**Exercise 2**

1) Manufacture system designed to extend the capacity of machines is called *Automation.*

2) Automated manufacture arose out of division of *labor* and *development* 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* transfer 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. False, to extend, not reduce

2. False, various operations, not limited

3. True

4. False

5. False, the latter half of the 18th century

6. True

7. True

8. False

9. True

10. False, make automobiles available to people

**Exercise 4**

1. Автоматизированная производственная линия состоит из серии рабочих станций, соединенных конвейером для перемещения деталей между станциями.
2. Современные автоматизированные линии управляются программируемыми логическими контроллерами.
3. Автоматизированные производственные линии используются во многих отраслях промышленности, особенно в автомобильной.
4. Если деталь производится серийно, конвейерное производство часто является наиболее экономичным способом производства.
5. Конвейерные линии датируются примерно 1924 годом.
6. Обработка прессом включают резку и формование деталей из листового металла.
7. Автоматизированная система предназначена для выполнения некоторых полезных действий с использованием энергии.

**Exercise 5**

1) Electricity is the most widely used energy source in modern automated systems.

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

3) Automation is a production system designed to increase the productivity of machines and mechanisms.

4) Communications, aviation, and astronautics are the sectors widely used in automation.

5) The division of labor, the transfer of energy, and the mechanization of production accelerated the development of automation.

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

7) The development of energy transfer technology contributed to the development of automation.

8) Industrial robots originally designed to perform simple tasks in hazardous environments for humans.