**Чегодаев Денис Вячеславович ЭЖКМм-1-20 Automation**

**Exercise 2**

1. Manufacture system designed to extend the capacity of machines is called automation.

2. Automated manufacture arose out of division of 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](https://lms.kgeu.ru/mod/page/view.php?id=50187) 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 piece 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.

**Exercise 3**

1. [Automation](https://lms.kgeu.ru/mod/page/view.php?id=50187) is not designed to reduce the capacity of machines to perform but to extend

2. In text doesn’t mention about limited scale of the use of automation in the fields of astronaut, communications and aviation

3. within the meaning of this sentence corresponds to the text, but the text doesn’t say

4. Power transfer is not the main obstacles but the next step

5. The division of labor developed not in the first half of the 19th century but in the latter half of the 18th century and economist Adam Smith wasn’t French but British.

6. yes it is

7. yes it is

8. A transfer machine is a device used not to move workers but for work pieces

9. yes it is

10. The goal of the assembly-line system in auto industry wasn't to make automobiles more expensive and luxurious but was made available to people.

**Exercise 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, в первую очередь в автомобильной.

4. Если деталь производится серийно, автоматизированная линия передачи часто является наиболее экономичным методом производства.

5. Линии передачи датируются примерно 1924 годом.

6. Рабочие операции пресса включают вырезание и формовку деталей из листового металла.

7. Автоматическая система предназначена для выполнения некоторой полезной работы, и это работа требует энергии.

**Exercise 5**

1. Electricity is the most widely used means of modern automated systems.

2. Automated systems perform basically two types of operations: 1) processing; 2) movement and location.

3. Automation is a system of manufacture designed to extend the capacity of machines and mechanism.

4. communications, aviation, and astronautics are the industries is the most extensive using of automation

5. The division of labor, power transfer and the mechanization of the factory accelerated the development process of automation.

6. The next step necessary in the development of automation was mechanization.

7. The development of power transfer technology contributed to the development of automation.

8. Industrial robots, originally designed to perform simple tasks in environments dangerous to human