Course 4. VIDEO LESSON 8. SURNAME NAME GROUP

Task 1. WATCH THE VIDEO AND ANSWER THE QUESTIONS.

1. What is the advantage of using the playback method for programming robots?

A It allows for complex paths to be easily programmed.
B It ensures precise positioning of the robot hand.
C It reduces the need for programming skills.
D It enables the robot to move in slow motion.

2. Which programming method requires the operator to manually position the robot using a control panel?

A Playback method
B Continuous path control
C Offline Programming
D Teach-In Programming

3. What is a typical application of teach-in programming?

A Spray painting
B Contour welding
C Spot welding
D Pick-and-place

4. What is a disadvantage of online programming?

A It requires the robot to move in slow motion.
B It does not allow for simulation of robot movements.
C It does not recognize possible collisions.
D It requires the operator to work within the working area

5. In which programming method are possible collisions recognized during simulation?

A Playback method
B Teach-In Programming
C Offline Programming
D Continuous path control

6. What is the purpose of offline programming?

A To ensure precise positioning of the robot hand.
B To simulate robot movements in a virtual 3D environment.
C To enable the robot to move in slow motion.
D To reduce the need for programming skills.

7. What is the advantage of using offline programming?

A It reduces the risk of collisions during programming.
B It ensures precise positioning of the robot hand.
C It allows for complex paths to be easily programmed.
D It enables the robot to move in slow motion.

Task 2. Choose the correct summary of the video.

A)_ In this video, we explore the benefits of using artificial intelligence in programming robots on a factory line. The video showcases how AI algorithms can analyze real-time data and make autonomous decisions for the robot's movements. It demonstrates how AI can optimize the robot's path to increase efficiency and productivity. The video also highlights the improved safety features of AI-controlled robots, such as collision avoidance systems. Overall, the video emphasizes the transformative impact of AI in revolutionizing robot programming in the manufacturing industry.

B)_ This video discusses the different methods of programming robots in a factory line. It explains the playback method, where the programmer manually leads the robot along the desired path and the control stores the position and orientation. This method allows for easy programming of complex paths with minimal programming skills. Another method mentioned is teach-in programming, where the operator positions the robot using a control panel and saves the coordinates. The video also mentions online programming, where the robot's movements are simulated in a virtual environment, and offline programming, where the program is written and simulated before being loaded onto the robot control.

C)_ This video claims that programming robots in a factory line is a difficult and time-consuming process. It suggests that even simple paths require advanced programming skills. The video also states that teach-in programming is not a secure method as it allows the operator to work within the working area of the robot. Additionally, it argues that online programming is not effective as it does not allow for collision detection. Finally, the video advises against offline programming, stating that it is prone to errors and does not provide accurate results.