Колмаков Глеб группа ИЭСм-1-20

2 ЗАДАНИЕ

1. Manufacture system designed to extend the capacity of machines is called **automation.**
2. Automated manufacture arose out of division of **labor and 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.

3 ЗАДАНИЕ  
  
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.(TRUE)  
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)

4 ЗАДАНИЕ  
  
1) Автоматизированная производственная линия состоит из ряда рабочих станций, соединенных передаточной системой для перемещения деталей между станциями.  
2) Современные автоматизированные линии управляются программируемыми логическими контроллерами.  
3) Автоматизированные производственные линии используются во многих отраслях промышленности, особенно в автомобилестроении.  
4) Если деталь производится серийно, автоматизированная линия передачи часто является наиболее экономичным способом производства.  
5) Трансферные линии датируются примерно 1924 годом.  
6) Операции прессования включают разрезание и формование деталей из листового металла.  
7) Автоматизированная система предназначена для выполнения некоторых полезных действий, и это действие требует мощности.

5 ЗАДАНИЕ  
  
1) Electricity is the most widely used energy source in modern automated systems.  
2) Automated systems perform mainly two types of operations: 1) processing; 2) movement and location.  
3) Automation is a production system designed to increase the productivity of machines and mechanisms.  
4) Communications, aviation and astronautics are the industries that most widely use automation.  
5) Division of labour, energy transfer and mechanization of production accelerated the process of automation development.  
6) Mechanization is the next step in the development of automation.  
7) The development of energy transfer technology contributed to the development of automation.  
8) Industrial robots were originally designed to perform simple tasks in environments dangerous to human.