**ВАРИАНТ 5**

**I.** Перепишите следующие предложения; подчеркните в каждом из них глагол-сказуемое и определите его видовременную форму и залог. Переведите предложения на русский язык. В разделе (б) обратите внимание на перевод пассивных конструкций.

а) 1. Electronic devices are doing simple but humanlike thinking.

2. The first practical electric lamp was the carbon arc.

3. The capacity of this mobile power station seems to range from 600 to 700 kilowatt.

б) 1. An amplifier is used to change the value of the input voltage.

2. Solar energy has been converted to electricity by using semiconductor devices.

3. The engineer was asked about the new technology used at the plant.

**II.** Выпишите из текста предложение, сказуемое которого стоит в пассиве. Подчеркните сказуемое и переведите это предложение.

**III.** Перепишите следующие предложения; подчеркните ***Participle I*** и ***Participle II*** и установите функции каждого из них, т. е. укажите, является ли оно определением, обстоятельством или частью глагола-сказуемого. Переведите предложения на русский язык.

1. When speaking about resistances, we usually mean that it is possible to classify substances as conductors and nonconductors.

2. When rubbing glass with silk, we produce static electricity.

3. Most widely used semiconductors at present are germanium, silicon, selenium and copper oxide.

4. The voltage produced by the system, was not enough to start the engine.

**IV.** Перепишите следующие предложения; подчеркните в каждом из них модальный глагол или его эквивалент. Переведите предложения на русский язык.

1. We can start up synchronous motors without load.

2. In order to reduce the heating losses, a step-down transformer can be used.

3. To put a half-wave rectifier into operation, a source of a.c. should be applied to it.

4. A rheostat is a resistor whose resistance value may be varied.

**V.** Перепишите текст и переведите его письменно.

##### TYPES OF CURRENT

Current is a flow of electricity through a circuit. There are two main types of current: direct and alternating. A direct current flows through a conducting circuit in one direction only. It flows provided a direct voltage source is applied to the circuit.

An alternating current is a current that changes its direction of flow through a circuit. It flows provided an alternating voltage source is applied to the circuit. Alternating current flows in cycles. The number of cycles per second is called the frequency of the current. In a 60-cycle alternating current circuit the current flows in one direction 60 times and in the other direction 60 times per second.

It is easy to transform a.c. power from one voltage to another by a transformer. Transformers are also used to step down the voltage at the receiving point of the line to the low values that are necessary for use. When necessary a.c. can be changed into d.c. but this is seldom necessary.

**VI.** Выпишите из текста эквиваленты к словам и словосочетаниям: направление течения тока, приемная точка, постоянный ток, напряжение, электрическая цепь.

**VII.** Письменно ответьте на следующие вопросы по тексту.

1. What is current?

2. What types of current do you know?

3. When does a direct current flow?

4. What type of current is called an alternating current?

5. What is called the frequency of current?

6. What device is used to transform a.c. power from one voltage to another?