

## Job Sheet

Name: Pangat Singh Roll no: 16010121045 Batch: A2

Name of experiment: Staircase wiring

Tools & equipment:

Insulated rubber gloves, goggles, tester, screwdriver, pliers, wire stripper.

Raw Material:

230 V AC supply, MCB, Two way switch ( $T_1$ ) ( $T_2$ ), multimeter, fuses, wires, light.

Procedure in brief:

- Connect the live wire from mains to 1<sup>st</sup> terminal of the fuse & 2<sup>nd</sup> terminal of fuse to the MCB.
- output of MCB is connected to middle terminal of two way switch ( $T_1$ )
- Top & bottom terminals of two way switch ( $T_1$ ) is connected to ~~light~~ top & bottom of ( $T_2$ ).
- Middle terminal of ( $T_2$ ) is connected to light.
- Neutral wire is connected to the light directly from MCB.

Use: More accessible and flexible for the user.

Conclusion: This way is called staircase wiring which makes a single road operable from two different spots.

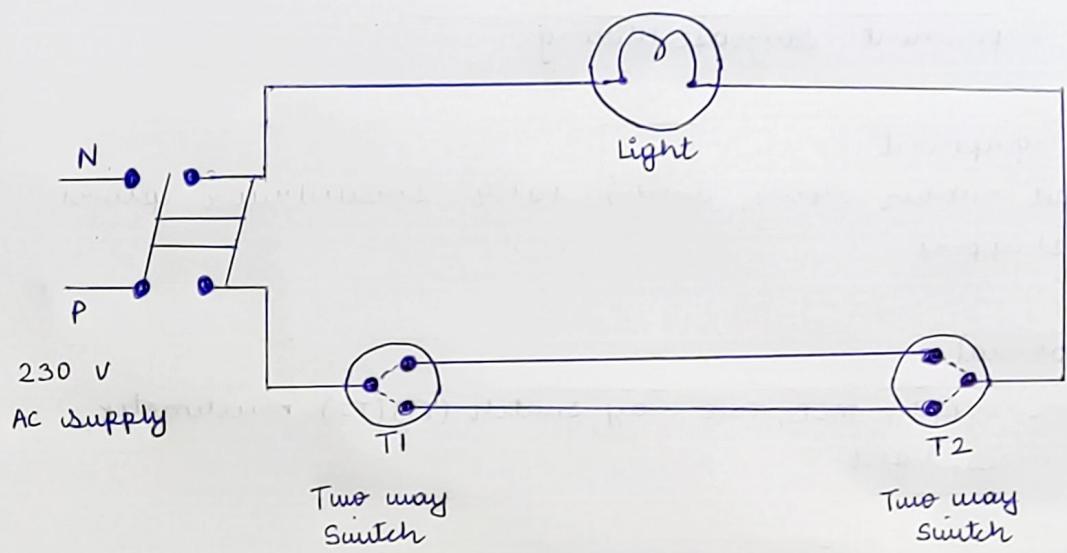


Fig: Circuit Diagram

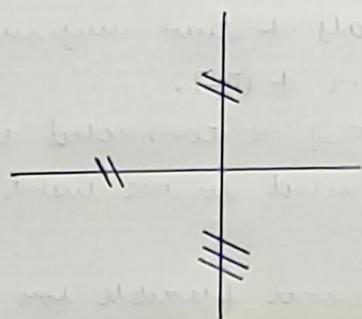


Fig: Layout Diagram

## Job Sheet

Name: Pargat Singh

Roll No: 16010121045

Batch: A2

Name of experiment: Godown wiring

Tools & equipment:

Insulated rubber gloves, goggles, tester, utility knife, screwdriver, ground pillars, wire stripper.

Raw Materials:

3 60W lamps, one way switch (S1), Two way switch 6A, MCB, wires, fuses.

Procedure in brief:

- In this wiring the loads are not connected by random switching.
- The user must follow a linear sequence in switching from the ends.
- So in order to close the circuit for a final load the remaining switches should be turned on.
- So we must keep the load in series with the remaining switches.
- The circuit gets disconnected whenever we turn off any switch.
- The major advantage of this circuit is the previous load will be disconnected when we normally switch on the next load.

Use: Usefull in scenarios where we want to save energy.

Conclusion: We learnt about the working & functionality of godown wiring.

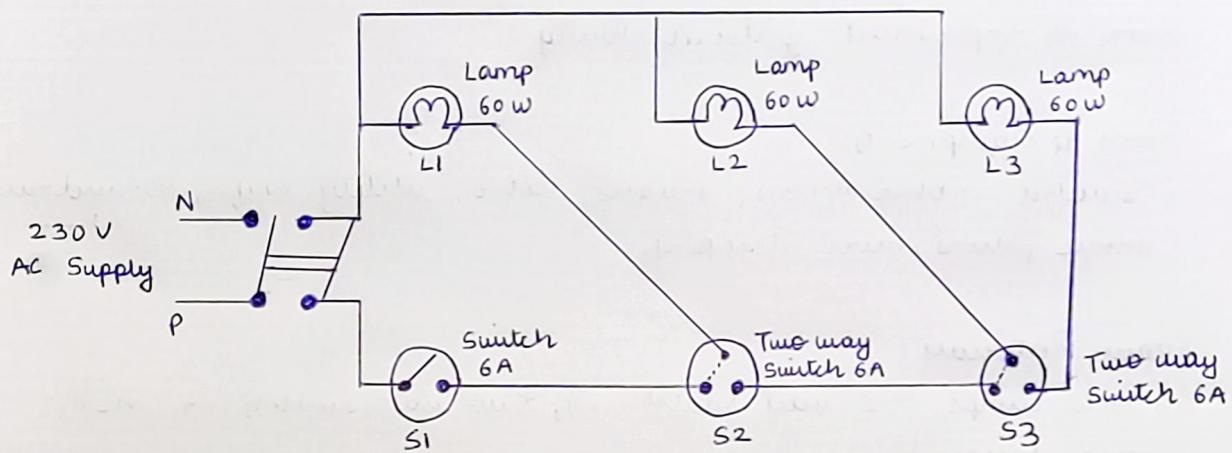


Fig: godown wiring

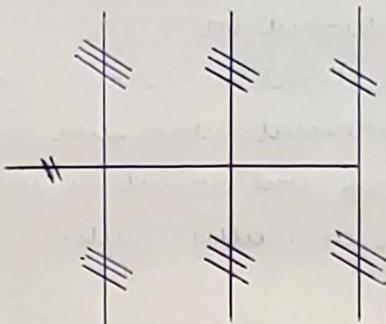


Fig: Layout Diagram

## Job Sheet

Name: Parbat Singh Roll No: 16010121045 Batch: A2

Name of experiment: House wiring

Tools & equipments:

Insulated rubber gloves, tester, pliers, wire strippers, screwdriver, goggles.

Raw Material:

230 V AC supply, MCB, regulator, lamp (60W), bell, fan, one way switch, wires, bell push, bell.

Procedure in brief:

- Connect the phase (line) from the supply (mains) to the 1st terminal of fuse & 2nd one is connected to input of MCB.
- Output of MCB is connected to switch (S1).
- 2nd terminal of switch (S1) is connected to the lamp & 1st terminal of switch (S1) is connected to bell push (B1).
- The 2nd terminal of bell push (B1) is connected to bell & the 1st terminal of bell push (B1) is connected to switch (S2).
- 2nd terminal of switch (S2) is connected to fan regulator & when its connected to fan.
- Neutral wire is connect to light, bell & the fans and the indirectly to MCB in order to complete the circuit.

Use: Power distribution in lighting.

Conclusion: Thus, here we have a house wiring circuit

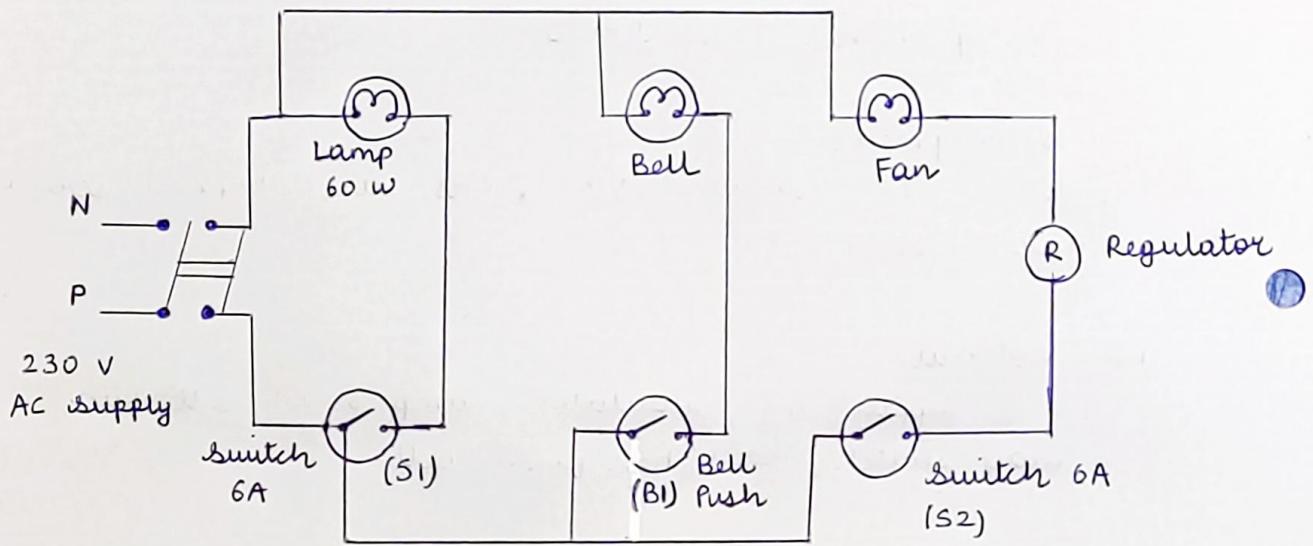


Fig: Circuit Diagram

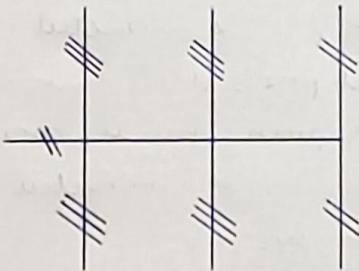


Fig: Layout Diagram