Process Automation - PCS7 PCS7 Basic Engineer Testing

General Information

Course Code: SCT-PCS7CT1A Length: 2 Hours

Audience

This Siemens PCS7 Basic Engineer Exam is intended for PCS7 engineers who have met the prerequisites below.

Prerequisites

- PCS7 System Engineering 2 or
- PCS7 System Engineering 2 Virtual

Profile

This is a multiple-choice written performance exam designed to assess the basic skills of a PCS7 Engineer. This is a skills-based certification test covering topics taught during PCS7 Engineering 2.

Topics

- 1. PCS7 Documentation and Online Support
- 2. PCS7 system overview
 - a. Automation System
 - b. Distributed I/O system
 - c. Combined Engineering/Operator system
 - d. Networked stations and systems / Industrial Ethernet
 - e. Simulation Tools
 - f. Overview configuration steps for AS and OS
 - g. SIMATIC PCS 7 Engineering Toolset
 - h. What is a Multiproject?
 - i. Initial settings of SIMATIC Manager
 - j. Setting up a Multiproject
 - k. Language for Display Devices
 - I. Archiving and retrieving a project, library or multi project
- 3. Station and network configuration Principles and relationships
 - a. PC Station Configuration
 - b. AS Station Configuration in the project
 - c. Distributed IO with PROFINET
 - d. PROFINET Configuration
 - e. HW Config Diagnostics
- 4. Component View and Plant View
 - a. Basics for charts and blocks
 - b. Organization blocks
 - c. Run Sequence

- d. Different groups of blocks
- e. Driver Blocks
- f. Trend Display
- g. Dynamic Display
- 5. Basics control functions
 - a. Introduction to APL blocks
 - b. Textual interconnections
 - c. Alarm blocks in PCS 7
 - d. Process Object View
- 6. Basics Operating and Monitoring
 - a. Plant Hierarchy Settings
 - b. OS-AS Connection
 - c. Project type
 - d. Compilation
 - e. Block Icons and Faceplates
 - f. Sequential control with SFC
 - g. Sequences on the OS
 - h. User administration
 - i. Picture navigation
 - j. OS Project Editor
 - k. Time synchronization
 - I. Lifebeat Monitoring
 - m. WinCC Basic Objects & special additional for PCS 7
 - n. Group display
 - o. Alarms
 - p. Read Back
 - q. Smart Alarm hiding
 - r. Status Displays
 - s. Archive configuration
 - t. Configuration of WinCC Controls
- 7. Locking functions and operating modes
 - a. Local/Remote control and other operating modes
 - b. Chart Reference Data
 - c. The Import Export Assistant (IEA)
 - d. New Type Model
 - e. AS-AS Communication
 - f. Configuration in Run
 - g. Simulation
 - h. Forcing block I/Os
- 8. SCL Basics
 - a. Structure of a user block
 - b. Block structured by templates
 - c. Attributes
 - d. Settings to the compiler
 - e. Symbolic Name
 - f. Handling of block types
 - g. TCiR Type Change in Run
 - h. Visualization
- 9. Server-Client System
 - a. System architecture
 - b. Configuration Steps

Unrestricted