Задание 2

1. Manufacture system designed to extend the capacity of machines is called automation.  
2. Automated manufacture arose out of division of labor, power transfer and the mechanization of the factory.  
3. The division of labor is, the reduction of a manufacturing or service process into its smallest independent steps.  
4. Another step necessary in the development of automation was mechanization.  
5. As a result of the development of power transfer specialized machines were motorized and their production efficiency was improved.  
6. The development of power technology also gave rise to the factory system of production.  
7. The transfer machine is a device used to move a work pieces from one specialized machine tool to another.  
8. Industrial robots were originally designed only to perform simple tasks.  
9. The goal of the assembly-line system was to make automobiles available to people who previously could not afford them.

Задание 3

1. Automation is a system of manufacture designed to reduce the capacity of machines to perform certain tasks formerly done by humans. - **True**  
   2. In the fields of communications, aviation, and astronautics automation is used in a very limited scale. – **False**   
   3. Automated control systems are used to perform various operations much faster or better than could be done by humans. - **True**  
   4. Power transfer and the mechanization of the factory were the main obstacles in the development of automation. - **False**  
   5. The division of labor developed in the first half of the 19th century and was first discussed by the French economist Adam Smith. - **False**  
   6. Mechanization was the next step necessary in the development of automation. - **True**  
   7. The development of power technology gave rise to the factory system of production. - **True**  
   8. The transfer machine is a device used to move workers from one place to another. - **False**  
   9. In the 1920s the auto industry combined automation concepts into an integrated system of production. - **True**  
   10. The goal of the assembly-line system in auto industry was to make automobiles more expensive and luxurious. – **False**

Задание 4

1. Автоматизированная производственная линия состоит из ряда рабочих станций, соединенных системой передачи для перемещения деталей между станциями.
2. Современные автоматизированные линии управляются программируемыми логическими контроллерами.
3. Автоматизированные производственные линии используются во многих отраслях промышленности, прежде всего в автомобильной.
4. Если деталь производится серийно, автоматизированная линия передачи часто является наиболее экономичным методом производства.
5. Линии передачи датируются примерно 1924 годом.
6. Операции обработки на прессе включают в себя вырезание и формовку деталей из листового металла.
7. Автоматизированная система предназначена для выполнения некоторых полезных действий, и это действие требует энергии.

Задание 5

1. Electricity is the most used energy source in modern automated systems.  
2. Automated systems perform basically two types of operations: 1) processing; 2) moving and positioning.  
3. Automation is a production system designed to increase the productivity of machines and mechanisms.  
4. Communications, aviation and space are the industries in which automation is most widely used.  
5. The division of labor, power transfer and the mechanization of production has accelerated the development process of automation.  
6. Mechanization was the next step necessary in the development of [automation](https://lms.kgeu.ru/mod/url/view.php?id=70884)  
7. The development of energy transfer technology has contributed to the development of automation.  
8. Industrial robots were originally designed only to perform simple tasks in environments dangerous to human workers.