

Mock Test

Robotics and Automation COBOTS Vengineer

Version- 1.0

Level- 5.5

CSC/N0521. Assist in Designing, Programming, and Maintaining Industrial Robotic Systems

Q1. What is a key consideration when assisting in designing collaborative robots for factory use? (7 Marks)

- A. Avoid Programming
- B. Improve Visuals
- C. Reduce Robot Weight
- D. Ensure Human Safety

Q2. How does assisting in programming COBOTS improve overall efficiency in industrial automation processes? (7 Marks)

- A. Optimize task execution
- B. Reduce component quality
- C. Slow production workflow
- D. Increase downtime

Q3. Which software is commonly used to program industrial robotic arms for automation tasks efficiently? (8 Marks)

- A. Spreadsheet Tool
- B. Graphic Design App
- C. CAD Drawing Tool
- D. Robot Operating System

Q4. How does analyzing system feedback support proper maintenance of industrial robotic systems effectively? (8 Marks)

- A. Detect faults early
- B. Slow task completion
- C. Reduce programming speed
- D. Increase sensor errors

CSC/N0513. Perform Installation, Commissioning, and Integration of Robotic Systems

Q5. Why is verifying electrical connections critical during the installation of industrial robotic systems? (7 Marks)

- A. Increase programming speed
- B. Ensure safe operation

- C. Slow mechanical movement
- D. Reduce task accuracy

Q6. How does proper alignment of robotic arms improve commissioning and integration efficiency? (7 Marks)

- A. Slow task execution
- B. Reduce sensor precision
- C. Prevent operational errors
- D. Increase downtime

Q7. Why must software and firmware be updated before integrating robotic systems with production lines? (7 Marks)

- A. Increase mechanical wear
- B. Ensure compatibility
- C. Delay task programming
- D. Reduce tool availability

Q8. How does performing system calibration after installation ensure accurate operation of robotic systems? (9 Marks)

- A. Maintain precision
- B. Increase vibration
- C. Slow integration process
- D. Reduce component lifespan

Q9. Why is testing all safety sensors during robotic system commissioning essential for COBOTS engineers? (10 Marks)

- A. Increase wiring faults
- B. Delay task execution
- C. Prevent accidents
- D. Reduce programming speed

CSC/N0514. Carry Out Robot Operating Systems (ROS) Programming of Robots and COBOTS

Q10. Why is defining precise motion commands in ROS programming crucial for COBOTS performing automated tasks? (7 Marks)

- A. Slow robot startup
- B. Increase wiring complexity
- C. Reduce software memory
- D. Ensure accurate movement

Q11. How does debugging ROS nodes help maintain reliable operation of robots and COBOTS in industrial settings? (7 Marks)

- A. Detect and fix errors early
- B. Reduce sensor accuracy

- C. Delay system integration
- D. Increase collision risk

Q12. Why should a COBOTS engineer validate ROS-based communication between sensors and actuators carefully? (7 Marks)

- A. Increase network downtime
- B. Slow programming speed
- C. Reduce tool efficiency
- D. Ensure synchronized operations

Q13. How does simulating robotic tasks in ROS before live deployment improve safety and operational reliability? (9 Marks)

- A. Identify potential failures
- B. Reduce programming skill
- C. Delay task completion
- D. Increase mechanical wear

Q14. Why is maintaining updated ROS libraries important when programming industrial robots and COBOTS? (10 Marks)

- A. Increase physical wear
- B. Ensure software compatibility
- C. Reduce power supply usage
- D. Slow human intervention

CSC/N0520. Configure Robotic Movements, Troubleshoot and Prevent Malfunction

Q15. How does adjusting robot acceleration and deceleration parameters help prevent mechanical system failures? (7 Marks)

- A. Waste energy
- B. Increase software lag
- C. Slow calibration
- D. Reduce stress on joints

Q16. Why is monitoring temperature and load sensors critical during robotic movement configuration tasks? (7 Marks)

- A. Prevent overheating
- B. Reduce torque efficiency
- C. Slow cycle completion
- D. Increase motion errors

Q17. Which process ensures accurate robotic arm positioning during industrial automation tasks? (8 Marks)

- A. Change Power Supply
- B. Update Software

- C. Clean Workspace
- D. Calibrate Robot Motors

Q18. Why is documenting troubleshooting steps important when configuring or maintaining robotic systems? (8 Marks)

- A. Increase collision risk
- B. Slow system boot-up
- C. Aid future maintenance
- D. Reduce calibration speed

CSC/N1339. Collaboratively Coordinate with the Team

Q19. How does sharing real-time robotic system updates with team members improve workflow efficiency? (7 Marks)

- A. Reduce sensor accuracy
- B. Prevent errors and delays
- C. Increase downtime
- D. Slow troubleshooting

Q20. Why is coordinating task assignments among COBOTS engineers important during industrial automation projects? (7 Marks)

- A. Avoid overlapping work
- B. Increase wiring errors
- C. Slow robot commissioning
- D. Reduce system performance

Q21. How does collaborative discussion of design changes help maintain operational accuracy in robotic systems? (8 Marks)

- A. Increase motion failures
- B. Reduce programming skill
- C. Slow inspection process
- D. Ensure uniform implementation

Q22. Why should COBOTS engineers regularly communicate troubleshooting findings with the team during maintenance? (8 Marks)

- A. Improve overall problem-solving
- B. Slow software updates
- C. Reduce mechanical life
- D. Increase sensor faults

CSC/N0505. Follow Health, Safety and Environment Guidelines at Workplace

Q23. Why is wearing PPE essential when working with COBOTS in industrial automation environments? (3.5 Marks)

- A. Reduce robot efficiency
- B. Increase programming time
- C. Prevent physical injuries
- D. Slow task execution

Q24. How does following lockout–tagout procedures ensure safety during maintenance of industrial robotic systems? (3.5 Marks)

- A. Increase maintenance speed
- B. Prevent accidental startup
- C. Reduce sensor accuracy
- D. Slow workflow

Q25. Why should COBOTS engineers handle batteries and electrical components according to safety guidelines? (4 Marks)

- A. Avoid electrical hazards
- B. Delay programming tasks
- C. Reduce software updates
- D. Increase robot speed

Q26. How does proper disposal of damaged sensors and materials support environmental safety in automation labs? (4 Marks)

- A. Slow team communication
- B. Reduce environmental pollution
- C. Increase robot downtime
- D. Waste storage space

DGT/VSQ/N0102. Employability Skills (60 Hours)

Q27. How does effective communication help a COBOTS engineer coordinate complex robotic system operations efficiently? (4 Marks)

- A. Increase software errors
- B. Reduce component quality
- C. Slow programming speed
- D. Avoid misunderstandings

Q28. Why is problem-solving essential for COBOTS engineers when troubleshooting automated industrial robots? (4 Marks)

- A. Increase downtime
- B. Resolve technical issues quickly
- C. Reduce sensor accuracy
- D. Delay task completion

Q29. How does adaptability benefit COBOTS engineers working with new automation technologies and evolving processes? (6 Marks)

- A. Adjust to changes smoothly
- B. Slow robot integration
- C. Ignore team updates
- D. Reduce programming efficiency

Q30. Why is continuous learning important for a COBOTS engineer to maintain efficiency in automation systems? (6 Marks)

- A. Slow maintenance tasks
- B. Increase mechanical wear
- C. Stay updated with latest tools
- D. Reduce system reliability