



National Craft Assessment and Certification Program S P E C I F I C A T I O N S

INSTRUMENT TECHNICIAN V3 (TINST12_02)

Released May 2005

Overview

This written assessment is a two-hour closed-book examination. You will be permitted to use a basic function, non-printing calculator during the examination. The assessment center will provide any necessary pencils. No extra papers, books, notes or study materials are allowed in the testing area.

Study Material

All NCCER written assessments are referenced to Contren® Learning Series modules listed in the content. You may order modules from Pearson (800.922.0579) or from NCCER's Online Catalog at www.nccer.org.

Assessment Development

All questions on each assessment have been developed and approved by subject matter experts from the respective craft. Assessment development and administration is under the direction of Prov™, NCCER's testing partner.

Credentials

NCCER will send appropriate credentials (certificate, wallet card and official transcript) to the assessment center upon successful completion of the written assessment.

Training Prescription Reports

Each candidate will have access to individual results of the written assessment from Prov's website at www.provexam.com. This training prescription will include the overall score and results by topic area.

National Registry

Assessment results will be maintained in NCCER's National Registry and become a part of each candidate's training records. These records are stored and become a portable record of the candidate's training and assessment achievements.

Focus Statement

The instrument technician is expected to demonstrate competency in the following areas: calibration, commissioning, startup, maintenance, and troubleshooting. The technician also adheres to safe working practices at all times.

Written Assessment Contents:

Module	Topic Area	# of Questions
12102-01	Electrical Safety	4
12105-01	Metallurgy for Instrumentation	4
12107-01	Instrumentation Drawings and Documents, Part 1	4
12108-01	Gaskets and Packing	4
12109-01	Lubricants, Sealants, and Cleaners	4
12110-01	Flow, Pressure, Level, and Temperature	6
12201-03	Craft-Related Mathematics	6
12202-03	Instrumentation Drawings and Documents, Part 2	4
12204-03	Process Control Theory	6
12205-03	Detectors, Secondary Elements, Transducers, and Transmitters	5
12206-03	Controllers, Recorders, and Indicators	4
12207-03	Control Valves, Actuators, Positioners	5
12208-03	Relays and Timers	4
12209-03	Switches and Photoelectric Devices	4
12210-03	Filters, Regulators and Dryers	4
12305-03	Instrumentation Electrical Circuitry	4
12306-03	Grounding and Shielding of Instrumentation Wiring	4
12401-03	Digital Logic Circuits	4
12402-03	Instrument Calibration and Configuration	7
12403-03	Performing Loop Checks	4
12404-03	Troubleshooting and Commissioning a Loop	4
12405-03	Tuning Loops	4
12406-03	Programmable Logic Controllers	4
12407-03	Distributed Control Systems	4
12408-03	Analyzers	4
	Total Number of Questions	111

The cut score for this assessment is 70%.