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| **Revision Questions on Automated Systems** |

Question 1: What is a characteristic of stationary robots?

A. High mobility

B. Fixed position

C. Adaptability to changing environments

D. Versatility in tasks

Question 2: In which industry are stationary robots commonly used for tasks like welding and painting?

A. HealthcareC

B. Logistics

C. Manufacturing

D. Exploration

Question 3: What is a limitation of stationary robots?

A. Lack of precision

B. Limited flexibility

C. High mobility

D. Adaptability to changing tasks

Question 4: Which of the following is an example of a stationary robot used in additive manufacturing processes?

A. Surgical robot

B. 3D printer

C. Autonomous vehicle

D. Social companion robot

Question 5: What is a potential advantage of stationary robots in terms of safety?

A. Increased risk of accidents

B. High mobility in dynamic environments

C. Reduced movement

D. Adaptability to changing surroundings

Question 6: Which term refers to the number of degrees of freedom in a robotic system?

A. Stationary capacity

B. Flexibility index

C. Mobility factor

D. Degrees of freedom (DOF)

Question 7: What type of tasks are stationary robots commonly used for in manufacturing?

A. Dynamic movements

B. Precision tasks

C. Exploration

D. Adaptive operations

Question 8: What is a challenge associated with the initial setup of stationary robots?

A. High adaptability

B. Lack of precision

C. Time-consuming installation and programming

D. Limited flexibility

Question 9: Which of the following is an example of a stationary robot used for tasks like welding?

A. Vacuum robot

B. Surgical robot

C. Robotic arm

D. Autonomous vehicle

Question 10: In which field are stationary robots commonly used for precise inspections?

A. Exploration

B. Healthcare

C. Logistics

D. Quality control

Question 11: What is a characteristic of mobile robots?

A. Fixed position

B. Limited adaptability

C. Stationary movement

D. Lack of versatility

Question 12: In which application are Automated Guided Vehicles (AGVs) commonly used?

A. Exploration

B. Logistics

C. Healthcare

D. Manufacturing

Question 13: What is a potential advantage of mobile robots in terms of flexibility?

A. Limited adaptability

B. Fixed mobility

C. Ability to adapt to dynamic environments

D. Lack of versatility

Question 14: Which of the following is a limitation of mobile robots?

A. Complexity in navigation

B. Lack of adaptability

C. Reduced initial investment

D. Minimal maintenance requirements

Question 15: What is a common example of a mobile robot used in hospital logistics and assistance?

A. Surgical robot

B. Drone

C. Robotic arm

D. Social companion robot

Question 16: What type of movement do mobile robots commonly exhibit?

A. Fixed movement

B. Stationary movement

C. Dynamic movement

D. Limited movement

Question 17: In which industry are mobile robots commonly used for planetary exploration?

A. Healthcare

B. Logistics

C. Exploration

D. Manufacturing

Question 18: What is a potential advantage of mobile robots in terms of productivity?

A. Limited movement

B. Reduced adaptability

C. Efficient movement in large spaces

D. Lack of versatility

Question 19: What is an example of a mobile robot used for material transportation in warehouses?

A. Autonomous vehicle

B. 3D printer

C. Robotic arm

D. Automated Guided Vehicle (AGV)

Question 20: What is a future trend in mobile robotics mentioned in the summary?

A. Limited movement

B. Reduction in decision-making capabilities

C. AI Integration

D. Decreased adaptability

Question 21: What is the primary characteristic of automated systems?

A. Complexity

B. Human intervention

C. Efficiency

D. Unreliability

Question 22: Which type of automation involves technologies like robotic arms on assembly lines?

A. Home Automation

B. Industrial Automation

C. Office Automation

D. Personal Automation

Question 23: What is the primary function of actuators in automated systems?

A. Collect data

B. Execute actions

C. Process information

D. Allow interaction

Question 24: What is a potential challenge of implementing automated systems?

A. Increased efficiency

B. Initial cost

C. Human intervention

D. Job displacement

Question 25: Which of the following is a real-world application of automated systems in agriculture?

A. Smart thermostats

B. Automated harvesting

C. Email automation

D. Self-driving cars

Question 26: What is the role of sensors in an automated system?

A. Execute actions

B. Process information

C. Collect data

D. Allow interaction

Question 27: Which trend in automation involves interconnected devices for seamless automation?

A. Robotics

B. Internet of Things (IoT)

C. Artificial Intelligence

D. Machine Learning

Question 28: What is an advantage of automated systems in terms of accuracy?

A. Increased human error

B. Reduced human error

C. Higher initial cost

D. Job displacement

Question 29: What component acts as the "brain" of an automated system?

A. Sensors

B. Actuators

C. Controller

D. Interface

Question 30: In the context of automated systems, what does IoT stand for?

A. Input of Things

B. Interface of Things

C. Internet of Things

D. Implementation of Things