

College of Industrial Technology
King Mongkut's University of Technology North Bangkok

Final Examination of Semester 1

Year: 2014

Subject: 341131 Electrical Drawing I

Section: 5-6

Date: 12 December 2014

Time: 08.00-10.00

Name..... ID..... Field of Study.....

Instructions

1. Cheating will result in failure of all classes registered for the current semester. Students who are caught cheating will also be denied registering for the following semester.
2. No documents are allowed to be taken out of the examination room.
3. Textbook, calculator and dictionary are NOT allowed.
4. No any electronic communication devices are allowed in the exam room.
5. The examination has 6 pages (including this page), 1 problem and a total score of 30 points.
6. Write all your answers on this exam sheet.

1. One-line diagrams of first floor and second floor plans are shown in Figure 1 and Figure 2, respectively. Draw the control diagrams of all circuits for these floor plans. (30 points)

The first floor plan is as follows.

- kWh meter and Load center (LC) are installed.
- S1 and S2 control L1 and L2.
- S3 controls L3 and L4.
- S4 controls L5 and L6.
- S5 controls E1.
- S6 controls E2.
- S7 controls L7.
- S8 (on 1st floor) and S9 (on 2nd floor) control L8.
- 4 plug sockets are installed.

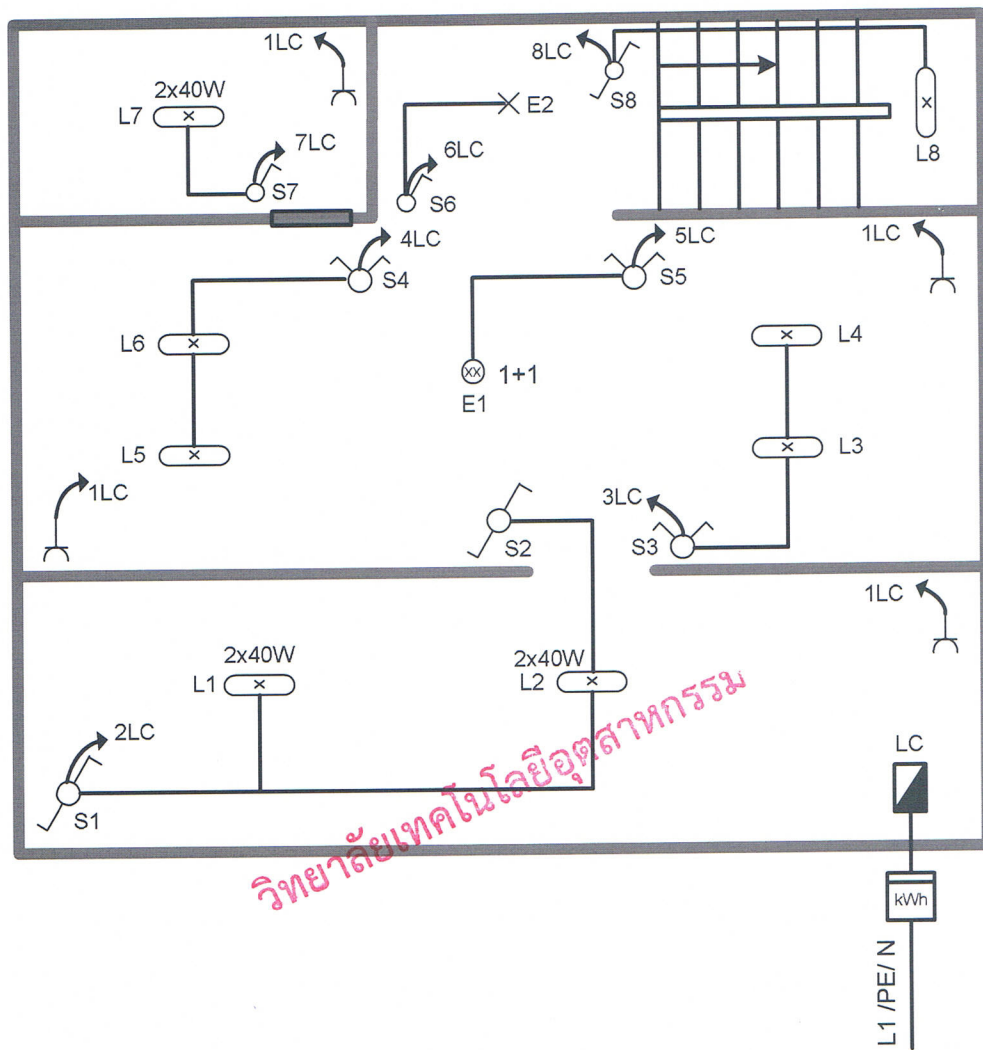


Figure 1: First Floor Plan

The second floor plan is as follows.

- S10 controls E3 and E4
- S11 and S12 control E5 and E8
- S13 controls E6 and E7
- S14 controls L9
- S15 controls L10
- S16 controls L11
- 5 plug sockets are installed.

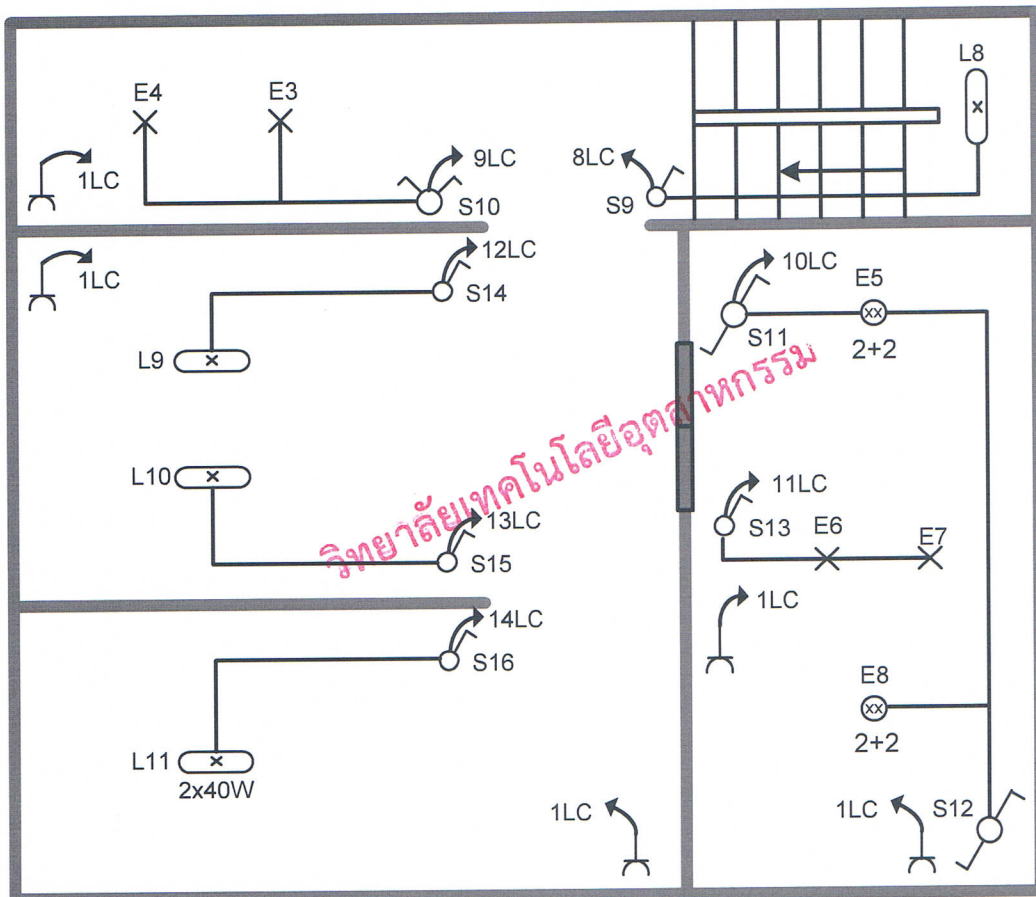


Figure 2: Second Floor Plan

Name..... ID.....

Control diagram of 1st floor plan (for 1LC-4LC)

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Control diagram of 1st floor plan (for 5LC-8LC)

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Control diagram of 2nd floor plan

วิทยาลัยเทคโนโลยีอุตสาหกรรม

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