

«МУРМАНСКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ»
(ФГАОУ ВО «МГТУ»)
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Индивидуальное контрольное задание по дисциплине
«Иностранный язык в профессиональной деятельности»

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Шифр зачетной книжки _____

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Вариант № _____

Выбранное контрольное задание по каждой дисциплине обучающемуся необходимо внести в лист задания в соответствии с перечнем заданий или вопросов и двумя последними цифрами шифра зачетной книжки.

Обучающийся обязан лист с индивидуальным контрольным заданием вклеить в контрольную работу перед сдачей ее на проверку. Без индивидуального контрольного задания контрольная работа проверяться не будет.

Таблица 1

	Последняя цифра шифра студенческого билет										
		1	2	3	4	5	6	7	8	9	0
Предпоследняя цифра шифра студенческого билета	1	10	8	2	10	2	10	8	10	8	2
	2	9	2	6	9	6	9	2	9	2	6
	3	7	5	1	7	1	7	5	7	5	1
	4	8	9	10	8	10	8	9	8	9	10
	5	6	7	7	6	7	6	7	6	7	7
	6	4	10	3	4	3	4	10	4	10	3
	7	3	3	5	5	5	5	3	5	3	5
	8	3	1	9	3	9	3	1	3	1	9
	9	2	4	4	2	4	2	10	2	9	4
	0	1	2	11	4	8	6	11	8	11	10

Вариант №1

I. Translate the text.

The nature of electricity

The ancient Greeks knew that when a piece of amber is rubbed with wool or fur it achieves the power of attracting light objects. Later on the phenomenon was studied, and, the word *electric*, after the Greek word 'electron', meaning amber was used. Many scientists investigated electric phenomena, and during the nineteenth century many discoveries about the nature of electricity, and of magnetism, which is closely related to electricity, were made. It was found that if a sealing-wax rod is rubbed with a woollen cloth, and, a rod of glass is rubbed with a silken cloth; an electric spark will pass between the sealing-wax rod and the glass rod when they are brought near one another. Moreover, it was found that a force of attraction operates between them. An electrified sealing-wax is repelled, however, by a wax rod, and also an electrified glass rod is repelled, by a similar glass rod.

The ideas were developed that there are two kinds of electricity, which were called resinous electricity, and that opposite kinds of electricity attract one another, whereas similar kinds repel one another.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Answer the following questions:

1. When was found electric phenomena?
2. What does a force of attraction mean?
3. What kinds of electricity are there?

IV. Supply *some, any, no*, where required

1. ... pupils went to the river, ... to the woods.
2. ... of my friends live in Moscow.
3. ... Have you ... English dictionaries?
4. Is there ... ink in the inkstand? Yes, there is...
5. Bring ...chalk, please.
6. There is ... chalk in the box.
7. Is theremilk in the jug? Yes, there is

V. Fill in blanks with the Past Progressive or the Past Simple Tense of the verbs in margin.

1. We ... to a lecture yesterday at ten o'clock. listen
2. She ... the piano from 11 till 12 o'clock. play
3. When he ... in, I ... my exercises. come, do
4. What ... you yesterday at 8 o'clock? do

5. Yesterday when I ... the newspaper, my sister ... to a concert over the radio. read, listen
6. She ... out of the window when I ... her. look, see
7. I ... along the street with my friend when the car ... by. walk

VI. Choose the correct variant

1. Before you _____, don't forget to lock the door.

-are leaving -will leave -leave -shall leave

2. Please do not speak to anyone before the police_____.

-come -are coming -'ll come, came

3. His parents will be very glad if she_____the university.

-enter -'ll enter - enters - entered

4. When you_____my brother, you_____him.

-'ll see; - won't recognize; - see won't recognize; -saw, recognize; -'ll see, don't recognize

5. We won't discuss the matter until the headmaster_____.

-'ll arrive - won't arrive - doesn't arrive- -arrives

Вариант №2

I. Translate the text:

What is electricity?

Have you ever gotten a shock when you touched a doorknob, or seen sparks fly when you combed your hair? That's electricity.

Electricity is a type of energy that gives things the power to work. This energy comes from electrons. Scientists have learned how to use electrons to produce electricity.

Classes of electricity.

The study of electricity may be divided into three classes or branches: magnetism, electrostatics, and electrodynamics. Magnetism is the property of the molecules of iron and certain other substances through which they store energy in a field of force because of the arrangement movement of the electrons in their atoms. Electrostatics is the study of electricity at rest, or static electricity. Examples of this type of electricity are charges on condenser plates. Rubbing glass with silk produces static electricity. Electrodynamics is the study of electricity in motion, or dynamic electricity. The electricity which flows through wires for light and power purposes is a good example of latter type of electricity.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text:

Оборудования работающего на основе использования возобновляемых источников энергии для автономного тепло- и электроснабжения частных домов и зданий. С его помощью можно частично или полностью покрыть энергозатраты практически любого объекта.

- солнечные вакуумные водонагреватели для круглогодичного производства горячей воды
- ветрогенераторы для выработки электроэнергии.
- солнечные фотоэлектрические батареи и товары на их основе – зарядные устройства, фонари.
- энергоэффективные светодиодные лампы

IV. Fill in the blanks with the articles *a, an, the*, where necessary.

We live in ... nice flat ... new house near ... park. ... flat is on ... second floor. There are ... two rooms in it. We have also ... kitchen and ... bathroom. ... kitchen is ... big enough. As ... rule, my mother cooks for us. We spend ... lot of ... time together in ... kitchen. There is ... TV set in ... corner of ... kitchen, and we often watch ... TV there.

V. Replace the infinitives given in brackets by the Future Progressive or the Present Simple:

1. The delegation (to start) for London as soon as they (to receive) their visas.
2. At the travel bureau they (to tell) you exactly when the train (to leave).
3. Ask the Smith if it (to take) him long to make a duplicate of this key.
4. I (not to think) I (to be able to) call on them and (to say) good-bye before I (to go) abroad.
5. If you (not to want) to climb the tree you can shake it and the apples (to fall) down to the ground.
6. If I (to go) to Moscow I usually (to stay) at my friends.
7. Ask him when he (to finish) packing.

VI. Переведите предложения. Определите, какое значение приобретают выделенные слова в контексте следующих предложений.

1. The soldier is now at his **post**.
2. The man did his best to get a better **post**.
3. I will send you the book by **post**.
4. The wooden gate was supported by two metal **posts**.

Вариант № 3

I. Translate the text.

Electroscope

An electroscope is a sensitive instrument for detecting small electric charges. It consists of a glass-jar closed with a stopper of insulating material in which is fitted a varnished glass-tube. A rod passes through the tube. At the top of the rod there is a metal ball or disc at the bottom of the rod two pieces of gold leaf are suspended. When a charge is brought near the electroscope, a charge of opposite sign is induced on the metal ball, and a charge of the same sign appears on the two of the gold leaves. Since, the two pieces of gold leaf now have charges of like sign they repel each other.

As an example a negatively charged glass rod is brought to the electroscope. A positive charge is induced on the ball and a negative charge appears on the two pieces of gold leaf.

The polarity of a charge may be determined by means of an electroscope. We charge the electroscope negatively by touching the ball with the rod of hard rubber which is rubbed with flannel or silk. If the unknown charge is brought to the electroscope it will induce on the ball a charge of opposite polarity and on the gold leaves a charge of the same polarity as that of the unknown charge. Therefore, if the unknown charge is negative, the gold leaves will repel each other; if it is positive, they will attract.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

ЭЛЕКТРОСКОП, прибор для обнаружения электрического заряда. Наиболее распространен электроскоп с золотыми листочками, в котором две золотые пластинки, прикрепленные к проводнику, помещены в изолированный корпус. Если к стержню проводника подвести электрический заряд, пластинки разойдутся, и степень расхождения указывает на величину заряда.

IV. Fill in the pronouns.

When Mary came to the dining room ... took off ... coat and sat down. The waitress soon brought ... some soup. When Mary finished ... dinner ... looked at ... watch, put on ... coat and went out. (Now Mary tells her little brother John what he must do when he goes to the dining room): ... must take off ... coat and sit down. Then the waitress will bring ... some soup. When ... finish ... dinner ... must put on ... coat and go out.

V. Use the Present Indefinite, the Present Perfect or the Past Indefinite.

1. You ever (to be) to the picture gallery? - Yes, I (to be). I (to visit) it once when I was a youth and the pictures (to make) a great impression on me. Since then I (not to be) here.
2. You already (to see) the new Indian film? - Yes, I (to see) it. I (to manage) to see it yesterday. I (to go) to the cinema in the evening and (to get) two tickets easily.
3. You always (to take) books from our library? - Yes, as a rule, I (to take).
4. I (not to see) Jane lately. When you (to see) her last? - I (to meet) her two days ago. I (to think) that she (to change) very much.
5. You (to have) dinner already? - No, not yet. The waitress (to take) my order fifteen minutes ago and (not to bring) me anything yet.
6. Where you (to get) this fine new bicycle from? - My parents (to give) it to me as a birthday present.

VI. Choose the correct variant

1. I want to go shopping but if you _____ to come, you
-want, need -not want, needn't -don't want, needn't -do want, needn't
2. If you _____ on this tram it'll take you to the downtown.
- 'll get - have got - got -get
3. He _____ to the country tomorrow if the weather is fine.
- go -goes - 'll go -'d go
4. You'll understand nothing unless you _____ the book yourself.
- read -won't read -don't read - 'll read
5. You'll understand this rule after your teacher _____ it to you.
- 'll explain - explain -explains - don't explain

Вариант №4

I. Translate the text.

Electric currents and their properties

Conduction is the name normally given to a movement or flow of charges. The charges are usually electrons, but may also be ions when the conduction takes place in gaseous or liquid conductors, in which the ions are mobile.

How does the current flow through a wire? A metal is made up of tiny crystals which are visible under a microscope. A crystal is a regular and orderly arrangement of atoms. As it was explained, an atom is a complex particle in which tiny electrons move around nucleus. When the atoms are tightly packed as they are in a metallic solid, some of the electrons move freely between the atoms. These are called free electrons. Ordinarily, the free electrons move at random through the metal. There must be some driving force to cause the electrons to move through the metal conductor. This driving force tending to produce the motion of electrons through a circuit is called an electromotive force or e.m. f. that moves electric charges from one point in the circuit to another.

When an electromotive force is applied to the ends of a wire the free electrons move in one direction. It is the movement of the free electrons in a conductor that induces an electric current. The greater the number of participating electrons, the greater is the flow of current.

No one has ever seen an electric current. We only know of the existence of a current by its effects. A current can heat a conductor, it can have a chemical action when passing through a solution, or it can produce a magnetic effect. We can measure currents by observing their heating, their chemical, or their magnetic effects.

There are some kinds of current, namely: a direct current (d. c. for short), an alternating current (a. c.) a pulsating current

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Галогенные лампы стали применять и в быту, так как оказались достаточно экономичными и удобными в эксплуатации. Галогенная лампа, в сущности, является лампой накаливания, только вместо вакуума в ней находится специальная смесь, как правило, содержащая бром или йод, которая повышает светоотдачу лампы. При той же

мощности, что и лампа накаливания, галогенная лампа имеет меньшие размеры, светит более ярко.

IV. Fill in the prepositions:

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu ... the next table. When the waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. "I'm sorry", said the waitress. "It will only be ready ... half an hour".

V. Put these sentences in the Future and in the Past:

1. The tourists are shown many places of interest in our town.
2. The Moscow University is greatly admired by everybody.
3. New metro station is built in our town.
4. The poem is recited in our group.
5. We are told to wait outside.

VI. Use the Past Indefinite or the Past Perfect:

1. They (to complete) all the preparation for the fancy-dress ball by 5 o'clock.
2. On leaving the hospital the man (to thank) the doctor who (to cure) him of his disease.
3. In the morning all the passengers (to feel) good after the night they (to spend) in the comfortable sleeper.
4. During my last visit to the picture gallery I (to find) that I no longer (to like) the pictures which (to impress) me when I first (to see) them. Evidently my taste (to change).
5. Last night he (complete) the experiment which he (to begin) some months, before.
6. They (to be) friends for some ten years before I (to meet) them.

Вариант №5.

I. Translate the text.

Conductors, insulators, semiconductors Conductors are materials that have a large number of loosely bound valence-ring electrons; these electrons are easily knocked out of their orbit and are then referred to as free electrons. Insulators are materials in which the valence-ring electrons are tightly bound to the nucleus. In between the limits of these two major categories is a third general class of materials called semiconductors.

Capacity

When two insulated conductors, one of which is charged, are brought into contact, the charge spreads over both conductors. The uncharged conductor becomes charged. A larger conductor receives a larger part of the charge. The potential of the two conductors becomes the same as soon as they are brought into contact, but the quantity of electricity is not the same on each. The larger portion of the charge is on the larger conductor.

We say that the conductors have not the same capacity for electricity. The capacity of the conductor depends upon its size.

The capacity of the conductor is measured by the quantity of electricity which must be given to it in order to raise its potential to a given amount.

From this definition it is seen that if the capacity of a conductor increases while the quantity of electricity on it remains constant, its potential will become less.

Condenser

Any arrangement by which the capacity of a conductor is increased artificially is called a condenser.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Вполне возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV. Fill in the blanks with the articles *a, an, the* where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Use the Present Indefinite or the Present Perfect.

1. As a rule I (to have) ham and eggs for breakfast, but this time I (to order) an omelet.
2. This is the house where I (to live). I (to live) here since childhood.
3. Once in a week I (to write) letters home, but I (not to write) one this week, so my next letter must be particularly long.
4. Where (to be) your monitor? "She (to go)" to the library.
5. I regularly (to see) him every morning at the tram stop, but I (not to see) him these two or three days.
6. It (to be) cold in winter in Moscow as a rule? - Yes, generally it (to be), but this winter (to be) exceptionally warm.
7. Why you (not to shave) in the morning? - I (to shave) every other day.

VI. Use the Passive Voice.

A guide will show the visitors the new buildings.

Someone told him to make a report on ancient architecture.

Mr. Smith taught her Greek and gave her a dictionary.

The teacher told John to learn the alphabet.

I will tell you another fable next time.

They invited the rest of us to go sightseeing.

The guide showed the American the Houses of Parliament.

Вариант №6

I. Translate the text.

Potential and difference of potential

Two bodies oppositely charged have a difference of potential or voltage is measured by the work required to carry a unit of positive charge from one body to another against the force of attraction or repulsion. The magnitude of the difference of potential depends upon the concentration of the charge and not on the amount of the charge.

If appositively charged body and a negatively charged body are brought in contact, electrons from the body with negative charge will move over to the body having the positive charge until an equilibrium of charge has taken place.

There is a very instructive analogy between the use of the word "potential" in electricity and "pressure" in hydrostatics. Just as water tends to flow from points of higher hydrostatics pressure to points of lower hydrostatic pressure, so electricity tends to flow from points of higher electrical pressure, or potential, to points of lower electrical pressure, or potential.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate technical terms and phrases.

Аналоговые электроизмерительные приборы

Амперметры, ваттметры, вольтметры, измерительные преобразователи, индукционные, счетчики, контрольно-измерительные приборы, магнитодинамические приборы, магнитоэлектрические приборы, мультиметры, омметры, приборы выпрямительного типа, термоэлектрические приборы, фазометры, ферродинамические приборы, частотомеры, цифровые электроизмерительные приборы, электрические счётчики, электромагнитные приборы, электростатические приборы.

IV. Supply *many, much* or *little, a little*.

When we came to the dining-room there were ... people there already. We sat down at a table, took the menu-card and began to read it. "I shall not eat ... today", said. "... soup, some milk and ... cake-nothing else". "I never eat very ... said Mary. "But today I am hungry, and I want to eat as ... as I can: soup, meat, fish and potatoes". "But it will take a lot of time", said Peter, "and we have very ... time, you know. We have ... things to do before the lecture begins".

V. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... amonth ago. He tells his stories ... such a way that you remember them ... a long time.

Although his characters are imaginary it always seems that they live ... real life. the beginning of the year they made a trading expedition ... Africa. Crusoe, left ... saying good-bye to anyone. ... his way ... London he had his first experience ... a shipwreck. The ship ran ... a rock and broke ... pieces. The sailors were swallowed ... the sea.

VI. Use the Present Continuous instead of the infinitives given in brackets:

1. Look the sun (to rise). It is (to shine) brightly.
2. John (to polish) his boots and his sister (to press) her dress.
3. It (to rain)? Yes, it (to rain) very hard. 6. The delegation (to leave) Moscow tomorrow.
4. What you (to read) now? I (to read) stories by Maugham.
5. 10 The weather is fine. The sun (to shine) and the birds (to sing).
6. Why you (to speak) so fast?
7. Who you (to wait) for? I (to wait) for my sister.

Вариант №7

I. Translate the text.

Unit of electrical current and current measurement

The electron is an extremely small unit, and for this reason it is not a convenient unit to use in the measurement of electric current or of quantity of electricity. The presence of an electric current in a circuit may be detected and its strength may be measured by a number of different methods. Each method is based upon some effect which the current produces under given conditions.

One of these effects is known as electrolytic dissociation. The properties of most conducting liquids are such that when a direct current is maintained in them, the constituent elements of the liquid are separated. For example, when two copper plates are dipped in a solution of copper sulphate and a direct current is maintained in a liquid entering at one plate, the anode, and leaving at the other, the cathode, metallic copper leaves the solution and is deposited on the cathode.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Чтобы обезопасить себя от воздействия электричества, принято работать в резиновых перчатках или стоять на резиновом коврике. Электрики (как, впрочем, и не электрики) берутся починить розетку или другой электрический прибор, не отключая ток. В таком случае они обязаны выполнять только одно правило: не замыкать собой электрическую цепь. Поэтому они не должны касаться каких-нибудь проводников электричества, а также обоих контактов электрического провода одновременно.

IV. Fill in the blanks with the preposition required. Translate the sentences into Russian.

... week-days we work. We rest ... Sundays. I get up ... the morning. We sleep ... night. She promised to do this work ... time. We have our vacation ... January. We live ... the twentieth century. We tell the ... a clock or a watch. Our child is in the fresh air ... morning ... night. My father comes home ... noon.

V. Use the Present Simple or the Present Progressive:

1. Why you (walk) so fast today? You usually (walk) quite slowly.-1 (hurry). I am afraid to miss the train.
2. Cuckoos (not to build) nests. They (to use) the nests of other birds. 3.1 always (to buy) lottery tickets, but I seldom (to win)
4. You cannot (to have) the book now because my brother (to read) it.
5. Some people (to do) everything with their left hand.
6. Who (to make) that terrible noise?-It is my son.
7. How you (to feel)?

VI. Use an adjective or a proverb.

1. What is the (proper) answer to this question?
2. If you read this joke (proper) you will understand it.
3. It was a (gay) song and she sang it (gay).
4. She spoke very (good) and everybody wondered where she had learnt to speak so fluently
5. She was (kind) to him and he was (happy).
6. The children were running among the trees laughing (happy).
7. He is a very (careful) driver.

Вариант №8

I. Translate the text.

How does it work?

It takes billions of electrons to make electricity operate. Electrons move through an electric wire in much the same way water moves through a garden hose. Turning on the faucet pushes the water through the hose. Pushing electrons makes electricity move through the wire.

The machine that pushes the electrons through the wire is called a generator. The wire from the generator goes to your home and into a control center, which is either a fuse box or a circuit breaker.

The fuse box controls how much electricity you use. If you try to use too much, you will "blow a fuse", and the electricity from that fuse will be cut off. A circuit breaker works differently from a fusebox. A circuit breaker does not let you use too much electricity. It cuts off the flow before there's an overload.

If you did not have a fuse box or circuit breaker, your electric wires could overheat and start afire! From the fuse box or circuit breaker, the wires go inside your walls to light switches and sockets.

Turning on the light switch lets the electricity flow to the light, and the light goes on. When you put a plug into a socket, electricity comes to the socket. But it doesn't flow into the lamp until the switch is turned on.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Техника безопасности:

Ни в коем случае нельзя одновременно дотрагиваться до бытовых приборов и заземленных предметов (водопроводные трубы, батареи центрального отопления и т. д.). Возможно, что на корпус бытового прибора пробивает электричество. В последнее время все больше и больше приборов имеют заземление. Это делается для обеспечения безопасности потребителей. Такие бытовые приборы имеют трехжильный шнур и вилку с тремя контактами.

IV. Supply **somebody, anybody, nobody, (no one, none), something, nothing, everybody, everywhere nowhere, somewhere, anywhere** where required.

1. Good morning...! 2. He never goes by train: he goes ... by plane. 3. There is ... here. 4. He did ... all day yesterday. 5. They want chairs. They have ... to sit. 6. of the pupils will go to

school. It is too cold.

7. ... is coming to see us. 8. She will tell us ... about her holidays. 9. He will go ... to have a little rest. 10. Is ... coming to inspect us? 11. Have you ... interesting to tell us? 12. Haven't you ... to go?

V. Replace the infinitives given in brackets by the Past Indefinite or the Past Continuous.

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI. Choose the correct variant

1. I want to go shopping but if you _____ to come, you
-want, need -not want, needn't -don't want, needn't -do want, needn't
2. If you _____ on this tram it'll take you to the downtown.
- 'll get - have got - got -get
3. He _____ to the country tomorrow if the weather is fine.
- go -goes - 'll go -'d go
4. You'll understand nothing unless you _____ the book yourself.
- read -won't read -don't read - 'll read
5. You'll understand this rule after your teacher _____ it to you.
- 'll explain - explain -explains - don't explain

Вариант №9

I. Translate the text.

Kinds of circuits

Circuits can be divided into four classes: series, parallel, combination of serial-parallel, and network.

Series circuits are those having one closed path for the flow of electricity. All the elements, or devices which make up the circuit are connected in tandem, one after the other, so that the end of one is connected to the beginning of the other; or, in other words, the positive terminal of one is connected to the negative terminal of another. If the series circuit is opened anywhere, the current will not flow through the circuit.

A parallel circuit is one divided into two or more branches, each branch carrying part of the current. Another way of saying the same thing is that all the elements or devices are connected so that one half of the terminals are fastened to a common conductor, and the other half are fastened to another common point, or another conductor.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Перегрузка электрической сети является одной из самых распространенных причин короткого замыкания. Короткое замыкание может произойти и из-за воздействия влаги. Электроустановочные устройства – розетки и выключатели также должны быть влагозащищенными. Внутренняя проводка, а если это невозможно, то внешняя проводка должна быть хорошо изолирована.

IV. Fill in the blanks with the articles *a, an, the* where necessary.

I have ... hobby. I like to cook. During my leisure time I make ... cakes and pies. It is not difficult to make ... pie. Sometimes my brother helps me. He is ... good boy and we get along well with ... each other. My brother usually goes ... shopping and buys ... different things, which are necessary for ... cooking. My cakes are tasty but I like ... pies ... best of all.

V. Fill in the prepositions.

It was two o'clock when John went ... the dining-room to have dinner. Peter was already there. He sat ... a table with a book ... his hands. John took the menu... the next table. When the

waitress came, he ordered some soup and meat. "Can you bring me some white bread?" asked John. "Yes, of course, I can", answered the waitress, "I shall bring you some ... a minute". She came back ... a few minutes. "What will you have ... dessert?" she asked. John asked her to bring him some ice-cream. So they took some milk, paid ... their dinner, and went out ... the street.

VI. Use the Future Perfect where possible:

1. I am afraid we (not to solve) all the problems by the time they (to come).
2. Let me know as soon as you can (to make) an appointment with him.
3. After the clerk (to decode) the telegrams he (to take) them to the chief.
4. I am sure he (to throw) some light upon this matter before I (to learn) about it from my sister's letter.
5. The secretary (to look through) all the papers by the time the director (to come).
6. Do not start arguing until you (to hear) what I have to say.
7. If you do not hurry, the train (to leave).

Вариант №10

I. Translate the text:

Measuring devices

Ammeters and Volt meters. - Ammeters measure the current flowing in a circuit and normally have scales which are graduated or calibrated in amperes, milliamperes or microamperes.

Voltmeters are used to measure the potential difference between two points in a circuit. The calibration of voltmeters is usually in volts, millivolts or microvolts.

The main difference between the two instruments of the same type or design is in the resistance of the operating coil, identical moving units may be used for either meter. An ammeter is connected in the positive or negative lead in series with a circuit and, therefore, must have a low resistance coil, otherwise the readings will be incorrect as the coil would absorb an appreciable amount of power.

A voltmeter is connected in parallel across the points of a circuit where the difference of potential is to be measured. The resistance of the operating coil must, in this instance, be as high as possible, to limit the amount of current consumed by it, or else a drop in potential due to the meter would occur and the pointer indication would not represent the true potential difference across the circuit.

Wattmeters.- The measurement of the power in a D. C circuit at any instant can be achieved by means of an ammeter and voltmeter as the power in watts is the product of the current and the voltage. With A.C. circuits, however, the instantaneous values are always changing. To measure A.C. power correctly, therefore, it is necessary to use the third instrument to measure the phase difference. The normal practice, however, is to combine these three instruments in one which will give a direct reading of power in watts.

II. Write out from the text the sentences with verbs in the form of the Participle or the Gerund or the Subjunctive mood.

III. Translate the text.

Электроинструменты:

Как правило, в инструментах электричество используется для выработки механической энергии, однако есть и такие инструменты, которые вырабатывают тепловую энергию: паяльник, калорифер.

IV. Fill in the prepositions where it is necessary.

This writer is known all ... the world. Many people are fond ... his books. I read one of his novels ... a month ago. He tells his stories ... such a way that you remember them ... a long time. Although his characters are imaginary it always seems that they live ... real life the beginning of the year they made a trading expedition ... Africa. Crusoe left saying good-bye to anyone. ... his way ... London he had his first experience ... a shipwreck. The ship rana rock and broke pieces. The sailors were swallowed...the sea.

V. Replace the infinitives given in brackets by the Past Indefinite or the Past Continuous

1. John (to write) the label when the bell (to ring) and a short man (to enter). A dog (to follow) him.
2. There (to be) silence while the man (to look) John up and down.
3. I (to see) the light in your windows as I (to pass).
4. During the dinner while he (to eat) his piece of cold meat, his aunt (to help) herself to wine.
5. While he (to read) a newspaper she (to sit) studying him, and by the look in her eyes he (to see) that she (to reflect) on something concerning him.
6. Jim half (to dream) still when he (to come) to the place of his destination.

VI. Change the verbs in bracket by Gerunds. Put prepositions where necessary.

I have no intention ... (to stay) here any longer. She insisted.... (to help) me. Are you fond of ... (to play). They have had very much experience ... (to cast). There was no possibility..... (to come) in time. There is little chance ... (to see) him today. We have the pleasure ... (to invite) them to the evening party. We are proud.....(to fulfill) that task ahead of time.

Вариант 11

I. Read and translate the text into Russian:

GENERATOR

Purpose

The generator is used for converting mechanical energy into electrical power for operation of electrical system and components.

Physical Description

The generator is an air-cooled, brushless machine. It is driven and held within the speed range by a constant speed transmission, which is in turn driven by the airplane engine.

The generator basically consists of an AC exciter rotating armature, exciter stationary DC field, AC stationary armature, main rotating DC field, a three-phase full wave rotating armature and a capacitor.

Operating

The exciter stationary field has three permanent magnets between the coils. Turning the rotor produces a voltage build-up in the generator as a result of the residual magnetism or flux from the permanent magnets. This flux produces a three-phase AC current in the rotating exciter armature and is fed to the three-phase full-wave rotating rectifier assembly where it is rectified to direct current. This current excites the main rotating field where it sets up a magnetic flux in the field poles. The rotating magnetic field, cutting the conductors in the AC stationary armature, produces three-phase, AC output at the main terminals. Part of the AC output is fed to the regulator where it is transformed by the regulator transformer-rectifier and fed back into the exciter stationary field.

II. Translate the following words and phrases:

The generator

The exciter

The rotating armature

The capacitor

The voltage build-up

The rectifier assembly

residual

excite

The pole

The rectifier

III. Complete the sentences with these words:

Constant speed, air- cooled, converting, three permanent magnets, a voltage build-up, the conductors, three-phase, AC output

1. The generator is a device for mechanical energy into electrical power.
2. The generator is an machine.
3. It is driven by a transmission.
4. The exciter stationary field has between the coils.
5. Turning the rotor produces in the generator.
6. The rotating magnetic field, cutting in the AC stationary armature, produces at the main terminals.

IV. Answer the questions.

1. What purpose is the generator used for?
2. Give the physical description of the generator.
3. What parts does the generator consist of?
4. How many magnets has the exciter?
5. What produces a voltage build-up in the generator?
6. What produces a three-phase AC current in the rotating exciter armature?
7. What current excites the main rotating field?
8. What does the rotating magnetic field produce?
9. Where the AC output is fed to?

V. Give English equivalents:

Генератор охлаждаемый воздухом, генератор без щёток, генератор работает в диапазоне скоростей, генератор состоит из, вращающийся якорь, накопитель, постоянный магнит, магнитный поток, электрический ток, трансформатор –выпрямитель, постоянный ток, клеммы, катушка (обмотка), трёхфазный ток.