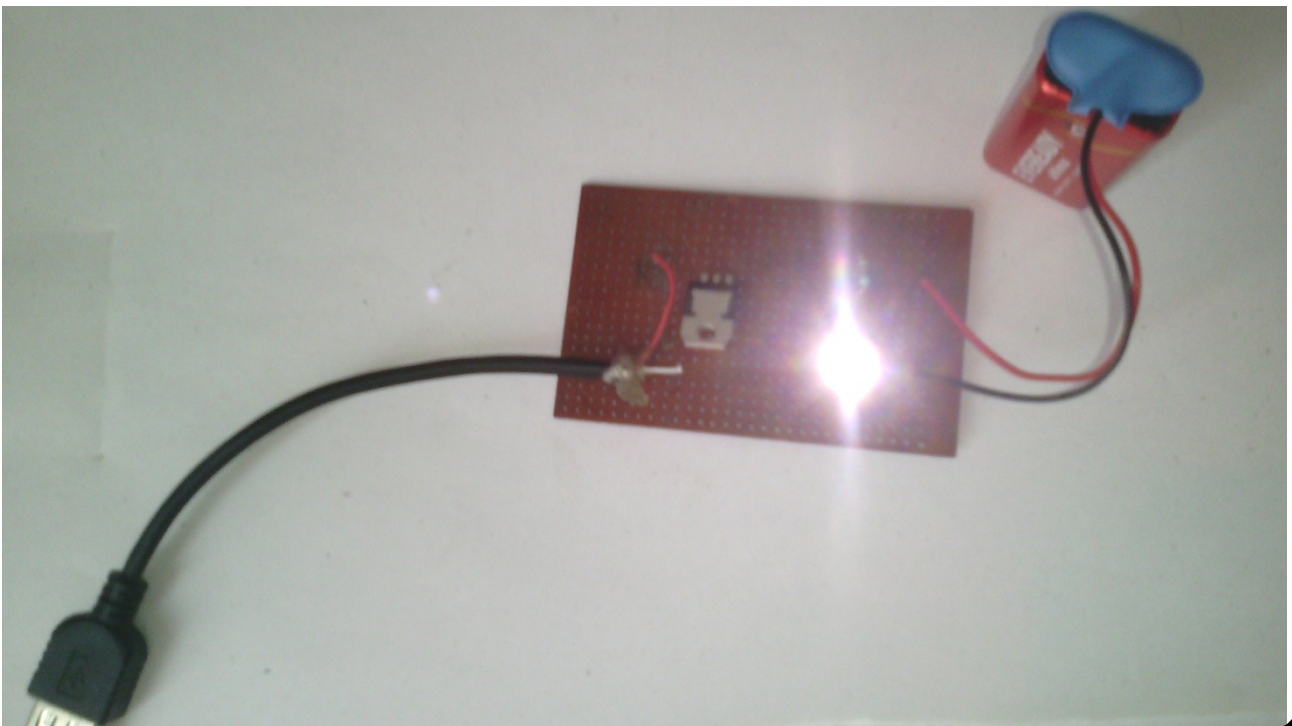


PHYSICS

INVESTIGATORY PROJECT



A

IM:-

TO CONSTRUCT A PORTABLE MOBILE CHARGER.

NAME-ASHAR FATMI

CERTIFICATE

THIS IS TO CERTIFY ASHAR
FATMI OF CLASS XII-A HAS
PERFORMED THIS PROJECT
—“PORTABLE MOBILE
CHARGER” UNDER MY
SUPERVISION.

PRIYA MENDIRATTA

PHYSICS TEACHER

BHATNAGAR INTERNATIONAL SCHOOL

ACKNOWLEDGEMENT

It is my duty to record my sincere thanks and deep sense of gratitude to my respected teacher and lab assistants. I have benefited a lot from suggestions given to me by school faculty. I am indebted to my guide

Mr. Brijmohan and Mr. Sharma my lab assistants for their constant support in the implementation of the project

ASHAR FATMI

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⇒ AIM

⇒ APPARATUS

⇒ THEORY

⇒ RESULT

⇒ PRECAUTIONS

⇒ SOURCES OF ERROR

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AIM

TO CONSTRUCT A PORTABLE
MOBILE CHARGER WHICH SUPPLIES
7.5V TO CHARGE SAMSUNG
GALAXY NOTE I.

APPARATUS

- PCB BOARD
- BATTERY
- TRANSISTOR {7805 PNP-IC}
- LED
- REISTOR {1.5 K approximately}
- BATTERY CAP
- USB PORT
- CONNECTING WIRE
- SOLDERING IRON
- SOLDERING WIRE

THEORY

MOBILE CHARGER:-

A device used to charge the battery of a phone. It converts the high voltage supply to a lower voltage so the phone could get charged.

RESISTORS:-

The barrier to the flow of current is called resistance. The devices which provide resistance is called resistor.

TRANSISORS:-

It is a semiconductor device used to switch electronic signal into electric power. It is

composed of semi conductor material with at least 3 terminals for conductance of external circuits.

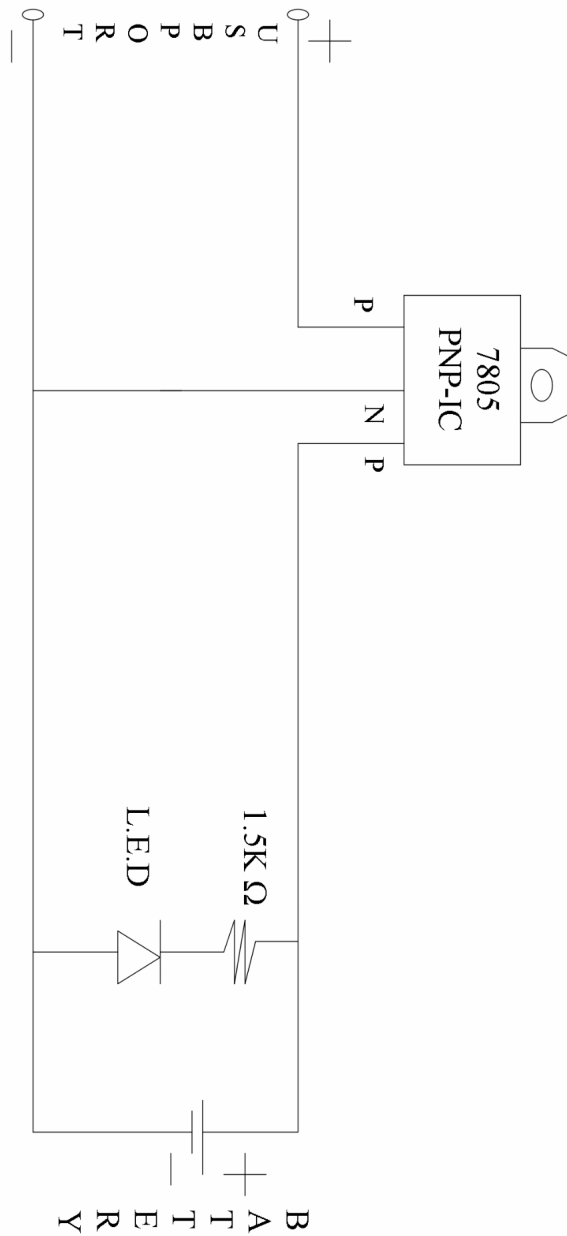
LED:-

Light emitting diode is two lead semi conductor light source. It resembles pn-junction diode, which emits light when activated.

BATTERY:-

It is a device containing one or more cells that convert chemical energy into mechanical energy.

CUIRCUIT DIAGRAM



RESULT

Hence Samsung galaxy note-I is charged by my portable mobile charger.

PHYSICS INVESTIGATORY PROJECT

PRECAUTIONS

- The connections should be neat, clean and tight.
- Battery should be ideal.
- Resistance should be of the given resistance.

SOURCES OF ERROR

Resistance is greater or lesser than required.

Transistor is broken.

Battery is not ideal.

U.S.B port is broken.

Voltage supply greater than required.

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THE END