

Godown wiring

Job/Aim: To learn and implement godown wiring

Tools and equipment : 1 MCB of rating 120V or 230V, 5A, 1 SPST (One-way) Switch, 2 SPDT (Two way Switches), 5A, 3 light bulbs of rating 40V, 2 wires of 1.2 mm PVC.

Godown

★ ~~Wiring~~ wiring diagram (Working)

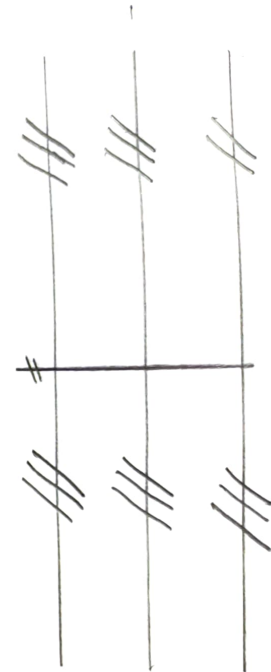
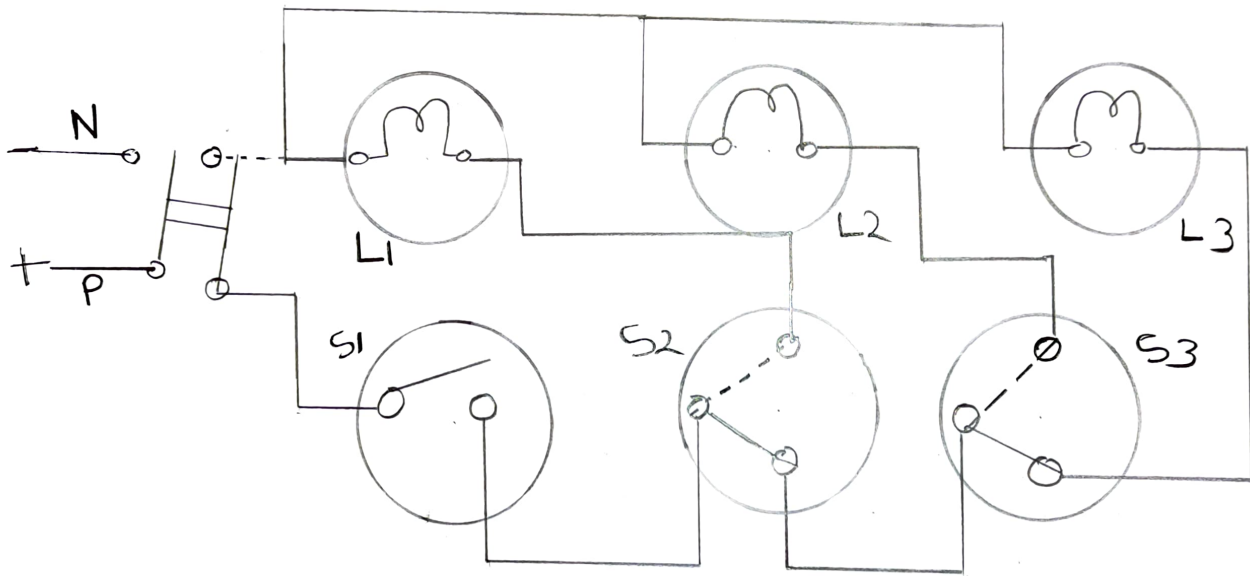
→ The phase is connected to the common pole of the first switch. The first throw of the switch has connected to the load. And the 2nd throw has connected to the common pole of the next switch. Initially, the common poles of all the switches are positioned to the 1st throw of the SPDT switch. So, in such an arrangement, changing the switch position to the 2nd throw OFF's previous load and ON the next one. By this arrangement, an infinite number of loads can be connected ~~to~~ in a sequence.

Switch S1 in the circuit is SPST while the other 2 are SPDT (see diagram). In godown wiring, the loads and switches are generally connected with equal spacing. The gauge of the wire or the load capacity of the wiring should be considered based on power rating on number of loads.

Use: 1.1) It saves energy as only one load is turned ON

1.2) It saves power as well as time

Conclusion: Thus, learned and implemented godown wiring successfully



L1, L2, L3 - LAMP 60W
 S1, - ONE WAY SWITCH ON
 S2, S3 - TWO WAY SWITCH

CIRCUIT DIAGRAM
 GODOWN WIRING

LAYOUT
 DIAGRAM

TERM :- 2021 - 2022

Date: -

SEM: I (FE)

SHOP: ELECTRICAL WIRING

KJ SOMAIYA COLLEGE
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 VIDYAVIHAR

Name: Mustafa Poonwala

Roll No: 16010421083

House wiring

Job/Aim: To learn basic house wiring (with 2 tubelights and a bulb having separate switches).

Tools: Screw driver, cutting pliers, ball peen hammer, Insulation Remover, tester.

Raw materials: Wooden wiring boards, silk wire, electrical bulbs, one-way switch, wooden round blocks, batten ramp holders, wire clips, nails, screws.

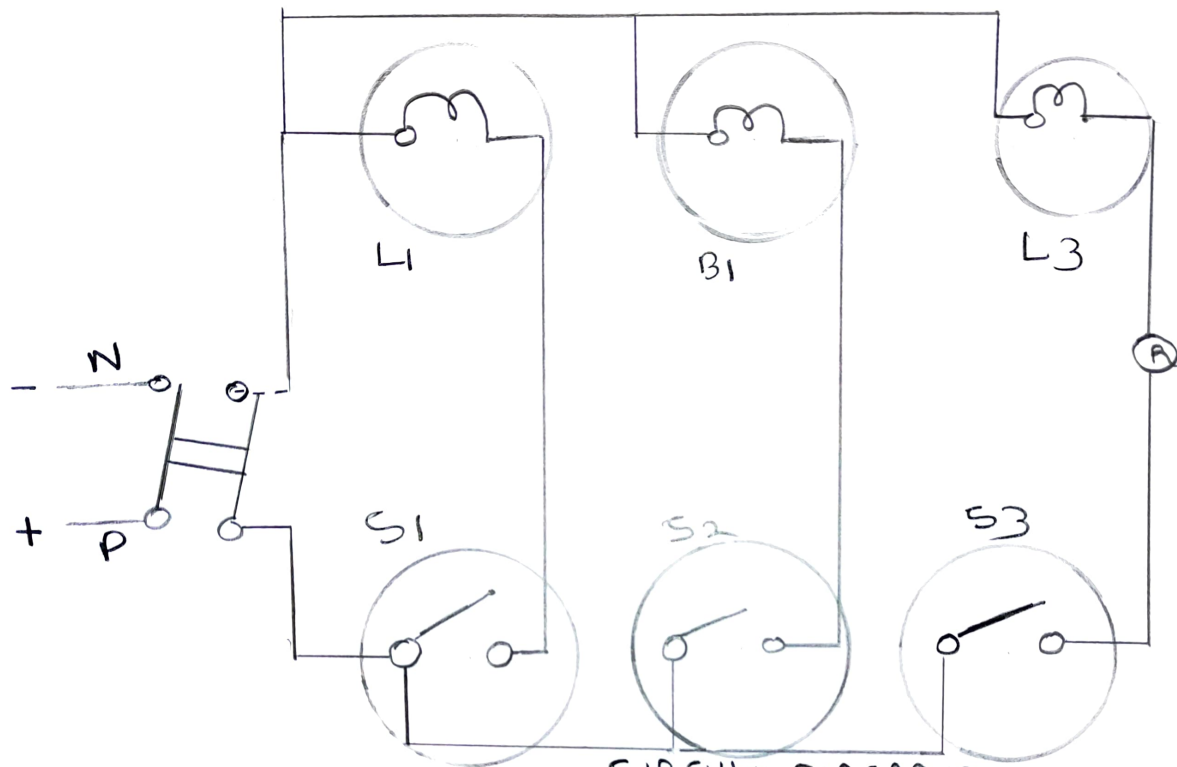
★ House wiring (Working)

→ First, the outline of the wiring diagram is marked on the wooden wiring board. Clips are nailed to the board. The wires are stretched and clamped with the clips.

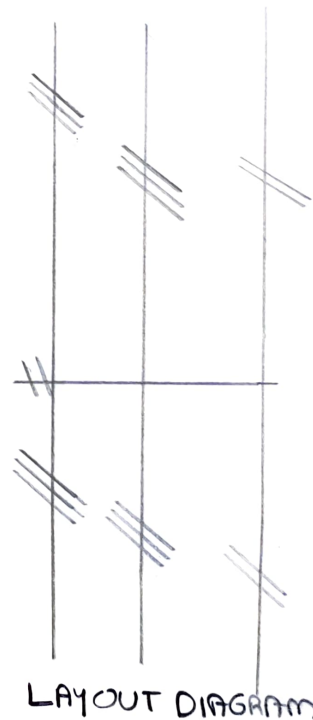
Next, round blocks are screwed on to the board, as per the diagram. After this, the wires are connected to the holders and the switch, which are then screwed on to the round blocks. Bulb and Tubelight is then fitted to the holders. In the final step, the wiring connections are tested by giving proper power supply.

Use: This type of wiring is used for entire interior wiring of the house.

Conclusion: Thus, we learned interior house wiring and implemented successfully.



CIRCUIT DIAGRAM
HOUSE WIRING



LAYOUT DIAGRAM

TERM: 2021-2022

DATE:-

SEM: I (FE)

SHP: ELECTRICAL WIRING

NAME: Mustafa Poonawala

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Staircase wiring.

Job/Aim: To wire a stair case arrangement using a two-way Switch

Tools: Two-way switches, bulb holders, Bulbs, Joint clips, wires, Screws, Ceiling rose, switch board, pliers and linetesters

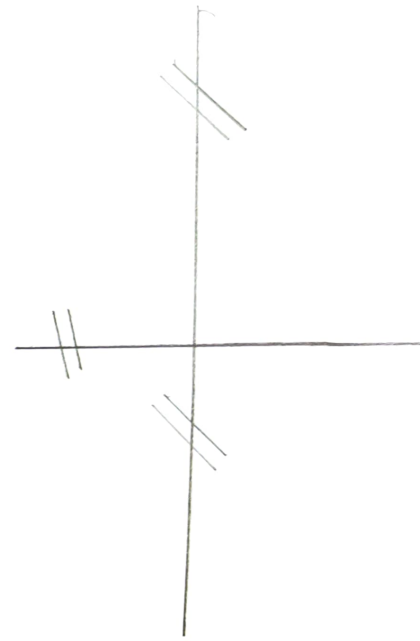
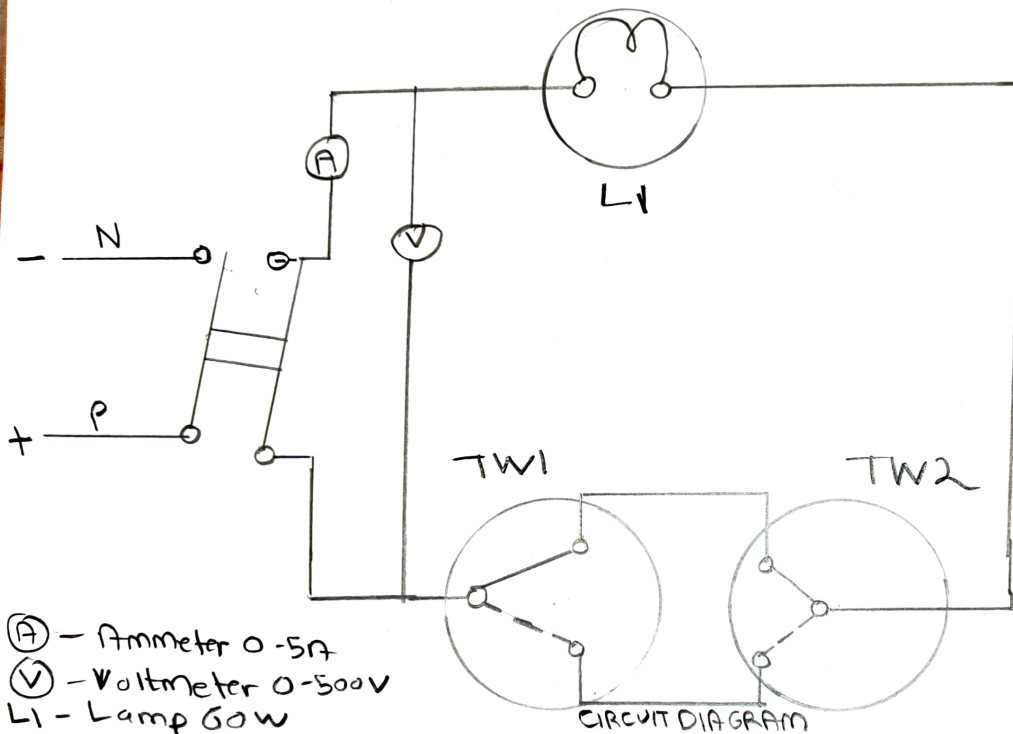
★ Staircase Wiring working:

The first pole and second pole of the SPDT switch S1 is connected to the corresponding first and the second pole of the SPDT switch S2. That is similar poles of both two switches are connected to each other.

The phase of the supply line is connected to the common pole of a switch. And the phase line of the load is taken from the common pole of the next switch. It makes an arrangement that, to close the circuit both the switches should be in the same position in order to make the 2 common poles in contact to achieve a closed circuit. Changing the ON/OFF condition of a single switch can determine whether the circuit is closed or open. Thus, in a staircase wiring, we can control load from both positions.

Use: 1- It provides flexibility for person & also encourage to save electricity.

Conclusion: Thus, the staircase wiring is completed and tested.



LAYOUT DIAGRAM

CIRCUIT DIAGRAM

STAIR CASE WIRING

- Ⓐ - Ammeter 0-5A
- Ⓥ - Voltmeter 0-500V
- L1 - Lamp 60W

TW1, TW2 - Two-way switch

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