

Mock Test

Robotics and Automation PLC-SCADA engineer

Version- 1.0

Level- 5.5

CSC/N0465. Implement and Maintain Control Systems Using PLC and SCADA Systems

Q1. Which method ensures reliable PLC-SCADA communication when managing large real-time datasets across multiple distributed controllers? (4 Marks)

- A. Using redundant communication paths
- B. Disabling diagnostic messages
- C. Increasing panel cooling capacity
- D. Limiting controller scan rates

Q2. Which diagnostic technique identifies intermittent SCADA tag update delays caused by overloaded PLC communication processing tasks? (4 Marks)

- A. Manual field inspection
- B. Increasing alarm thresholds
- C. Resetting all controllers
- D. Network packet analysis

Q3. Which strategy maintains system stability integrating high-speed robotic motion controllers with existing PLC-SCADA control architectures? (3.5 Marks)

- A. Limiting PLC memory usage
- B. Increasing SCADA display brightness
- C. Implementing synchronized data buffering
- D. Reducing motion controller resolution

Q4. Which control approach minimizes downtime when a critical PLC fails during continuous SCADA-supervised robotic production operations? (3.5 Marks)

- A. Configuring hot-standby redundancy
- B. Logging faults manually
- C. Running equipment unsupervised
- D. Deactivating all safety interlocks

CSC/N0466. Develop System Logic, Programming Automation Sequence, and Troubleshoot Issues

Q5. Which technique ensures complex automation sequence executes reliably when multiple PLC tasks require synchronized logic processing? (7 Marks)

- A. Limiting tag descriptions length
- B. Increasing HMI brightness settings

- C. Disabling motion control modules
- D. Using inter-task synchronization flags

Q6. Which method helps troubleshoot sudden sequence interruptions caused by conditional branches failing under dynamic robotic load variations? (7 Marks)

- A. Analyzing step-transition diagnostics
- B. Resetting the entire PLC
- C. Reducing all timer presets
- D. Changing operator permissions

Q7. Which approach improves system logic integrity when developing advanced robotic automation routines involving parallel execution paths? (8 Marks)

- A. Increasing PLC power supply rating
- B. Implementing structured state machines
- C. Disabling safety interlocks temporarily
- D. Shortening scan-cycle watchdog time

Q8. Which troubleshooting action identifies inconsistent actuator responses during complex sequential PLC-controlled robotic operations? (8 Marks)

- A. Reviewing I/O monitoring traces
- B. Reducing control cabinet lighting
- C. Modifying SCADA color scheme
- D. Limiting alarm history storage

CSC/N0467. Perform PLC Programming and Configuration

Q9. Which step ensures correct PLC program execution when configuring new automation control modules? (7 Marks)

- A. Random tag assignment
- B. Skip hardware checks
- C. Verify I/O mapping
- D. Ignore module status

Q10. What action helps prevent logic errors when designing ladder programs for robotic applications? (7 Marks)

- A. Validate rung sequence
- B. Rush program creation
- C. Ignore interlocks
- D. Avoid test cycles

Q11. Which method ensures PLC communication links operate reliably during configuration of SCADA systems? (8 Marks)

- A. Skip communication tests
- B. Test network connectivity

- C. Random IP changes
- D. Disable protocol settings

Q12. What should an engineer confirm to avoid equipment faults during PLC parameter configuration? (8 Marks)

- A. Use default values
- B. Set correct parameters
- C. Bypass safety limits
- D. Avoid cross-checking

CSC/N0468. Carry SCADA System Design and Maintenance

Q13. Which SCADA design activity ensures reliable communication between PLC devices and the supervisory monitoring server? (7 Marks)

- A. Configuring networks
- B. Arranging chairs
- C. Painting walls
- D. Shifting tables

Q14. Which maintenance step helps identify causes of slow SCADA response during real-time industrial data processing? (7 Marks)

- A. Cleaning windows
- B. Changing posters
- C. Checking network load
- D. Updating staff list

Q15. Which SCADA configuration parameter must be validated to avoid delayed alarm notifications during robotic process monitoring? (8 Marks)

- A. Alarm thresholds
- B. Floor color
- C. Meeting schedule
- D. Desk arrangement

Q16. Which routine SCADA inspection task ensures stable data acquisition from distributed robotic field sensors? (8 Marks)

- A. Moving office plants
- B. Adjusting curtains
- C. Replacing carpets
- D. Verifying I/O modules

CSC/N0469. Perform Integration of Robotics and Automation Systems

Q17. Which integration step ensures synchronized operation between industrial robots and PLC-controlled automation processes? (7 Marks)

- A. Mapping I/O signals
- B. Cleaning panels
- C. Changing posters
- D. Rearranging chairs

Q18. Which verification task confirms correct data exchange between SCADA interface and integrated robotic control modules? (7 Marks)

- A. Adjusting lighting
- B. Testing communication
- C. Updating notice board
- D. Repainting workspace

Q19. Which configuration activity ensures robots follow correct sequence when integrated into automated production workflows? (8 Marks)

- A. Setting logic steps
- B. Moving tables
- C. Changing room color
- D. Recording attendance

Q20. Which validation step ensures robotic actuators respond accurately to PLC program commands during system integration? (8 Marks)

- A. Decorating office walls
- B. Organizing files
- C. Polishing cabinets
- D. Checking motion feedback

CSC/N0470. Conduct Training and Documentation

Q21. Which training activity ensures operators clearly understand updated PLC-SCADA procedures for automated system handling? (7 Marks)

- A. Demonstrating workflows
- B. Changing wall paint
- C. Rearranging chairs
- D. Updating cafeteria menu

Q22. Which documentation step guarantees accurate recording of modifications made to integrated robotic automation control logic? (7 Marks)

- A. Cleaning windows
- B. Updating revision logs
- C. Shifting tables
- D. Adding posters

Q23. Which essential training component helps maintenance staff correctly troubleshoot SCADA alarms during robotic operations? (8 Marks)

- A. Explaining alarm types
- B. Adjusting curtains
- C. Painting doors
- D. Changing carpet

Q24. Which documentation task ensures new team members quickly learn operating procedures for all automation subsystems? (8 Marks)

- A. Updating cubicle layout
- B. Decorating office walls
- C. Replacing plants
- D. Creating user manuals

CSC/N1339. Collaboratively Coordinate with the Team

Q25. Which coordination practice ensures smooth information flow between robotics programmers, PLC engineers, and SCADA operators? (7 Marks)

- A. Sharing daily updates
- B. Changing wall color
- C. Rearranging desks
- D. Adding office plants

Q26. Which team communication method helps resolve automation workflow issues quickly during integrated robotic system operations? (7 Marks)

- A. Moving cabinets
- B. Painting corridors
- C. Conducting brief meetings
- D. Decorating workspace

Q27. Which collaborative approach ensures alignment between robotic integration tasks and scheduled PLC-SCADA maintenance activities? (8 Marks)

- A. Planning jointly
- B. Adjusting curtains
- C. Replacing posters
- D. Changing carpet

Q28. Which teamwork strategy supports timely troubleshooting when robotic actuators or PLC modules show unexpected faults? (8 Marks)

- A. Updating notice board
- B. Organizing files
- C. Polishing furniture
- D. Coordinating responses

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

Q29. Which safety practice must be followed before performing maintenance on live PLC panels or robotic systems? (5 Marks)

- A. Isolating power supply
- B. Cleaning windows
- C. Rearranging desks
- D. Updating notice board

Q30. Which health guideline helps prevent accidents when working around moving robotic arms and automated machinery? (5 Marks)

- A. Adjusting curtains
- B. Maintaining safe distance
- C. Painting walls
- D. Replacing carpets

Q31. Which environmental practice should be followed while disposing used cables and damaged electronic automation components? (5 Marks)

- A. Using e-waste bins
- B. Moving tables
- C. Adding posters
- D. Changing wall décor

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

Q32. Which soft skill helps a PLC-SCADA engineer effectively communicate technical problems to non-technical team members? (4 Marks)

- A. Decorating office
- B. Painting walls
- C. Reorganizing desks
- D. Clear communication

Q33. Which personal attribute ensures consistent performance and accountability while managing complex robotics automation projects? (4 Marks)

- A. Reliability
- B. Adjusting curtains
- C. Replacing carpets
- D. Moving office plants

Q34. Which teamwork skill is essential for collaborating with engineers during PLC-SCADA system integration and troubleshooting tasks? (6 Marks)

- A. Updating notice board
- B. Organizing files
- C. Cooperation
- D. Rearranging chairs

Q35. Which time management practice helps a Robotics Engineer complete automation project milestones within scheduled deadlines? (6 Marks)

- A. Prioritizing tasks
- B. Cleaning windows
- C. Changing wall color
- D. Adding posters