

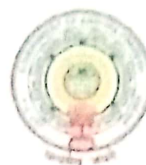


GOVERNMENT DEGREE COLLEGE (MEN)

ACCREDITED BY NAAC WITH B++ (CGPA 2.90)

Srikakulam - 532001, Andhra Pradesh, India

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Department of Physics

Brainstorming Session

Date and Time	14.12.2022
Class	I B.Sc (MPC,MPCS & MPE)
No.of students participated	59
Name of the Activity	Brainstorming Session
Title	Why is a 12 volt household battery harmless but a 12 volt car battery is harmful?
Objective	Brainstorming session focused on the topic of "12 volt household a 12 volt car battery is harmful?" could be to explore, discuss hypotheses related to this question. It promotes Critical Thinking,Engage Curiosity,Highlight Scientific Method,and Promote Further Study.
Teacher Activity in this session	1. Asking Questions during this session like below a. What is Battery? b. Different types of batteries? c. How do you measure the energy of the battery? d. What are the factors that influence energy ? 2. Encourage students to share their thoughts and ideas without filtering them.

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	3. Encourage Divergent Thinking Prompt students to think outside the box and consider unconventional solutions or perspectives. Encourage them to push the boundaries of their creativity. 4. Emphasise Learning: Remind participants that the goal of the session is not necessarily to arrive at a definitive answer but to promote curiosity, critical thinking, and a deeper understanding of scientific principles.
Student Activity in this Session	1. Group Sharing : Students in the groups can discuss and refine their hypotheses based on the input from their peers. 2. Debate and Discussion: Organise a debate where students can argue for or against the idea that air forms a shadow. Assign some students to argue in favour of the hypothesis and others against it. This encourages critical thinking and helps students consider different perspectives. 3. Record Ideas: As ideas are generated, write them down on a whitepaper . Ensure that all ideas are captured without judgement or evaluation at this stage.
Documental evidences	https://drive.google.com/file/d/1Td_vy6fv254-mCOY9b47t1QBt6Vcqc/view?usp=drive_link
Name of the Lecturers who planned & conducted the activity	Sri.M.V.Satyanarayana Sri R.Ravi kumar Sri B.Mohana Rao Dr.GVS Jayapala Rao 

Brain Storming Session

→ Why 12V household battery harmless, but 12V car battery harmful?

1) What is battery?

Battery is a device that converts the chemical energy into electrical energy. The chemical reactions in a battery involve the flow of electrons from one material to another.

2) What are the types of batteries?

There are so many types of batteries, mainly batteries are primary and secondary.

Some types of batteries are as follows.

1. Lithium batteries
2. Alkaline batteries
3. flow batteries

3) How do you find the energy in the battery?

Battery stores energy in the form of chemical energy. A battery is made by combining two or more cells together. The cell or battery change the chemical energy obtained from reactions between the electrolytes and electrodes into electrical energy.

1. G. Lekhana - 2222001050014 - G. Lekhana.
2. G. Mounika - 2222001050016 - G. Mounika
3. G. Likhitha - 2222001050013 - G. Likhitha
4. P. Sreeja - 2222001050041 - P. Sreeja
5. G. Nagamani - 2222001052017 - G. Nagamani
6. T. Tanuja - 2222001052046 - ~~T. Tanuja~~ T. Tanu

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12-2022

Brain storming

MPC/MPCS/
MPE6

Topic: why 12v house hold battery is harmless
But 12v car battery is harmful

1. what is battery?

A battery is a device which converts chemical energy contained within its active material directly into electrical energy by means of an electro chemical oxidation-reduction reaction.

2. Types of batteries?

1. lithium ion a. lead
2. lithium s. Alkaline
3. lead-acid

3. How do you find the energy in the battery?
Energy depends on (i) (current) if current increases, energy increases.

Power of capacity is how much energy is stored in the battery. This is power is often expressed in watt-hour.

HF NO

- 1) B. Rajasekhar MPC 22220001052007
- 2) K. Subhas chandrababu MPC 22220001052023
- 3) G. Akhil MPC 22220001052018
- 4) S. Wilson babu (MPC) 22220001052043
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- 6) B. Ravikumar (MPC) 22220001052012
- 7) K. Abhilash (MPC) 22220001052022
- 8) S. Himanth Kumar (MPC) 22220001052044

Signature

Sig M.P.C.

R. Subhas

G. Akhil

S. Wilson babu

B. Rama Rao

Ravi

K. Abhilash

S. Himanth

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Brain Storming

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<u>Name</u>	<u>group</u>	<u>hall ticket no</u>	
L. Ramesh	M.P.C	2222001052025	L. Rame
T. madhu richan	M.P.C	2222001052047	T. madhu richan
M. Gnaneswarasao	M.P.C	2222001052030	M. Gnaneswarasao
R. Ravi Kumar	M.P.C	2222001052038	R. Ravi Kumar
P. Sivakarasasao	M.P.C	2222001052039	P. Siva
M. Chandhini	(M.P.C)	2222001050034	M. Chandhini
P. Ravi	[M.P.C]	2222001052035	P. Ravi

[Signature]

Brain storming

Date: - 14/12/2022

Brain storming

Topic:- why 12V household battery harmless but 12V car battery harmful?

Ans:-

⇒ 12V household battery current flow less intensity. So the 12V household battery doesn't harm to the person. 12V car battery current flow high intensity. So the 12V car battery harmful to the person.

(1) what is Battery?

A:- ⇒ chemical energy convert into electrical energy
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(2) Types of Batteries?

A:- lithium ion battery.

(3) How do you find the energy in the Battery?

A:- ⇒ voltmeter

⇒ Power capacity is how much energy is stored in the battery. This power is often expressed in watt-hours.

A. Vijay Kumar.	2222001050001	$\frac{\pi}{\text{MPC}}$	A. Vijay Kumar
D. Neela Krishna.	2222001050011	$\frac{\pi}{\text{MPC}}$	D. Neela Krishna
K. Dharmarao	2222001050022	$\frac{\pi}{\text{MPC}}$	D. Dharmarao
A. Ammaji Rao	2222001052005	$\frac{\pi}{\text{MPC}}$	A. Ammaji Rao
K. Rama Krishna.	2222001052021	$\frac{\pi}{\text{MPC}}$	K. Rama Krishna
M. Adi	2222001052029	$\frac{\pi}{\text{MPC}}$	M. Adi
K. Chandrasechar	2222001052024	$\frac{\pi}{\text{MPC}}$	K. Chandrasekar
S. Vamsi Krishna	2222001050048	$\frac{\pi}{\text{MPC}}$	S. Vamsi Krishna
P. Tulasi Rao	2222001050038	$\frac{\pi}{\text{MPC}}$	P. Tulasi Rao
G. Saitya	2222001050015	$\frac{\pi}{\text{MPC}}$	G. Saitya

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Bjain streaming session :-

Date: - 14.12.2022

1) Why 12V household Battery harmless, But 12V car battery harmful.

- A) $\rightarrow$ the car Battery can produce a lot of current and that can rapidly heat metallic objects enough to cause damage.
- $\rightarrow$ the skin has a very high resistance, leading to low current, and the Battery has a low voltage, leading to low current.

2) What is Battery.

- A) A Battery is a device that converts chemical energy contained within its active materials directly into electrical energy by means of an electrochemical oxidation-reduction reaction.

3) Types of Batteries?

- A) Nickel-cadmium Battery, Daniell cell, lithium ion, zinc, lead Alkali, drycell and Aluminium-air Battery.

4) How do you find the energy in the Battery?

- A) A watt-hour is the voltage (V) that the Battery provides multiplied how much current (Amps) the Battery can provide for some amount of time.

$$\text{Voltage} \cdot \text{Amp} \cdot \text{hours} = \text{Watt}$$

1) A Sameeya	BSC (MPC)	2222001052001	A Sameeya
N Anitha	MPC	2222001052034	N Anitha
A. Sridevi	MPC	2222001052006	A. Sridevi
K. Shanalaemi	MPCS	2222001050020	K. Shanalaemi
P. Thangai	MPCS	2222001050040	P. Thangai
M. Chandini	MPCS	2222001050034	M. Chandini

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Photo Gallery :



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I. B.Sc

M.P.C, M.P.C.S

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Brain storming

Date:- 14/12/2022

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Name

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M.P.C

2222001052025

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M.P.C

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(M.P.C)

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P. Ravi

[M.P.C]

2222001052035 P. Ravi

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MPC / MPCs /
MPEG

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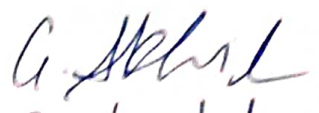
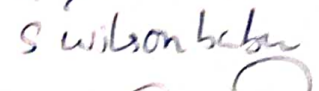
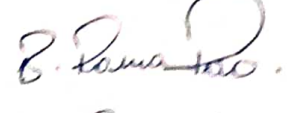
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