**AMERICAN INTERNATIONAL**A close up of a sign

Description automatically generated

**UNIVERSITY-BANGLADESH**

**Assignment Cover Sheet**

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| Assignment Title: | **Drawing the proper electric Fittings and Fixture Layout based on a Civil plan using AutoCAD software and understanding BNBC** | | | |
| Assignment No: | **Experiment 7** | | Date of Submission: | **20-11-2022** |
| Course Title: | **Computer Aided Design & Drafting** | | | |
| Course Code: | **BAE2101** | | Section: D |  |
| Semester: | FALL | 2022-23 | Course Teacher: | **Dr. Md. Mahadi Hasan** |

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| ***Faculty use only*** | | |
| FACULTYCOMMENTS | **Marks Obtained** |  |
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|  | **Total Marks** |  |
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**Objective:**

To familiarize students with proper understanding of drawing electric fittings and  
fixture distribution based on civil planning using AutoCAD software. Moreover, another  
objective of this experiment is the practical safeguarding of persons, and of buildings and their contents from electrical hazards. The experiment also constitutes minimum standards for electric wiring and equipment installed within or on public and private buildings and other premises.

**Symbols List:**

F – Fan  
L – Light  
T – Tube Light  
K – One Kind of Light  
TV – Television  
TE – Telephone  
M – Motor  
CH – Hanging Light  
ML – Multiple Light  
CB – Circuit Breaker  
SB – Switch Board  
SS – Switch Board Socket  
ST – Two Pin Socket  
SL – Skirting Level Socket  
TS – TV Socket  
15\_1 – 3 Pin Socket (15 A)  
TJB – Telephone Junction Board;  
AJB – Antenna Junction Board  
C1, C2.... – No of Cables;  
1,2,3......... – No of SB  
SDB – Sub Distribution Board,  
MDB – Main Distribution Board

**Discussion and Conclusion:**

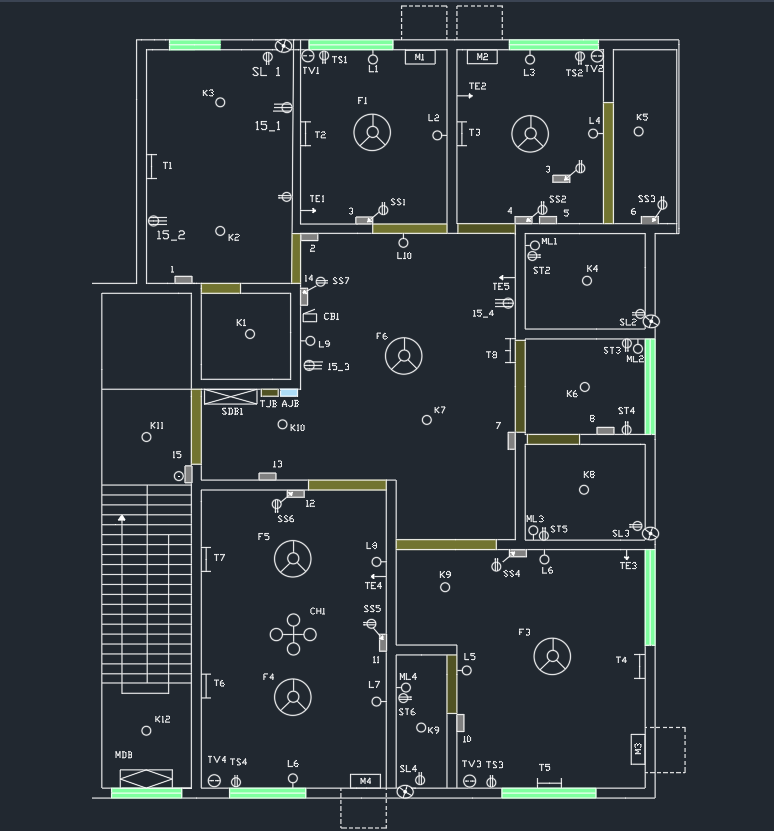
The drawing was done using the AutoCAD software. First of all, the floor plans were drawn. While drawing I faced some difficulties with the measurements as they were missing in the sample drawing. But after analyzing the sample drawing, I came to know that most of the room sizes are identical and then it became easier to make the drawing. So used previous experiences and done some parallel calculations for drawing the rooms.

After the completion, followed the sample drawing and added all the components. Different components are used in the drawing and they were used more than once. So before placing those components I prepared every required component drawing separately and later on made copy and pasted according to the position. Some of the components are positioned at center of the room so those measurements were also done before placing the components.

Among some of the components, they are placed according to the room position. So, I used the rotate option and changed the components to match the sample drawing components and then placed them accordingly. And later on, for each component, used the symbol naming according to the sample drawing using the text option.

The main challenge of the task was drawing different components and placing them in the right position. There were many components, so this drawing took a large time to finish. If the components were previously drawn or saved the drawing task could have been easier.

**AutoCAD Drawing Image:**



**References:**

1. Kristen S. Kurland, “AutoCAD 2004, 2D Training Manual”.  
2. Bob McFarlane, “Beginning AutoCAD 2004”.  
3. David Byrnes and Mark Middlebrook, “AutoCAD 2007 For Dummies”.  
4. Bangladesh National Building Code (BNBC) – 1993, part 8.