

071605T4MCT

MECHATRONICS TECHNOLOGY LEVEL 5

ENG/OS/MC/CR/06/5

Operate Programmable Logic Control (PLC) Systems

July/August 2025



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

CU IST

S/NO	ITEMS	QUANTITY (per candidate)	PROVIDED BY
1.	Computer with PLC programming software	1	Institution
2.	Push button switch, NO (Green)	1	
3.	Push button switch, NO (Red)	1	
4.	Capacitive proximity sensor (24V DC)	1	
5.	Inductive proximity sensor (24V DC)	1	
6.	Single phase motor	1	
7.	Contactor (24V DC coil)	1	
8.	Indicator lights, 24V DC (Green)	1	
9.	Indicator lights, 24V DC (Red)	1	
10.	Single-strand control wires (1.5mm ² , PVC insulated)	5 metres	
11.	3 core flex cable 1.5mm ² (Power)	2 metres	
12.	PLC communication cable	1	

13.	Double pole MCB	1	
14.	Single pole MCB	1	
15.	Connectors and terminals	5	
16.	Cable lugs, 1.5mm ² (fork and pin type)	30	
17.	Siren alarm (24V DC)	1	
18.	3/2 solenoid with spring return Directional Control Valve	1	
19.	Single acting cylinder piston	1	
20.	Compressor	1	
21.	Pressure gauge	1	
22.	Pneumatic pipes	2 metres	
23.	24V DC power supply	1	
24.	AC power source	1	
25.	Multimeter	1	
26.	Wire cutter	1	
27.	Wire stripper	1	
28.	Crimping tool	1	
29.	Screwdrivers (flat and Phillips head)	2	
30.	LOTO tag	1	
31.	Labeling stickers	10	
32.	Metallic object	1	
33.	Plastic object	1	