

021306T4ICI

INDUSTRIAL CONTROL AND INSTRUMENTATIONS LEVEL 6

ENG/OS/IC/CR/3/6

Manage Instrumentation and Process Control Systems

July/ Aug 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND
CERTIFICATION COUNCIL (TVET CDACC)**

PRACTICAL ASSESSMENT GUIDE

Time: 3 Hours

ASSESSOR INSTRUCTIONS

1. Assess the candidate as the practical progresses observing the critical areas.
2. You are required to mark the practical as the candidate performs the tasks.
3. You are required to take pictures and video clips at critical points.
4. Ensure the candidate has a name tag and registration code at the back and front.

Candidate's name & Registration No.			
Assessor's name and registration code			
Unit of Competency			
Venue of Assessment			
Date of assessment			
Items to be evaluated: <i>(Award appropriate marks for each item evaluated)</i>	Marks available	Marks obtained	Comments
OBSERVATION CHECKLIST			
1. Safety awareness			
i. Safety boots <i>(Award 1 or 0)</i>	1		
ii. Apron <i>(Award 1 or 0)</i>	1		
iii. Proper handling of tools <i>(Award 1 or 0)</i>	1		
iv. Proper handling of equipment <i>(Award 1 or 0)</i>	1		
v. Housekeeping and waste disposal <i>(Award 1 or 0)</i>	1		
Sub total	05		
INSTALLATION, CONFIGURATION & TESTING OF A TEMPERATURE CONTROLLER			
Task.1 Set out the temperature controller & accessories on the table or wooden platform provided. <i>award 5 marks for setting</i>	5		
Sub total	05		
TASK.2 Correctly connected power supply to the temperature controller as per manufacturer specification. Connect the heater (bulb) to the power supply (DC)	5 5		

<i>award 5 marks for each connection</i>			
Sub total	10		
1. Correctly wired the following components to the temperature controller: <ul style="list-style-type: none"> • Temperature sensor • Heating element <i>award 5 marks for each wiring</i>	5 5		
Sub total	10		
Task.3 Tested the installed circuit for proper functioning as below: <ul style="list-style-type: none"> • Varied temperature set point as follows- sp1=25°C and & sp2=50 °C <i>award 10 marks for correct variation</i> • Documented observations for each set point change as below: <ol style="list-style-type: none"> a. when the process value is above set point sp1 b. when the process value is below set point sp2 <i>award 5 marks for each observation</i>	10 5 5		
Sub total	20		
GRAND TOTAL	50		
$\frac{x}{50} \times 100\%$			
The candidate was found to be: (Please tick (√) as appropriate)			
<input type="checkbox"/> Competent	<input type="checkbox"/> Not yet competent		

<i>(The candidate is competent if the candidate scores 50% and above)</i>			
Candidate's signature:		Date	
Assessor's signature:		Date	