 3. Watching the tea-kettle James Watt saw a thick cloud of steam rising from.
  - 4. Taking off the cover he saw nothing but boiling water.
  - 5. Being poor he had to work hard.

#### 4. Переведите предложения с предлогом FOR.

1. It isn't for me to say so.

- 2. The unusual phenomenon occupied the scientist's thoughts for some weeks.
  - 3. I stood aside for us to pass it.
  - 4. I have arranged for you to have a private room.
- 5. Einstein always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. Nick spoke to Tom in the park yesterday.
- 2. The flower in the vase is very beautiful.

## 6. а) Переведите предложения на русский язык; б) определите, чем являются слова, оканчивающиеся на -ing (причастием, герундием или отглагольным существительным)

- 1. Solar batteries converting the energy of the Sun directly into electric current are sources of electric energy for radio and television equipment on spaceships and man-made satellites.
- 2. Using atomic fuel for the production of electricity is one of the most perspective sources.
  - 3. Splitting atoms scientists have learned to release much energy.
- 4. Splitting uranium may release neutrons to split more atoms to form a chain reaction.
- 5. At the beginning of the century scientists succeeded in breaking the nucleus of the atom by attacking it with very small particles flying with high speed.

#### 1. Read and translate the article.

#### Concrete

Concrete is considered to be a universal material for construction. Different kinds of concrete can be used practically for every building purpose. The raw materials for producing concrete can be found in every part of the world. The main property that makes concrete so popular is that it can be formed into strong monolithic slabs. Another good quality is its relatively low cost. Besides, concrete is known to be fire- and decay-resistant.

Concrete is produced by combining coarse and fine aggregates, Portland cement, and water. Coarse aggregate is generally gravel or crushed stone, and fine aggregate is sand. Cement, sand, gravel, and water are taken in proportional amounts and mixed. The quality of concrete depends mostly on the quality of the cement used. The process of production consists in pouring the mixed components into forms and holding them there until they harden. The process of hardening generally lasts for about 28 days.

There exist different ways of producing concrete. It can be produced by mixing the ingredients and pouring the mixture into position on the very site of building. Concrete can also be produced in a factory, and used as a material for manufacturing prefabricated blocks. Accordingly, there exist the so-called in-situ (cast-in-place) concrete and precast concrete.

Concrete, as any other building material, has not only advantages but also disadvantages. Its main disadvantage is that it has no form of its own. Also, it does not possess useful tensile strength. Because of these qualities, in modern times construction concrete is very frequently combine with different metals. Most common of them are iron and steel.

The introduction of metal into the structure of concrete is highly advantageous. It strengthens the material and helps to realize its limitless construction and architectural potential. It should be noted that the use of ferroconcrete started only in the nineteenth century and is still gaining popularity.

#### 2. Answer the questions given below

- 1. What properties make concrete a highly used construction material?
- 2. What two types of aggregate are used for producing concrete?
- 3. Is sand a coarse or fine aggregate?
- 4. What ingredients does the quality of concrete depend upon?
- 5. How long does the process of hardening the mixed components last?
- 6. What is the difference between the so-called in-situ and precast concrete?
- 7. What quality is considered to be the main disadvantage of concrete?
- 8. For what reason is tensile strength considered to be an important quality?
- 9. For what purpose are metals introduced into the structure of concrete?
- 10. What metals is concrete frequently combined with?
- 11. When did the use of ferro-concrete start?
- 12. Would you like to live in a wooden or concrete building? Why?
- 13. What house do you live in? Is it modern or an old one?
- 14. Is it a multistory building?
- 15. What materials is it constructed of?
- 16. What story (floor) do you live on?
- 17. What materials are the stairways made of?

#### 3. Переведите предложения, определив функцию инфинитива.

- 1. Dissimilar metals and alloys are joined to get the final product with qualities of each component.
- 2. Metals and alloys to be joined are placed close together and are subjected to pressure and shock waves.
  - 3. To strengthen metals is to reinforce them with fibers.
- 4. To produce changes in physical state a considerable amount of thermal energy must be supplied to metal.
- 5. A very good practice is to introduce the best scientific inventions into industry.
  - 6. This metal is too brittle to be hammered.

#### 4. Переведите предложения с предлогом FOR.

- 1. It's silly for you to be asking me questions.
- 2. He didn't mean for you to stay here.
- 3. Faraday's work was a great surprise for scientists all over the world.
- 4. There is no one for the children to play with.
- 5. It is not the right time for us to speak about it.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. She met the girl at my friends' last Sunday.
- 2. Apples were on the plate yesterday.

### 6. Определите, какой частью речи является слово с окончанием – ing и переведите эти предложения.

- 1. The poor peasant thanked Robin Hood heartily for having helped him.
- 2. Being very ill, he couldn't go to school.
- 3. Playing volleyball is a good amusement for young people.
- 4. The forest resounded with the hooting of owls and howling of wolves.
- 5. I am sitting in the waiting room at the doctor's now.

#### Варианты контрольных работ для второго семестра

#### Вариант 1

#### 1. Read and translate the text

#### Excavation

What does construction of a building start with? Construction of any building usually starts with excavation. Excavation is a process necessary for the construction of every modern building.

It is a well-known fact that there exist different kinds of soil. It is also a well-known fact that the structure of the upper stratum of the soil is of great importance for excavation. The foundation of a building should never be placed on organic soils because soils of this kind are easily decomposed. They are decomposed because water and wind change their structure. So, if the upper stratum of soil is organic, it must be removed from the construction area in order to guard the foundation of the building against water and wind erosion. Further excavation may take place only after the upper organic stratum has been removed. In colder climates the foundations of buildings should be placed below the level to which the ground freezes in winter.

What are the major parts of a building? Modern buildings have three major parts. These are the superstructure, the substructure, and the foundation. The superstructure is the above-ground part of a building; the substructure - its belowground part. As to the third part - foundation - its function is of great importance as it serves to transfer the loads of a building into the upper stratum of earth - its soil.

#### 2. Answer the questions.

- 1. How many major parts does a modern building usually have?
- 2. What are the major parts of a building?
- 3. How is the above-ground (below-ground) part of a building called?
- 4. What is the function of a foundation?
- 5. Which part of soil is of great importance for excavation?
- 6. Which part of organic soil must be removed from the building area?

- 7. Why must it be removed?
- 8. In what climatic zones should the foundations be placed below the freezing point?
- 9. Have you ever watched the process of removing the upper stratum of soil from the building area?
  - 10. What house do you live in? Is it modern or an old one?
  - 11. Is it a multistory building?
  - 12. What materials is it constructed of?
  - 13. What story (floor) do you live on?
  - 14. Is there an elevator (a lift) in your house?
  - 15. Do you have to use it?
  - 16. How many rooms are there in your apartment (flat)?

#### 3. Переведите предложения, определив функцию инфинитива.

- 1. Dissimilar metals and alloys are joined to get the final product with qualities of each component. Metals and alloys to be joined are placed close together and are subjected to pressure and shock waves.
  - 2. To strengthen metals is to reinforce them with fibers.
- 3. To produce changes in physical state a considerable amount of thermal energy must be supplied to metal.
- 4. A very good practice is to introduce the best scientific inventions into industry.
  - 5. This metal is too brittle to be hammered.

#### 4. Переведите предложения с предлогом FOR.

- 1. It's silly for you to be asking me questions.
- 2. He didn't mean for you to stay here.
- 3. Faraday's work was a great surprise for scientists all over the world.
- 4. There is no one for the children to play with.
- 5. It is not the right time for us to speak about it.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. She met the girl at my friends' last Sunday.
- 2. Apples were on the plate yesterday.

### 6. Определите, какой частью речи является слово с окончанием – ing и переведите эти предложения.

- 1. The poor peasant thanked Robin Hood heartily for having helped him.
- 2. Being very ill, he couldn't go to school.
- 3. Playing volleyball is a good amusement for young people.
- 4. The forest resounded with the hooting of owls and howling of wolves.
- 5. I am sitting in the waiting room at the doctor's now.

#### 1. Read and translate the text.

#### Brick

Brick, stone, and timber are known to be the oldest building materials. Bricks belong to artificial (man-made) materials. Their production started in prehistoric times. Since then they have been produced and tested in all types of climate and in many countries. Thousands of years ago the builders in Egypt already knew the advantages of bricks and used them for construction. In those days the production of bricks was quite different from the modern one: bricks were produced not by burning but by drying in the sun, there being much sunshine in Egypt all the year round. Brick work was also popular in Rome, there being very few growing forests and as a result little timber there.

In modern times bricks can be made of concrete, mortar, of burnt clay and of a combination of some other substances. For example, different types of clay and shale can be used as raw materials. Accordingly, bricks produced nowadays have different sizes, shapes, colors, and textures. Bricks also vary with the method of fabrication and temperatures of burning. It should be noted that some types of brick, such as, for example, salmon bricks are undercurrent and highly porous. Naturally, their strength is extremely poor. This property of salmon brick should be taken into account when choosing brick material for construction. But there exist many other types of brick that are extremely strong and almost glass hard. Between these extremes there lie some other types of brick with different properties. Brick properties are of great importance and should be taken into account while choosing material for construction purposes.

#### 2. Answer the questions given below.

- 1. What building materials are considered to be the oldest ones?
- 2. What natural (man-made) materials are used for construction nowadays?
- 3. Is brick a newly produced or an ancient building material?
- 4. In what countries are there (many, few) growing forests?

- 5. What countries are rich (poor) in raw materials?
- 6. What properties of brick should be taken into account when choosing material for building purposes?
  - 7. Was the atmosphere polluted in the ancient world?
  - 8. Why is the modern atmosphere polluted?
  - 9. What processes pollute the atmosphere nowadays?
  - 10. What house do you live in? Is it modern or an old one?
  - 11. Is it a multistory building?
  - 12. What materials is it constructed of?
  - 13. What story (floor) do you live on?
  - 14. What materials are the stairways made of?
  - 15. Is there an elevator (a lift) in your house?
  - 16. How many rooms are there in your apartment (flat)?
- 17. Do you like your flat or would you like to change it for another (bigger or smaller) one?

#### 3. Переведите предложения, определив функцию причастия.

- 1. Taking off the cover he saw nothing but boiling water.
- 2. Being poor he had to work hard.
- 3. Look at the child playing in our garden.
- 4. Going along the street I met my old friends.
- 5. Taking the old man by the hand I helped him to cross the street.
- 6. Being sure that lie was at home I knocked at the door once more.
- 7. Looking at the drops of water the boy wondered about their nature.

#### 4. Переведите предложения с предлогом FOR

- 1. It isn't for me to say so.
- 2. The unusual phenomenon occupied the scientist's thoughts for some weeks.
  - 3. I stood aside for us to pass it.
  - 4. I have arranged for you to have a private room.

5. Popov always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. He will join our excursion next time.
- 2. You took this medicine in the hospital.

### 6. Определите, какой частью речи является слово с окончанием – ing и переведите эти предложения.

- 1. The building of this house will cost much money.
- 2. I remember reading a very clever article on market economy.
- 3. My greatest pleasure is traveling.
- 4. He was writing a letter when I entered the room.
- 5. While translating the text, I looked.

### 1. Прочитайте текст, переведите его и задайте к тексту 7 вопросов разных типов.

Many of the pyramids were built with a number of different stone materials. Most of the material used was fairly rough, low grade limestone used to build the pyramid core, while fine white limestone was often employed for the outer casing as well as to cover interior walls, though pink granite was also often used on inner walls. Basalt or alabaster was not uncommon for floors, particularly in the mortuary temples and as was mud bricks to build walls within the temples (though often as not they had limestone walls).

Egypt is a country rich in stone and was sometimes even referred to as the "state of stone". In particular, Egypt has a great quantity of limestone formation, which the Egyptians called "white stone", because during the Cretaceous period Egypt was covered with seawater. The country is also rich in sandstone, but it was never really used much until the New Kingdom.

Limestone seems to have first been employed in the area of Saqqara, where it is of poor quality but layered in regular, strong formations as much as half a meter thick. The layers are separated from each other by thin layers of clay and the coloration may vary according to layer. It could often be quarried very near the building sites, and quarries have been found at Saqqara, Giza, Dahshur and other locations.

#### 2. Переведите эти предложения.

- 1. In the cold climatic zone's foundations should be placed below the level of freezing.
  - 2. Foundations should not be placed on organic soils.
  - 3. Underburned brick is highly porous.
  - 4. The drier is the cut wood, the lower is its strength.
- 5. Increasing workability of the mix is achieved by pouring additional water into the mix.

- 6. High-grade concrete has practically limitless use.
- 7. The advantages of flat roofs are that they can cover very broad buildings.
- 8. Screws are much used in light framing.
- 9. Dark flooring materials absorb light and darken a room.
- 10. Plywood sidings never decay.

#### 3. Подберите заголовок к описанию.

Titles: Membrane; Membrane Fire Protection; Ventilator, Vapor Retarder.

- 1. A device for keeping the air fresh in a building.
- 2. A layer of material used in order to prevent the passage of water vapor through a building assembly.
  - 3. A sheet of material that is impenetrable for water or water vapor.
- 4. A ceiling used to provide fire protection to the structural membrane above.

#### 4. Переведите слова-термины.

suspending girder, gypsum plaster, reflecting power, wire nail, plate iron, concrete slab, tensile strength, site of foundation, coarse gravel, cellular brick.

Для того, чтобы правильно выполнить задание, необходимо усвоить раздел построения вопросительных предложений в английском языке.

### 1. Прочитайте текст, переведите его и задайте к тексту 7 вопросов разных типов.

NikoIai Vasilyevich Nikitin was an outstanding engineer, a creator of new building constructions, a recognized authority in the field of multistory building, a talented organizer of constructional designing, the author of world-known unique structures.

N. V. Nikitin was the creator of such structures as the Moscow University, the Palace of Culture and Sciences in Warsaw, the V. I. Lenin Central Stadium in Moscow, the first multistory building in Tashkent, the V. I. Lenin Memorial in Ulyanovsk, the Volgograd Monument to the Motherland and many others.

The above-mentioned structures have received recognition far beyond the borders of our country.

The Ostankino TV tower in Moscow, which is the tallest structure in the world, is considered to be the acme of N. V. Nikitin's creative work. Extremely complicated technical problems were solved while putting up this unique structure.

N. V. Nikitin carried out extensive scientific work as well. He was a recognized authority in the field of theoretical calculation of reinforced concrete constructions, the author of 70 printed works and 20 inventions.

#### 2. Выберите правильный вариант и переведите это предложение.

- 1. External and internal constructions possess (the same functions; different functions).
- 2. Any changes in underfloor systems can be made (only with great difficulty; quite easily).
  - 3. Devices intended for light framing are made of (sheet metal; metal plate).
- 4. Mechanical and electrical systems (can be subject to frequent change and damage; are never subject to frequent change and damage).

- 5. Concrete is considered to be (a universally used material; a frequently used material).
- 6. The material it is made up of allows rapid installation using (heavy; lighter) equipment and more manpower.
- 7. High cost and low fire-resistance are classified as (advantages; disadvantages) *of* construction materials.
- 8. The properties of terracotta are (different from the properties of brick; similar to the properties of brick).
  - 9. Much what we do takes place (indoors; outdoors).
- 10. Civil construction includes (industrial and precast concrete; industrial and military) types of construction.

#### 3. Подберите заголовок к описанию.

Titles: Fixed Window; Single-hung Window; Double-hung Window; Sliding Window.

- 1. A window with one fixed sash and another that moves horizontally in track.
  - 2. Glass that is immovably mounted to a wall.
  - 3. A window with two sashes. They both slide vertically in tracks.
- 4. A window with two overlapping sashes. The lower of them can slide vertically in tracks, and the upper one is fixed.

#### 4. Переведите слова-термины.

British made pipes, long-term erosion protection, cantilever bridge, brick clay, bottomless hole, water-supply, floor height, non-bearing wall, live wood, load binder.

Для того, чтобы правильно выполнить задания, необходимо усвоить следующие разделы грамматики английского языка:

- 1. Общие сведения об «Participle», его функции;
- 2. Постановка вопросительных предложений;
- 3. Части речи. Герундий.

#### 1. Read and translate the article.

#### **CONSTRUCTION MATERIALS**

Materials used for construction purposes possess different properties. They differ in durability, strength, weight, fire-and decay-resistance and, naturally, cost.

Wood, timber, brick, stone, concrete, metals, and plastics belong to the most popular building materials used nowadays. They all have their advantages and disadvantages that are taken into account when designing a structure.

Wood belongs to naturally growing materials. It is known to be the oldest construction material and is still widely used for different purposes. Wood is popular since it has low weight and is easy to work. Besides, it grows naturally and is cheap. But its usage is limited because of its disadvantages: it easily burns and decays. As to stone, it also belongs to the oldest building materials. Among its advantages there are strength, high heat insulation and fire-resistance.

Brick belongs to artificial construction materials. It has been used in many countries and in different climates. In modern times bricks vary widely with the method of production and temperature of burning.

Concrete is known to be one of the most popular building materials. It is produced by mixing cement, gravel, water, and sand in the proper amounts.

#### 2. Answer the questions

- 1. Into what groups can construction materials be divided?
- 2. What are the advantages (disadvantages) of wood, stone, metals?
- 3. What two groups are metals divided into?

4. What is the difference between ferrous non-ferrous metals?

#### 3. Переведите предложения, определив функцию причастия.

- 1. Taking off the cover he saw nothing but boiling water.
- 2. Being poor he had to work hard.
- 3. Look at the child playing in our garden.
- 4. Going along the street I met my old friends.
- 5. Taking the old man by the hand I helped him to cross the street.
- 6. Being sure that lie was at home I knocked at the door once more.
- 7. Looking at the drops of water the boy wondered about their nature.

#### 4. Переведите предложения с предлогом FOR.

- 1. It isn't for me to say so.
- 2. The unusual phenomenon occupied the scientist's thoughts for some weeks.
  - 3. I stood aside for us to pass it.
  - 4. I have arranged for you to have a private room.
- 5. Popov always answered all students' questions, for there were no foolish or simple questions for him.

#### 5. Задайте все возможные вопросы к этим предложениям.

- 1. He will join our excursion next time.
- 2. You took this medicine in the hospital.

### 6. Определите, какой частью речи является слово с окончанием – ing и переведите эти предложения.

- 1. The building of this house will cost much money.
- 2. I remember reading a very clever article on market economy.
- 3. My greatest pleasure is traveling.
- 4. He was writing a letter when I entered the room.
- 5. While translating the text, I looked.

#### Список использованной литературы:

- 1. Гарагуля С.И. Английский язык для студентов технических колледжей. Ростов-на Дону, «Феникс», 2017. 509с.
- 2. Восковская А.С., Карпова Т.С. Английский язык: Учебник Ростов-на Дону, «Феникс», 2016. 376с.
  - 3. Луговая А.Л. Английский язык для строительных специальностей средних профессиональных учебных заведений: Учеб.пособие / А.Л.Луговая. М.: Высшая школа, 2006.-166 с.
- 4. Качалова К.И., Израилевич Е.Е. Практическая грамматика английского языка. М.: Лист Нью, 2009г. 544с.