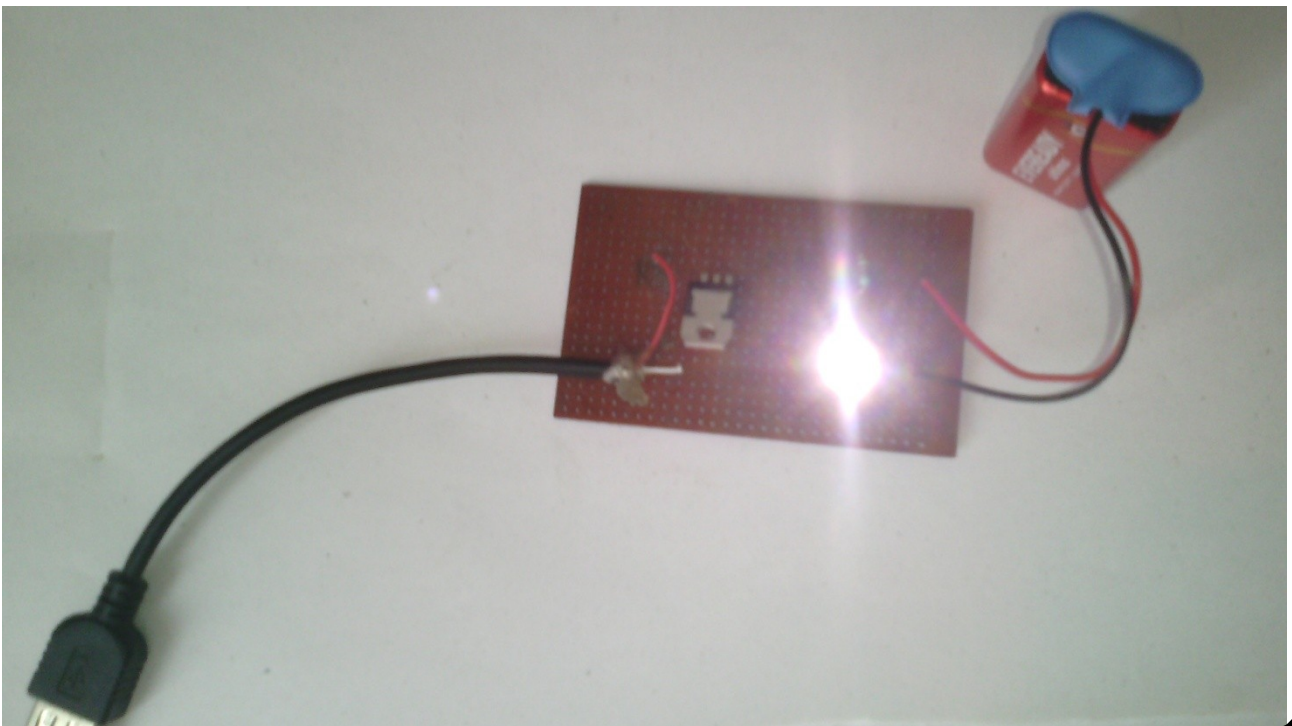




# MASS PHYSICS

CLASSES FOR XI, XII & NEET-JEE BY PRABHAKAR SIR

## *INVESTIGATORY PROJECT*



A

*IM:-*

TO CONSTRUCT A PORTABLE MOBILE CHARGER.

NAME

**CERTIFICATE**

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

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PHYSICS TEACHER

## 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*

*and my lab assistants for their constant support in the implementation of the project*

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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:-

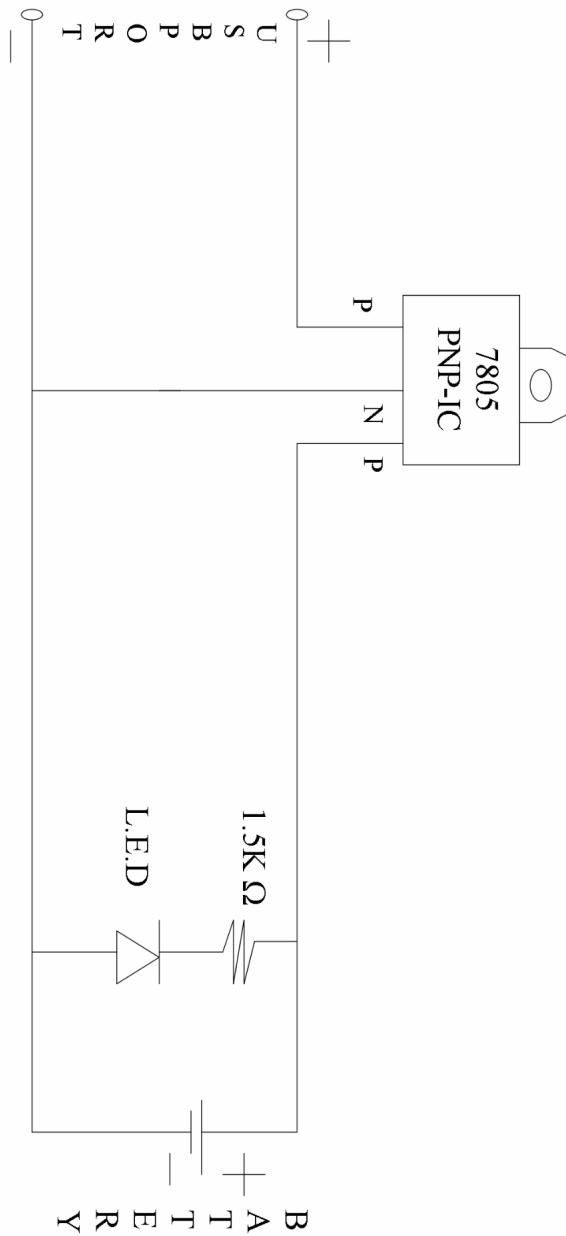
Light emitting diode is two lead semi conductor light source. It resembles pn-junction diode, which emits light when activated.

### 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

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# 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.

# BIBLIOGRAPHY

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- YOUTUBE.COM
- CONCEPT OF PHYSICS  
BY- H C VERMA.

THE END

