

FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA 40450 SHAH ALAM

## **ASSIGNMENT 1**

SEMESTER	:	NOVEMBER 2004 – MARCH 2005
COURSE	:	SELECTED TOPIC – PLC
COURSE CODE	:	KJE555
LECTURER	:	EN. MOHD HEZRI FAZALUL RAHIMAN

## **INSTRUCTIONS TO STUDENTS**

- 1. Complete this assignments using SYSWIN 3.4.
- 2. Use this page as cover page for your assignment.
- 3. Deadline for assignment submission: 1 MARCH 2005

Please write the following particulars.

NAME	:							
KP UITM	:							

## ASSIGNMENT 1

The elevator shown in **Figure 1** employs a platform to move objects up and down. The global objective is that when the UP button is pushed, the platform carries something to the up position, and when the DOWN button is pushed, the platform carries something to the down position. The following hardware specifications define the equipment used in the elevator:

Output element: M1 = Motor to drive the platform up M2 = Motor to drive the platform down

Input element:

LS1 = Normally Close (NC) limit switch to indicate UP position LS2 = NC limit switch to indicate DOWN position START = Normally Open (NO) push button for START STOP = NO push button for STOP UP = NO push button for UP command DOWN = NO push button for DOWN command

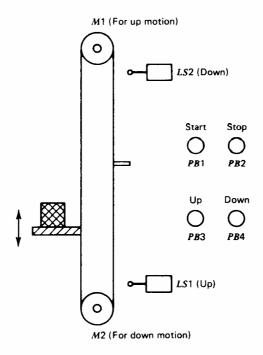


Figure 1: Elevator system for Assignment 1

Prepare a programmable controller ladder diagram.

## **PRINTING GUIDE:**

- 1. Click Menu > Print
- 2. Unchecked all check box except for Ladder Diagram as shown in the following figure.

Print		×
Print sections:		
Front Page		
Block Overview		Options
🗵 Ladder Diagram		Options
Statement List		Options
Symbol Lists		Options
Cross References		Options
Expansion Functions		
PLC Setup		
□ <u>1</u> /0 Table		
Network range:		
All	<u>R</u> ange	Printer Setup
Output options:		
Graphics Mode Courier New 8	Set <u>up</u>	OK Cancel

3. Click **Options** button for Ladder Diagram section. Unchecked all the check box as shown in the following figure.

Ladder Diagram Options		×
Network separators: Print separators Include gommonts	Print separators: Ar editor Every network Every group	
General: Print Step numbers in Print Statement List Print Address List	<u>m</u> argin	
Cross Reference:	Print options: Compact Full	
Page Breaks: E <u>n</u> able page breaks	Page breaks before: Every network Every group Every block	OK Cancel

4. Click OK for Ladder Diagram Options and OK for Print menu. The printing result is as shown in the following figure.

Ladder Diagram - 1	:1			.SWP 2/04/05 4:21:14 Page 1
000.00 START 010.00 CR1	000.01 И STOP	010.00 CR1		
010.00	000.02 M	010.01 VH	010.02 	
010.00	000.03 N LS1	010.06 N VOUT	010.03 V1	
010.00	000.02	010.06 И VOUT	010.01 OH VH	