

Государственное бюджетное профессиональное образовательное учреждение  
«Троицкий технологический техникум»

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**Комплект  
оценочных средств по учебной дисциплине  
ОГСЭ.03 Иностранный язык в профессиональной деятельности  
(английский язык)**

Образовательной программы среднего профессионального образования  
По специальности СПО  
**13.02.03 Электрические станции, сети и системы**

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Троицк, 2023 год

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## 1. Паспорт комплекта оценочных средств

### 1.1. Область применения комплекта оценочных средств.

Комплект контрольно-оценочных средств предназначен для проверки результатов освоения учебной дисциплины ОГСЭ.03 Иностранный язык в профессиональной деятельности (английский язык) (далее - УД) основной образовательной программы среднего профессионального образования (далее ОП СПО) по специальности СПО 13.02.03 Электрические станции, сети и системы.

#### Комплект оценочных средств позволяет оценивать:

1. Формирование элементов профессиональных компетенций (ПК) и элементов общих компетенций (ОК):

Профессиональные и общие компетенции	Показатели оценки результата	Средства проверки (№ заданий)
1	2	3
ОК 01. Выбирать способы решения задач профессиональной деятельности применительно к различным контекстам	готовность к труду, осознание ценности мастерства, трудолюбие; готовность к активной — деятельности технологической и социальной направленности, способность инициировать, интерес к различным сферам профессиональной деятельности, овладение — универсальными — учебными познавательными действиями:	Чтение и перевод текста со словарём. Текст « Great Britain », « The USA », «Russia », « English writers », « Global warming », « Insulators», «Transformers» «Types of power stations », «Types of current », «Computers » , «Internet ».
ОК 02. Использовать современные средства поиска, анализа и интерпретации информации, и информационные технологии для выполнения задач профессиональной деятельности	приобретение опыта практической деятельности в повседневной жизни	Чтение и перевод текста со словарём. Текст « Great Britain », « The USA », «Russia », « English writers », « Global warming », « Insulators», «Transformers» «Types of power stations », «Types of current », «Computers » , «Internet ».
ОК 04. Эффективно взаимодействовать и работать в коллективе и команде	Готовность к саморазвитию, самостоятельности и самоопределению; овладение навыками учебно-исследовательской, проектной и социальной деятельности; Овладение универсальными коммуникативными действиями:	Выполнение презентаций (проектов) на заданную тему: 1. «Достопримечательности Москвы, России», 2. «Лондон. Достопримечательности», 3.« Английские писатели» 4. «Известные ученые», «Великобритания», «Образование в России и

		Великобритании». 5.«Английские писатели», 6. «Олимпийские игры», 7. «Парниковый эффект», 8. «Типы электростанций»
ОК 09. Пользоваться профессиональной документацией на государственном и иностранном языках	овладение основными видами речевой деятельности	Употребление лексических единиц и фразеологических оборотов, профессиональных терминов речи для делового общения и заполнения документов (тема 5.1; 5.2)
ПК 6.2. Организовывать и выполнять техническое обслуживание сложного электрооборудования электрических станций, сетей и систем;	готовность к активной деятельности технологической и социальной направленности, способность инициировать, планировать и самостоятельно выполнять такую деятельность	Перевести текст: 1. «Transformers» 2.«Types of power stations », 3. « Insulators», 4. «Filters», 5. «Types of current» Пополнить технический глоссарий по теме «Direct current and alternating current»

## 2. Оценка умений и усвоение знаний

Освоенные умения, усвоенные знания	Показатели оценки результата	Средства проверки (№ зданий)
I. Читать и переводить со словарём профессионально направленные тексты.	Читает и переводит со словарём профессионально направленные тексты	Чтение и перевод текста со словарём. Текст «Great Britain », «The USA », «Russia », « English writers», « Global warming», « Insulators», «Transformers» «Types of power stations», «Types of current», «Computers», «Internet ».
II. Пользоваться общими и специальными словарями.	Работает с общими и специальными словарями.	Использование общих и специальных словарей. «The USA», «The British Universities», «English –Russian Writers», «Global warming», «Insulators», «Transformers», «Types of current», «Professional lexic», «Computers », «Internet»
III. Вести беседу.	Отвечает на вопросы, составляет диалоги по	Составление диалога, беседы

	теме.	по теме.  1. «Великобритания», 2-3. «Образование в России и Великобритании», 4.«Английские писатели», 5.«Здоровый образ жизни», 6.«Олимпийские игры», 7. «Парниковый эффект», 8. «Типы электростанций».
IV. Изложить в письменной и устной форме содержание текстов.	Излагает в письменной и устной форме содержание текстов.	Изложение в письменной и устной форме содержания текстов, составления рассказа по упражнениям или пересказа по теме:  «English and Russian scientists», «Education in the United Kingdom», сообщение по темам, рефераты: «Filters», «Transformers», «Animals in danger», «First computer», « Famous writers of Russia and Great Britain».
V. Самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас.	Совершенствует самостоятельно устную и письменную речь, пополняет словарный запас.	Совершенствование устной и письменной речи, пополнение словарного запаса по темам:  «Famous scientists of Russia and Great Britain», «Healthy lifestyle», «Filling out questionnaires », «Professional vocabulary »
VI. Работать самостоятельно со специальной литературой и другими источниками с целью получения информации.	Работает самостоятельно со специальной литературой и другими источниками с целью получения информации.	Выполнение презентаций (проектов) на заданную тему:  1. «Достопримечательности Москвы, России», 2. «Лондон. Достопримечательности», 3.« Английские писатели» 4. «Известные ученые», «Великобритания», «Образование в России и Великобритании». 5.«Английские писатели», 6. «Олимпийские игры», 7. «Парниковый эффект»,

		8. «Типы электростанций»
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Условные сокращения: Т – Текст

У – Упражнение

2. Освоение умений и усвоение знаний.

## **1.2 Система контроля и оценки освоения программы учебной дисциплины**

### **1.2.1. Формы промежуточной аттестации по УД**

<b>Учебная дисциплина</b>	<b>Формы промежуточной аттестации</b>
1	2
ОГСЭ. 03 Иностранный язык в профессиональной деятельности (английский язык)	Дифференцированный зачет

**1.2.2. Организация текущего контроля успеваемости, промежуточной аттестации по итогам освоения программы учебной дисциплины**

Организация текущего контроля успеваемости по освоению программы учебной дисциплины предусматривает: проведение устного опроса (фронтальный, индивидуальный); выполнение переводов текстов; подготовку сообщений; составление рассказов, анализ фрагментов текста.

## **2. Задания для контроля и оценки освоения программы учебной дисциплины.**

### **2.1. Задания для текущего контроля**

#### **РАЗДЕЛ 1. Страноведение**

##### **GREAT BRITAIN**

###### **Тест № 1**

###### **I. Укажите номера слов, указывающих части Великобритании.**

1. England; 2. Germany; 3. Scotland; 4. Wales; 5. Italy; 6. Spain;
7. France; 8. Northern Ireland

**Эталон ответа:**

1.,3., 4.,8

###### **II. Укажите номера слов, относящихся к климату Великобритании.**

1. cold; 2. maritime; 3. hot; 4. warm; 5. changeable; 6. beautiful;
7. mild; 8. cool

**Эталон ответа:**

2., 7

###### **III. Укажите номера слов, относящихся к географическим особенностям Великобритании.**

1. rivers; 2. valley; 3. island; 4. lake; 5. population; 6. Government

**Эталон ответа:**

1., 2., 3

###### **IV. Укажите номера слов, относящихся к политическому строю Великобритании.**

1. Parliament; 2. republic; 3. Government; 4. monarchy; 5. president; 6. Queen; 7. socialist; 8. capitalist

**Эталон ответа:**

4., 6., 8

###### **V. Укажите номера слов, относящихся к экономической характеристике Великобритании.**

1. highly developed; 2. industrial; 3. shipbuilding; 4. power; 5. population; 6. machine building; 7. electronic engineering; 8. area

**Эталон ответа:**

1.,2., 3., 6., 7

###### **Тест № 2**

**Напишите графический диктант. Знаком отмечайте предложения,**

*соответствующие тематическому тексту.*

1. Great Britain occupies a large island to the East of Europe. 2. Its population is 50 million. 3. The climate of the country is mild. 4. There are few rivers and lakes in the country. 5. The rivers are long. 6. Many large cities are situated on the rivers. 7. Great Britain is a republic. 8. The Government is dependent on the capitalists. 9. Great Britain is a highly developed industrial capitalist country. 10. The main branches of Great Britain's industry is textile industry.

**Эталон ответа:**

**2., 3., 6., 8., 9.**

### **Именительный падеж с инфинитивом**

Грамматическое упражнение

*Выделите предложения с инфинитивом*

1. Many students are known to go in for sports. 2. He worked very hard. 3. This is the very house where he lived. 4. She is said to be a good student. 5. Give me some milk, please. 6. The text is said to be quite easy. 7. They are sure to bring here their books. 8. We passed through the forest. 9. The doctor is supposed to come in 2 hours. 10. Though he is sixteen, he is very small.

Эталон ответа:

**1. Many students are known to go in for sports.** 2. He worked very hard. 3. This is the very house where he lived. **4. She is said to be a good student.** 5. Give me some milk, please **6. The text is said to be quite easy.** 7. They are sure to bring here their books. 8. We passed through the forest. **9. The doctor is supposed to come in 2 hours.** 10. Though he is sixteen, he is very small

1. *Прочтите тексты и передайте их общее содержание.*

#### **A. THE UNITED STATES OF AMERICA**

The United States of America were founded on July 4th, 1776, when thirteen English colonies, which had been established during the previous century and a half, decided that they could no longer regard themselves as subjects to the British Crown. In 1783 the War of Independence ended in favour of the colonists. The USA has steadily increased its power, and the original thirteen States have now grown to fifty. The development of the U.S. was hindered by a civil war between the Northern and Southern States in the 1860s. If this war, which was won by the Northerners (or "Yankees", as they were called) had lasted longer its results might have been more serious and the unity of nation might have been permanently impaired. The civil war ended in 1865, and since that time the USA has become more and more

important.

The United States lies in the central part of the North American continent with the Atlantic Ocean to the East, the Pacific to the West, Canada to the North, and Mexico and the Gulf of Mexico to the South. Americus Vespuccius made several voyages to the New World and gave spirited accounts of his discoveries. The country was called "Amerigen",—that is the land of Americus or America from Americus. As there was no other name for the New World, this came into general use. The USA is a republic of semiautonomous states, each with its own governor, capital and legislative body. The federal government is headed by the President and a Congress consisting of a Senate and a House of Representatives.

## **2. Прочитать и перевести текст**

### **Russia**

The Russian Federation is the largest country in the world. It occupies about 1/6 of the world. Its territory covers half Europe and a part of Asia. The area of Russia is over 17 million square km-s. The country borders on 14 countries and is washed by 12 seas of three oceans: the Arctic, the Atlantic and the Pacific. It also has a sea border with the USA. There are many forests and steppes, mountains and hills, rivers and lakes here. The largest rivers are: the Volga, the Ob, the Yenisei, the Lena, and the Amur. The highest mountains are: the Urals, the Altai, and the Caucasus. We have the deepest lakes in the world. The Baikal is among them. Our country is rich in natural resources. We have oil and coal, iron, timber and natural gas. Moscow is the capital of our country. The largest cities are: Leningrad, Novgorod, Ekaterinburg, Chelyabinsk

### **II. Найдите в тексте ответы на вопросы.**

1.What is the area of Russia? 2. How many seas does it border on? 3. What mineral resources have we?

#### **Эталон ответа:**

1. The area of Russia is over 17 million square km-s. 2. The country is washed by 12 seas of three oceans. 3. We have oil and coal, iron, timber and natural gas.

### **III. Выпишите из текста.**

1.Названия частей света. 2. Названия океанов. 3. Названия материков. 4.

Слова, обозначающие пути сообщения. 5. Слова, обозначающие природные богатства.

**Эталон ответа:**

1.- 2. the Arctic, the Atlantic and the Pacific oceans. 3. Europe, Asia. 4. oil and coal, iron, timber and natural gas.

**РАЗДЕЛ 2. Образование****Education in Britain****Прочитайте текст и выделите ступени образования в  
Великобритании.**

Education in Britain is compulsory and free for all children.

Primary education begins at the age of 5 in England, Wales and Scotland, and 4 in Northern Ireland. It includes three age ranges: nursery for children under 5 years, infants from 5 to 7, and juniors from 7 to 11 years old. In nursery schools babies don't have real classes, they learn some elementary things such as numbers, colours and letters. Besides, they play, have lunch and sleep there. Children usually start their school education in an infant school and move to a junior school at the age of 7.

Compulsory secondary education begins when children are 11 or 12 and lasts for 5 years: one form to each year. Secondary schools are generally much larger than primary ones. Pupils in England and Wales begin studying a range of subjects stipulated under the National Curriculum. Religious education is available in all schools, although parents have the right to withdraw their children from such classes.

About 5 per cent of schoolchildren attend fee-paying private or public schools. Most of these schools are boarding ones, where children live as well as study. The most famous British public schools are Eton, Harrow and Winchester.

The large majority of British schools teach both boys and girls together. But grammar schools, which give state secondary education of a very high standard, teach boys and girls separately.

The school year in England and Wales starts in September and ends in July. In Scotland it runs from August to June and in Northern Ireland from September to June and has three terms. At 7 and 11 years old, and then at 14 and 16 at secondary school, pupils take examinations in the core subjects (English, Mathematics and Science).

The main school examination, the General Certificate of secondary education (GCSE) examination is taken at the age of 16. If pupils are successful, they can make their choice: they may either go to a Further Education College or a Polytechnic or they may continue their education in the sixth form. Those who stay at school after GCSE, study for 2 more years for "A" (Advanced) Level Exams in two or three subjects which is necessary to enter one of British universities. Universities usually select students basing on their A-level results and an

interview. After three years of study a university graduate gets the Degree of a Bachelor of Arts, Science or Engineering. Many students then continue their studies for a Master's Degree and then a Doctor's Degree (PhD).

**Эталон ответа:**

1.Primary education. 2. Compulsory secondary education. 3.Higher education.

**1.Прочитайте, используя дополнительные источники, главные факты биографии В.К. Рентгена**

**2.Напишите краткий рассказ о его биографии.**

**Эталон ответа:**

**Wilhelm Conrad Röntgen** (27 March 1845 – 10 February 1923) was a German mechanical engineer and physicist, who, on 8 November 1895, produced and detected electromagnetic radiation in a wavelength range known as X-rays or Röntgen rays, an achievement that earned him the first Nobel Prize in Physics in 1901. In honour of his accomplishments, in 2004 the International Union of Pure and Applied Chemistry (IUPAC) named element 111, roentgenium, a radioactive element with multiple unstable isotopes, after him

### **Тест: Аудирование текста**

Задание 1. Прослушайте текст и дайте ответы на вопросы:

What was H.G. Wells?

What novels do you know?

### **H.G. Wells (1866-1946)**

Was an English novelist, journalist, sociologist and historian, who is best known for

His science-fiction novels such as The Island of Doctor Moreau (1896), The Invisible Man (1897) and The War of the Worlds (1898).

The Time Machine (1895) which was his first novel, was so popular that it has been made into two successful films. The novel is about a young scientist, Alexander Hartdegen who invents a time machine and devotes his life to travelling through time.

Wells' attention to detail makes his work seem believable even today.

**Эталон ответа:**

1. H.G. Wells was an English novelist, journalist, sociologist and historian.
2. I know the novel "The Time Machine"

## **РАЗДЕЛ 3. Здоровый образ жизни**

### **Задание 1.** Прочитать и перевести текст.

The first record of the games dates from 776 BC in Greece. The important sports in the original Olympic Games were running, jumping, wrestling, throwing, the discus and throwing the javelin. Only men competed, and they wore no clothes in order to have greater freedom of movement.

The first modern Olympiad took place in Athens in 1986. Since then the Olympic Games have been held every four years with only two exceptions because of the two world wars. There may be Summer and Winter Games.

In modern times the Olympic movement has become an enormous and expensive organization. The Winter Olympic Games are a multi-sport event held every four years.

The Winter Olympic have been hosted on three continents, but never in a country in the southern hemisphere. The United States has hosted the Games four times. France has been the host three times. Austria, Canada, Italy, Japan, Norway and Switzerland have hosted the Games twice.

In 2014 Sochi was the first Russian city to host the Winter Olympic. Our Government, Olympic Sports Committee and sportsmen were preparing for this event with great enthusiasm. Our sportsmen won the greatest number of golden medals. We all supported our sportsmen. Our country is very proud of them.

### **Задание 2.** Исправить ложные утверждения:

1. The first Olympic Games were held in Ancient Greece.
2. Both men and women took part in the Games at that time.
3. The men wore no clothes because of the hot weather.
4. The Olympic Games have been held every four years since 776 BC.
5. The programme of the modern Olympic Games consist of running, jumping, wrestling, throwing the discus and throwing the javelin.
6. The Olympic Games are held every four years. There were only two exceptions because of earthquakes.
7. The Winter Olympics have been hosted in various countries on three continents.
8. The USA and France have hosted the Games several times.
9. Sochi was the first Russian city to host the Winter Olympics.
10. The Winter Olympics have never been held in Russia before.

### **Задание 3.** Дайте общую информацию об Олимпийских Играх, используя следующие подсказки:

The first official Olympic Games took place in the year... in...

They were held in honour of...

The important sports in the original Olympic Games were...

The first modern Olympiad took place in the year... in...

The Olympic Games are held every...

They may be...

The five Olympic circles represent...

## **The Olympic Games**

They are connected to symbolize...

Russia hosted the Games...

In 2014 ...

I'd like to go to next Olympic Games because ... (international competitions are one of my favourite things, they're so exciting and spectacular etc).

## **РАЗДЕЛ 4. Экология**

**Прочитайте текст “Global warming” , ответьте на вопросы и будьте готовы обсудить проблему:**

### **Questions:**

1. What is global warming?
2. What is greenhouse effect?
3. What activities are unfavorable and change the composition of the biosphere and the Earth's heat balance?
4. What can prevent the developing of greenhouse effect?
5. Why are water circulation patterns changing?
6. What might cause disappearing of large areas of coastal land?
7. Does the warming affect biological communities?
8. Is there a correspondence between greenhouse effect and global warming?

### **Эталон ответа:**

1. It is the result of man's intervention with our nature.
2. Carbon dioxide is a greenhouse gas, it allows infrared radiation from the sun to enter the atmosphere on the Earth and not to leave it. This process causes the surface to heat up.
3. Power stations, cars, factories and plants produce an enormous amount of carbon dioxide (CO<sub>2</sub>). Cement production and burning of carbon-based fuels have boosted its concentration in the atmosphere, leading to global warming. Perfume sprays and carbons used in refrigerators also contribute to global warming. Trees and plants are able to change carbon dioxide back to vital oxygen. However humankind is rapidly cutting down trees in the Amazon rainforests.
4. There are many possible ways to make our climate stable and safe: increasing forestlands, vehicle fuel economy, using of wind and solar power and many others.
5. Scientists discovered that the polar ice caps and glaciers around the world were melting. It creates more water and raises sea levels.
6. If warming continues, the sea levels are expected to rise much more.

Floods, storms and hurricanes are likely to become stronger. All the cities near the sea-shore will be under water. 7. The warming affects biological communities. 8. There is a correspondence between greenhouse effect and global warming.

## **РАЗДЕЛ 5. Письма, анкеты**

**Задание I.** Заполните анкету.

1. Your Family Name (Surname)

2. First name

3. Your Date of Birth

4. Your Home Address

5. Your Nationality

6. Occupation

7. Telephone number

8. Signed

9. Date

**Эталон ответа:**

1. Your Family Name (Surname)	Ivanov
2. First name	Igor
3. Your Date of Birth	19.02.2002
4. Your Home Address	3.17. Lenin street, Troitsk
5. Your Nationality	Russian
6. Occupation	student
7. Telephone number	89514327522
8. Signed	I. Ivanov
9. Date	22.05.2019

## **РАЗДЕЛ 6. Искусство общения по телефону**

### **1. Прочитайте текст, переведите. Ответьте на вопрос: Who is the most famous inventor?**

#### **Telephone Invention**

Just like a radio invention, lots of inventors and scientists took part in a telephone invention. Right now the official telephone inventor is Antonio Meucci, an Italian scientist, who was the first one to publish telephone device in 1860. In 1861, another scientist Johann Philipp Reis demonstrated a device that looked like a phone. The most famous inventor is Alexander Bell who was considered the main inventor but in 2012 it was officially announced to be Meucci. It happened because Bell was the first one to file a patent for his phone in 1876 and Meucci didn't know English and was too poor to do it before Bell. It is interesting that another scientist Elisha Gray tried to file a patent for his phone on the same day. After a telephone was invented it was constantly improved. The ring was made as well as a button microphone, rotary and push-button dial, a speaker and so on. In 1973, a cell phone was invented. The first phone call was made by the inventor Martin Cooper who derisively call his competitor Joel Engel from AT&T on April 3, 1973. Martin was working in Motorola back then. The first cell phone weighted over 1 kg and was very big plus you had to charge it for more than 10 hours. Ten years later cell phones became popular among people and they started to buy it in wholesale numbers. Despite the fact that it was developing so fast it took years for a cell phone to conquer the world. For example, the first cell phones finally came to the USSR in 1991 and the first owners were very rich people. If someone had a cell phone it meant that it was a very important person. At the moment everyone can buy a cell phone and nowadays it is not just a phone but a small computer that has hundreds of functions and the Internet access.

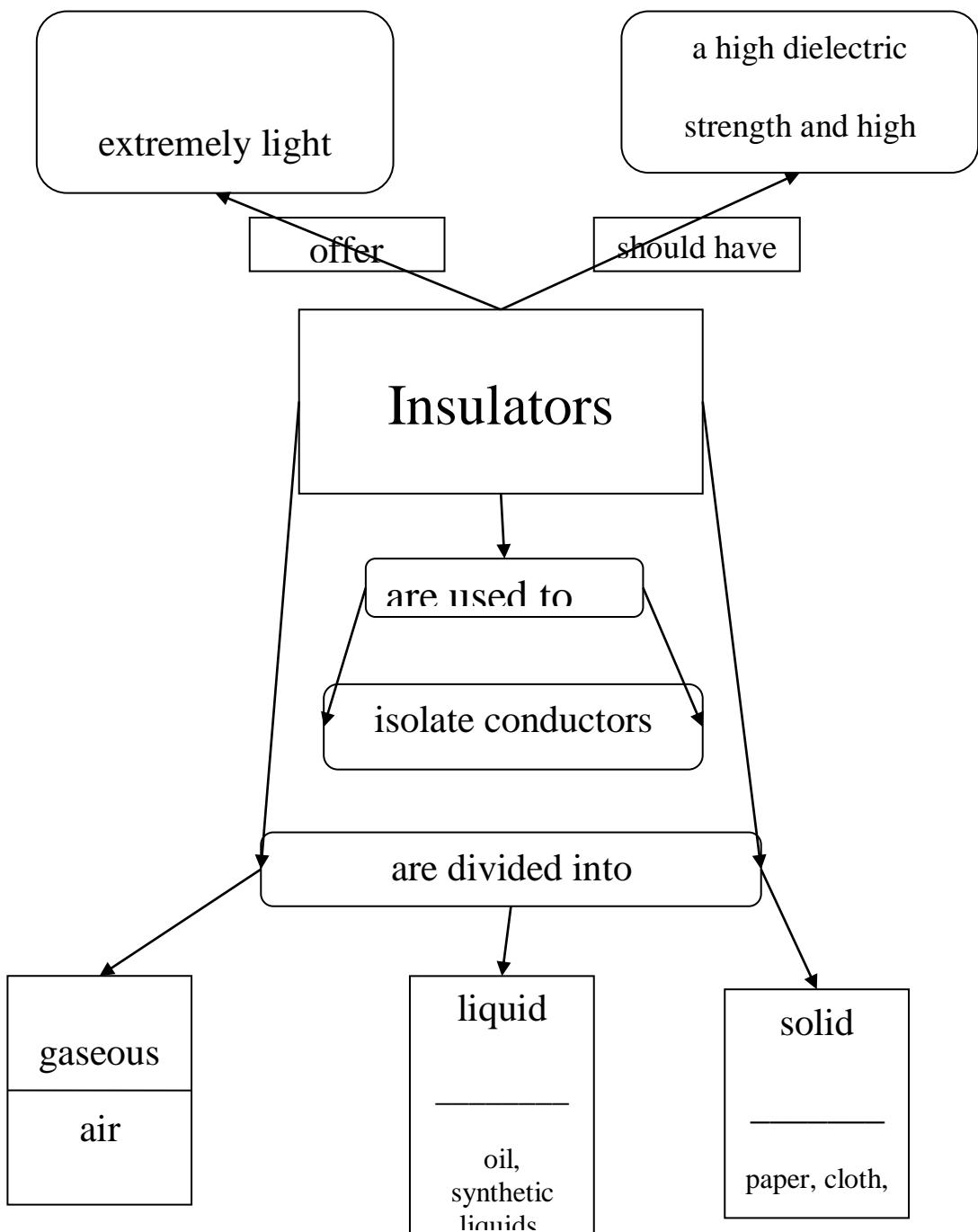
Эталон ответа:

The most famous inventor is Alexander Bell who was considered the main inventor but in 2012 it was officially announced to be Meucci.

## **РАЗДЕЛ 7. Основные понятия электротехники.**

### **Проводники и изоляторы.**

#### **4. Подготовьте рассказ, используя схему:**



1. What are insulators used to?
2. What do they offer?
3. They should have a high dielectric strength and high resistivity, should not they?
4. What are they divided into?
5. What properties has porcelain?

**Эталон ответа:**

1. Insulators are used to isolate conductors.
2. They offer extremely light resistance.
3. They should have a high dielectric strength and high resistivity.
4. They are divided into gaseous, liquid, solid.

## Transformers

**Прочтите текст и выберите правильный вариант ответа:**

A transformer is used to transfer energy; due to the transformer electric energy may be transferred at a high voltage and reduced at the point where it must be used to any value. Besides, a transformer is used to change the voltage and current value in  a  circuit.

A two-winding device consists of a closed core and two winding (coils). The primary winding is connected to the voltage source; it receives energy. The secondary winding is connected to the load resistance; it supplies energy to the load.

The value in the secondary winding depends on the number of turns in it. In case the secondary winding has more turns than the primary, the output voltage is greater than the input voltage. A device of this type steps up the voltage and is termed a step up transformer. In case the secondary winding has fewer turns than the primary, the output voltage is lower than the input. This device decreases or steps down the voltage. It is termed a step down transformer.

**Choose the correct variant:**

1. A transformer is used a) to reduce power. b) to receive power. c) to transform power.
2. The primary winding a) receives energy. b) supplies energy.
3. A step down transformer a) increases the voltage. b) decreases the voltage.
4. The nameplate is attached a) to the frame. b) to the tank.
5. The tank contains a) air. b) oil.
6. Faults in a transformer result from a) overheating. b) stresses. c) short-circuits.

**Эталон ответа:**

1. A transformer is used to transfer energy.
2. The primary winding receives energy.
3. This device decreases or steps down the voltage.
4. The nameplate is attached to the tank.
5. The tank contains oil.
6. Faults in a transformer result from overheating and short-circuits.

## Capacitors

Выберите конструкцию пассивного залога *Capacitors* \_\_\_\_\_ in different sizes:

are produced  
is produced  
am produced

are producing  
is been produced

Переведите предложение *Capacitors are rated in farads:*

- А) мощность конденсаторов измеряется в фарадах
- Б) из фарадов вытекает мощность
- С) измерение мощности фарадами
- Д) фарадная мощность
- Е) мощность не измеряется в фарадах

Вставьте нужный предлог: *The value of capacitance depends \_\_\_ the size of the plates and the properties of the dielectrics:*

- А) on
- Б) of
- С) about
- Д) from
- Е) in

## РАЗДЕЛ 8. ПРОФЕССИОНАЛЬНАЯ ЛЕКСИКА

### TEXT. ELECTRIC POWER PLANTS

Electric power is generated at electric power plants. The main unit of an electric power plant comprises a prime mover and the generator which it rotates. In order to actuate the prime mover energy is required. Many different sources of energy are in use nowadays. To these sources belong heat obtained by burning fuels, pressure due to the flow of air (wind), solar heat, etc.

According to the kind of energy used by the prime mover, power plants are divided into groups. Thermal, hydraulic (water-power) and wind plants form these groups.

According to the kind of prime mover, electric power plants are classed as

- а) Steam turbine plants, where steam turbines serve as prime movers. The main generating units at steam turbine plants are the turbogenerators. Steam turbine plants belong to the modern, high-capacity class of power plants.
- б) Steam engine plants, in which the prime mover is a piston-type steam engine. Nowadays no large generating plants of industrial importance are constructed with such prime movers. They are used only for local power supply.
- в) Diesel-engine plants; in them diesel internal combustion engines are installed. These plants are also of small capacity, they are employed for local power supply.

d) Hydroelectric power plants employ water turbines as prime movers. Therefore they are called hydroturbine plants. Their main generating unit is the hydrogenerator.

Modern wind-electric power plants utilize various turbines; these plants as well as the small capacity hydroelectric power plants are widely used in agriculture.

## **Exercises**

### **VI. Choose the correct variant:**

1. An electric power plant a) transmits electric energy, b) generates electric energy.
2. Prime movers use energy of a) one kind, b) various kinds.
3. Steam engine plants serve for a) industry power supply, b) local power supply.
4. Combustion engines are employed in a) diescl-engine plants, b) steam engine plants.
5. Water turbine plants are called a) wind-electric plants, b) hydroturbine plants.

### **VIII. Translate the extract. Use a dictionary:**

1. The world's consumption of fuel energy is increasing at an astronomical rate. Man is using more and more the organic fuel sources-coal, oil, wood and others. The use of these fuels in the 19th century was equal to almost half the total used in all the preceding nineteen centuries. According to estimates, consumption is expected to double and then double again before the year 2000...

2. Two readings should be taken on an insulation containing two-way switches, one with both switches on the "on" position and the other with both switches in the alternative "on" position.

3. If the result of the test between conductors is also satisfactory, no further insulation tests are necessary and the insulation may be considered to be in order.

4. If, however, the results of the tests are unsatisfactory, proceed to the distribution board, withdraw all fuses and test each branch circuit individually between conductors until the faulty circuit or circuits are located.

## **РАЗДЕЛ 9. Деловой английский**

Переведите слова по теме: **Direct current and alternating current.**

### **Vocabulary**

Cycle

Number

Frequency

Time

Advantage

To consider

To apply

To term

Provided

Эталон ответа:

### **Direct current and alternating current**

#### **Vocabulary**

Cycle – цикл, период

Number – число

Frequency – частотность, частота

Time – раз

Advantage – преимущество

To consider – рассматривать

To apply – использовать, применять

To term – называть

Provided – при условии

## **РАЗДЕЛ 10. Компьютерные технологии**

### **COMPUTER**

**Прочитайте и переведите текст.**

#### **WHAT IS A COMPUTER?**

Computer is a device for processing information. Computer has no intelligence by itself and is called hardware. A computer system is a combination of four elements:

• Hardware

• Software

• Procedures

• Data / Information

Software are the programmes that tell the hardware how to perform a task. Without software instructions, the hardware doesn't know what to do. The basic job of the computer is the processing of information. Computers take information in the form of

instructions called programs and symbols called data. After that they perform various mathematical and logical operations, and then give the results (information). Computer is used to convert data into information. Computer is also used to store information in the digital form.

**Ответьте на вопросы письменно:**

1. What does the term «computer» describe?
2. Is computer intelligent?
3. What are the four components of a computer system?
4. What is software?

**Эталон ответа:**

1. Computer is a device for processing information.
2. Computer has no intelligence by itself and is called hardware.
3. A computer system is a combination of four elements:  
Hardware  
Software  
Procedures  
Data/ Information
4. Software are the programmes that tell the hardware how to perform a task.

**5. WHAT IS HARDWARE?**

Webster's dictionary gives us the following definition of the hardware — the devices composing a computer system.

Computer hardware can be divided into four categories:

- 1) input hardware
- 2) processing hardware
- 3) storage hardware
- 4) output hardware.

**Input hardware** collects data and converts them into a form suitable for computer processing. The most common input device is a keyboard. It looks very much like a typewriter. The mouse is a hand-held device connected to the computer by a small cable. As the mouse is rolled across the desktop, the cursor moves across the monitor/

**Output hardware**

The purpose of **output hardware** is to provide the user with the means to view information produced by the computer system. Information is in either hardcopy or softcopy form. Hardcopy output can be held in your hand, such as paper with text (words or numbers) or graphics printed on it. Softcopy output is displayed on a monitor. Monitor is a display screen for viewing computer data, television programs, etc. Printer is a computer output device that produces a

paper copy of data or graphics. Modem, is an example of communication hardware — an electronic device that makes possible the transmission of data to or from computer via telephone or other communication lines. Hardware comes in many configurations, depending on what you are going to do on your computer.

### **Задание 1.**

Что из нижеперечисленного является оборудованием?

1. 'program
2. mouse
3. CPU
4. printer
5. modem
6. instruction
7. cursor or the pointer
8. keyboard
9. symbol

### **Эталон ответа:**

- . mouse
- printer
- modem
- keyboard

## **Современные компьютерные технологии в промышленности**

Automation is the system of manufacture performing certain tasks, **previously** done by people, by machines only. The **sequences** of operations are controlled automatically. The most familiar example of a highly automated system is an **assembly plant** for automobiles or other complex products. Automated manufacturing had several steps in its development. Mechanization was the first step necessary in the development of automation. The simplification of work made it possible to design and build machines that **resembled** the motions of the worker. These specialized machines were motorized and they had better production **efficiency**.

Industrial robots, originally designed only to perform simple tasks in environments dangerous to human workers, are now widely used to transfer, manipulate, and position both light and heavy work pieces performing all the functions of a transfer machine.

### **3. Рекомендуемая литература и иные источники**

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6. Луговая А.Л. Английский язык для студентов энергетических специальностей. СПО. – М.: Академия, 2021.

### **Интернет-ресурсы.**

1. [www.lingvo-online.ru](http://www.lingvo-online.ru) (более 30 англо-русских, русско-английских и толковых словарей общей и отраслевой лексики).
2. [www.macmillandictionary.com/dictionary/british/enjoy](http://www.macmillandictionary.com/dictionary/british/enjoy) (Macmillan Dictionary с возможностью прослушать произношение слов).
3. [www.britanca.com](http://www.britanca.com) (энциклопедия «Британника»).
4. [www.ldoc online.com](http://www.ldoc online.com) (Longman Dictionary of Contemporary English).