

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

Qualification Code : 071606T4MCT

Qualification : Mechatronics Technician Level 6

Unit Code : ENG/OS/MC/CR/06/6/A

Unit of Competency: Operate Mechatronic Systems

PRACTICAL ASSESSMENT

INSTRUCTIONS TO CANDIDATE

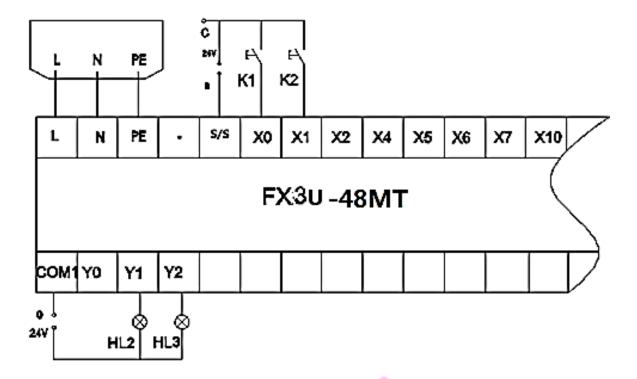
- 1. You will be allocated **3 HOURS** to complete the practical task.
- 2. The assessor will be checking how you are performing operations

You have been provided with the following

- 1. Computer
- 2. FX3U-48MT PLC module
- 3. programming cable
- 4. Instruction training unit with:
 - a) 240V ac power supply(live, Neutral ad Earth)
 - b) 24V DC power supply module
 - c) Connecting cables.
 - d) 2 push Buttons
 - e) Two 24V Lamps

You are required to:

- 1. Following installation manual below, install the PLC and do the wiring by connecting the external circuit of the PLC
- 2. Write PLC program and load to PLC edit, compile, debug loading user program.
- 3. Operate on site
 - ✓ Note: Cut off the power of PLC when plug programming cable.
 - ✓ Program to make the Y1 outlet of PLC output square wave with 3 seconds pulse width, press K1 to count the input pulse of PLC. When count value is 10, the outlet Y2 of PLC is "1", press K2 to reset the outlet Y2 of PLC.
- 4. Run the user program and observe program operational results.



List I/O distribution t able, and write PLC program according to requirement.

PLC input	Related	PLC output	Related
	equipment		equipment
	6		
X0	K1	Y1	HL2
X1	K2	Y2	HL3

