

071605T4MCT

MECHATRONICS TECHNOLOGY LEVEL 5

ENG/OS/MC/CR/03/5

Maintain Mechatronic Systems Instrumentation and Control

Nov/Dec 2024



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

PRACTICAL ASSESSMENT

OURS

INSTRUCTIONS TO CANDIDATE:

1. You are required to perform the foll

TASK 1: Wire the Components

- i. Connect the inputs and outputs to the PLC

TASK 2: Program PLC

- i. Develop an input/output distribution table
- ii. Program the PLC such that the motor runs for 5 seconds when a metallic object is placed in front of an inductive sensor. When plastic object is placed in front of capacitive sensor, the motor runs for 10 seconds.
- iii. Debug and upload the Program to the PLC

TASK 2: Test the system

- i. Operate the system.
- ii. Disconnect the components

2. You are provided with the following resources for the tasks.

- i. 24V DC power supply
- ii. AC power supply
- iii. PLC module
- iv. PLC communication cable
- v. 24V DC Motor
- vi. Capacitive sensor
- vii. Inductive sensor
- viii. Digital Multimeter
- ix. Screw Drivers
- x. Computer station Installed with appropriate PLC programming software
- xi. Connecting Wires
- xii. Plastic component
- xiii. Metallic component