NOTE ON PERFORMANCE TESTING

Performance Profile Sheet(s) are included in a format that can be easily photocopied for each trainee. This examination is designed to measure competency in the tasks taught in each module.

Please note the number of tasks to be tested while teaching each module. Each trainee should be tested on all the tasks listed on the Performance Profile Sheet(s). Before performance testing, the instructor should brief the trainees on:
• Test objectives and criteria
• Safety precautions
• Procedures for each task to be tested

The instructor administering the performance testing should also do the following:
• Ensure that all of the needed equipment is available and operating properly.
• Set up the testing stations.
• Organize and administer the test in a way that allows for optimal performance.
• Complete the Performance Profile Sheet(s) for each trainee by assigning a pass/fail score for each listed task. Also, include the testing date, and start and end times for each task in the rating boxes.
• Monitor adherence to all safety regulations and precautions.
• Provide adequate supervision to prevent injuries.
• Take immediate and effective action to remedy any emergency.

Performance Testing
If Performance Testing is done as part of the NCCER Standardized Craft Training Program, the following conditions must be met:
1. The Craft Instructor must hold valid NCCER instructor certification.
2. The training must be delivered through an Accredited Training Sponsor recognized by NCCER.
3. The specific performance testing must be completed successfully.
4. The results of the testing must be recorded on the Registration of Training Modules Form. This form must be provided to the local Accredited Training Sponsor to be forwarded to the NCCER Registry.
Craft: Instrumentation Level 3  
Module: Module One, 12207-16  
Module Title: Control Valves, Actuators, and Positioners

TRAINEE NAME: ________________________________

TRAINING PROGRAM SPONSOR: ________________________________

INSTRUCTOR: ________________________________

Rating Levels:  
(1) Passed: performed task  
(2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Install a positioner on a control valve.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Locate bridgwall markings on a globe valve and determine the stem and packing orientation.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Identify different actuators and positioners from instructor-provided drawings or during a field survey.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Task Details

**Objective 2**
- **Task:** Identify various thermocouple types using a multifunction calibrator and a calibrated heat source.
- **Rating:** [ ] Passed: performed task
- **Date:**
- **Start Time:**
- **End Time:**

**Objective 2**
- **Task:** Identify at least three instructor-chosen thermocouples by color code.
- **Rating:** [ ] Passed: performed task
- **Date:**
- **Start Time:**
- **End Time:**

**Objective 4**
- **Task:** Connect a communication device to a smart transmitter and document the existing settings.
- **Rating:** [ ] Passed: performed task
- **Date:**
- **Start Time:**
- **End Time:**

*When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.*
Instrumentation Level 3 Module Three, 12305-16

Instrumentation Electrical Circuitry

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Calculate the resistance range of three resistors using their color bands. Using a multimeter, measure the actual resistance of each resistor and determine if it is within the specified tolerance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Connect three resistors in series and calculate the total nominal resistance using the color bands and the appropriate formula. Using a multimeter, measure the actual total series resistance and compare it to the calculated value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Connect three resistors in parallel and calculate the total nominal resistance using the color bands and the appropriate formula. Using a multimeter, measure the actual total parallel resistance and compare it to the calculated value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also, list the date the testing for each task was completed.

When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.
Craft: Instrumentation Level 3  
Module: Module Four, 12208-16  
Module Title: Relays and Timers

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select and connect various types of relays and timers to create a functional circuit as directed by the instructor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rating Levels:
(1) Passed: performed task  
(2) Failed: did not perform task

Also, list the date the testing for each task was completed.

Recognition:
When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.
Craft: Instrumentation Level 3  
Module: Module Five, 12209-16  
Module Title: Switches and Photoelectric Devices

---

**TRAINEE NAME:**

---

**TRAINING PROGRAM SPONSOR:**

---

**INSTRUCTOR:**

---

**Rating Levels:**

(1) Passed: performed task  
(2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

**Recognition:**

When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.

---

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Select and connect various switches into a functional circuit as directed by the instructor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Select and connect various photoelectric devices into a functional circuit as directed by the instructor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Craft: Instrumentation Level 3  
Module: Module Six, 12307-16  
Module Title: Terminating Conductors

TRAINEE NAME: ________________________________

TRAINING PROGRAM SPONSOR: ________________________________

INSTRUCTOR: ________________________________

Rating Levels:  
(1) Passed: performed task  
(2) Failed: did not perform task  
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Physically distinguish between various types of cable, including twisted-pair, non-twisted-pair, and coaxial.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Terminate conductors using crimp connectors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Terminate shielded cable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Install a coaxial cable connector.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Test a cable using telephones.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Inspect a cable for defects and classify any defects found.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Craft: Instrumentation Level 3  
Module: Module Seven, 12306-16  
Module Title: Grounding and Shielding of Instrumentation Wiring

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify and explain the function of an equipment ground identified in an instructor-provided drawing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Draw an example of a ground loop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Identify and explain the function of an equipment shield in an instructor-provided drawing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBJECTIVE</td>
<td>TASK</td>
<td>RATING</td>
<td>DATE</td>
<td>START TIME</td>
<td>END TIME</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>1</td>
<td>Draw and accurately label a block diagram for a basic process control loop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>From a piping and instrumentation drawing (P&amp;ID), identify the major components of each of these process control loop types:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Feedforward</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cascade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ratio</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Craft: Instrumentation Level 3  
Module: Module Nine, 12206-16  
Module Title: Controllers

INSTRUCTOR: ________________________________

Rating Levels: (1) Passed: performed task    (2) Failed: did not perform task
Also, list the date the testing for each task was completed.

Recognition: When testing for the NCCER Training Program, be sure to record Performance testing results on the Registration of Training Modules form, and submit the results to the Training Program Sponsor.

<table>
<thead>
<tr>
<th>OBJECTIVE</th>
<th>TASK</th>
<th>RATING</th>
<th>DATE</th>
<th>START TIME</th>
<th>END TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Given a schematic for a pneumatic controller, explain the purpose and operation of all major components.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Given a block diagram of an electronic controller, explain the function of each block.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>