

## Вариант 2.

### Задание 1.

1. Computer components produced should be very clean.
2. Many countries have cable TV, a system using wires for transmitting TV programs.
3. Having stated the laws of gravity, Newton was able to explain the structure of the Universe.

### Задание 2.

1. These plants producing a great quantity of liquid and gaseous wastes containing chlorinated hydrocarbons.

Эти растения производят большое количество жидких и газообразных отходов, содержащих хлорированные углеводороды (Функция - определение)

2. As the oxidation rate increasing, the temperature gradually rises, increasing the rate of oxidation and hence the rate of temperature rise

По мере увеличения скорости окисления температура постепенно повышается, увеличивая скорость окисления и следовательно, темп темп роста (Функция - обстоятельство)

3. When discussing the problem they argued a lot

Обсуждая проблему, они много спорили.

4. Speaking English, pay attention to the order of words

Говоря по-английски, обратите внимание на порядок слов.

### Задание 3.

1. With the current being switched on, the machine automatically starts operating.

При включении тока, машина автоматически начинает работу.

2. Silver being very expensive, we only rarely use it as a conductor.

Поскольку серебро очень дорогое, мы редко используем его в качестве проводника.

3. The distance having been measured, the computer adjusts the car's speed.

После измерения расстояния компьютер корректирует скорость автомобиля.

### Задание 4.

1. To lower the temperature of the cooling water by artificial means would require additional energy.

(Функция - нагревание)

2. An additional factor to be considered is the cost and maintenance of cooling system.

(Функция - определение)

3. We hope to get the book.

(Функция - получение)

4. A special electronic device signals the engine to stop.

(Функция - часть указателя)

5. Radar may control the brakes to avoid collisions with other cars.

(Функция - достижение цели)

### Задание 5.

1. We believe it to be the best way out of this situation.

Мы считаем, что это лучший выход из этой ситуации. (Complex Object)

2. The environment was thought to be an unlimited source of resources.

Считалось, что окружающая среда является неограниченным источником ресурсов. (Complex Subject)

3. People would like all ecological problems to have been solved - Люди хотели бы, чтобы все экологические проблемы были решены.

(Complex subject)  
4. She thought him to be a qualified specialist - Она считала его квалифицированным специалистом.  
(Complex Object)

### Задание 6.

1. (We believe it to be the best)

Programming is the process of preparing, testing and correcting instructions for a computer.

Программирование - это процесс подготовки, тестирования и коррекции инструкций для компьютера.  
(Функция - часть сложного предложения)

2. I'm glad to have the opportunity of talking to you, Doctor.  
Я рад иметь возможность поговорить с вами, доктор.  
(Функция - часть сложного предложения)

3. No any metal capable of being drawn out into a wire?  
Может ли быть металл - проволока? (Металл растянут в проволоку)  
(Функция - часть предложения в предложении)

4. The method for storing and transporting blue gases becomes criticized.  
Метод хранения и транспортировки газов подвергается критике.  
(Функция - часть предложения в предложении)

5. If steam is required for processing, a turbine may be modified by extracting the steam.  
Если для процесса требуется пар, турбину можно изменить, извлекая пар.  
(Функция)

### Задание 7.

1. Если бы дети взяли мой велосипед, чтобы поехать в школу, они были бы в значительно лучшей форме.

2. Если бы у меня было много денег, я бы купил себе машину.

3. Хелен была бы очень расстроена, если бы узнала, что мы уехали.

### 3 August 8

## Electric motors and generators

1. Electric motors and generators are used to convert mechanical energy into electrical energy, or electrical energy into mechanical energy, by electromagnetic means. A machine that converts mechanical energy into electrical energy is called a generator, and a machine that converts electrical energy into mechanical energy is called a motor.

2. Two related physical principles underlie the operation of generators and motors. The first is the principle of electromagnetic induction, discovered by the British scientist Michael Faraday in 1831. If a conductor is moved through a magnetic field, or if the strength of a stationary conducting loop is made to vary, a current is set up or induced in the conductor.

5. The magnetic field of a permanent magnet is strong enough to operate only a small practical dynamo or motor. As a result, for large machines electromagnets are employed. Both motors and generators consist of two basic units, the field which is the electromagnet with its coils, and the armature the structure that supports the conductors, which cut the magnetic field and carry the induced current in a generator or the exciting current in a motor. The armature is usually a laminated soft-iron core around which conducting wires are wound in coils.

### 3 August 9.

1. Mechanical energy is converted into electrical energy by electric motors and generators
2. The physical principles that underlie the operation of generators and motors are

the use of electromagnetic fields.

2 The physical principles that underlie the operation of generators and motors are the principle of electromagnetic induction and the use of electromagnetic fields.

3 The simplest of all dynamoelectric machines is a small practical dynamo or motor that can operate with the magnetic field of a permanent magnet.

4 Both motors and generators consist of two basic units; the field, which is the armature, which supports conductors and carries the induced or exciting current. The armature is usually a laminate of soft-iron core around which conducting wires are wound in coils.

Задача 10.

1. Motors and generators consist of two basic units
2. Electromagnets are used for large machines
3. The armature is usually a laminated soft-iron core.

Задача 11.

Динамические машины: Are electric motors and generators used to convert mechanical energy into electrical energy?

Статические машины: Electric motors and generators are not used to convert mechanical energy into electrical energy.

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