Материал контрольной работы располагайте по следующему образцу:

Поле Левая половина листа

Английский текст

Правая половина листа

Русский текст

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| Lomonosov founded the first Russian University in Moscow | Ломоносов основал первый русский университет в Москве |

Вариант 3

l. Перепишите следующие предложения; подчеркните в каждом из них глагол сказуемое и определите его временную форму и залог. Переведите предложения на русский язык. Обратите внимание на перевод пассивных конструкций.

1. Scientists have been looking for the substance as a source of energy for many years.
2. Becquerel’s discovery was followed by the intensive research work of Marie and Pierre Curie.
3. New methods of obtaining polymers have been applied at our plant.
4. The lecturer is listened to with great interest.

2. Перепишите следующие предложения, подчеркните Participle I и Participle II и установите функции каждых, т.е. укажите, является ли оно определением, обстоятельством или частью глагола-сказуемого. Переведите предложения на русский язык.

1. Matter consists of one or a number of basic elements occurring in nature.
2. Unless properly treated the metal can not be used for space technology.
3. While working at a new transmitter for deaf people Bell invented a telephone.
4. The air in many cities has been polluted by traffic and industry.

3. Перепишите следующие предложения и переведите их на русский язык, обращая внимание на бессоюзное подчинение.

1. The information science gets about other galaxies comes through radioscopes.
2. We know radio and radar systems play a very important role at any airport.
3. Every substance a man comes in contact with consists of molecules.

4. Перепишите предложения и переведите их на русский язык, обращая внимание на разные значения глаголов to be, to have, to do.

1. Experiments for industrial production of materials in space are being carried out in many countries.
2. A historian has to study a lot of various facts to reconstruct the far past.
3. The quality of these metal parts is to be very high.
4. He does his work in time.

5. Перепишите следующие предложения и переведите их на русский язык, обращая внимание на функции инфинитива.

1. High temperature alloys make it possible for jet engines to be operating for a long period of time.

2. In a new Japanese car the information to be received by the driver will come through a navigation earth satellite.

3. There is no doubt that mankind will be able to explore the solar system by using the nuclear rockets.

4. To design new buildings is the work of an architect.

6. Прочитайте текст. Перепишите и письменно переведите весь текст.

Nuclear Chemistry

1. It is known atoms undergo certain changes, however, which cannot be explained by changes in the configuration of atomic electrons. H. Becquerel was the first to notice that a crystal of a salt of uranium placed on a photographic plate in the dark affected the plate so that an image of the crystal appeared. He concluded this effect to have been caused by the emission of some kind of ray from uranium.

2. Shortly after his discovery, the Curies found the intensity of the rays emitted by the pitchblende ore from which uranium is obtained to be greater than would be expected from the knowledge of the uranium content.

3. The enhanced activity was due to a previously unknown element radium, which occupies the position below barium in Group II of the periodic table. It was shown that the rays emitted by radium consist of two kinds of particles, called A-particles and B-particles, and an electromagnetic radiation called Y-rays, having a wave length of the same order as that of X- rays. A-particles have been shown to be the nuclei of helium atoms. They are emitted from radium with a speed of about 15,000 miles per second and are able to penetrate a few cm of air, or very thin aluminium foil. B-rays are electrons; their speed is about 100,000 miles per second.

7. Ответьте письменно на вопрос:

What did the Curies discover during their research?

8. Дополнительный текст. Прочитайте, перепишите и сделайте полный письменный перевод текста.

Space Cooling

A new method of cooling that can generate cryogenic temperatures of 200° С below zero without the use of electricity and with almost no moving parts has been tested at the jet propulsion Laboratory in Pacadena, California. The refrigerator used for the purpose was recently tested to -253° C, only 20 degrees above absolute zero, the lowest possible temperature.

In space such cooling system could increase the life of future space station refueling ports by cooling the large liquid-hydrogen fuel tanks which are likely to be in service.

In future earth applications it could be used for cooling hydrogen-powered cars and planes, as well as for cooling superconducting motors and computers.

According to JPL (Jet Propulsion Laboratory) experts the key lies in the use of hydrides, materials that interact with hydrogen. These materials absorb tremendous amounts of hydrogen gas at room temperature. The engineers of JPL have taken advantage of this property to build a series of devices that act as compressors and provide a continuous cooling stream of liquid hydrogen.

The system saves weight in space since it can use direct solar heat instead of electricity from heavier, inefficient electric systems. Because it has so few moving parts and uses the same supply of gas in a closed cycle, it could operate for many decades. Because of its long potential lifetime, the system could be used to cool infrared sensors’ during missions to the other planets, which may take 10 years or more to complete.