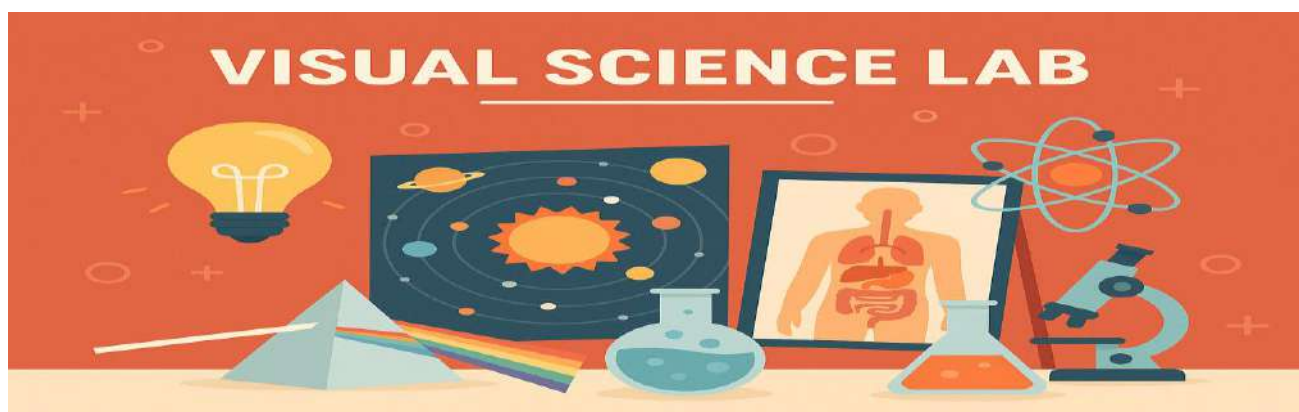




D.B.M.S. College of Education

(Recognised by National Council for Teacher Education)
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INTRODUCTION

During the month of April 2025, Semester 1 students at D.B.M.S. College of Education actively participated in a series of science experiments conducted in the Visual Science Lab. The primary aim of these activities was to promote hands-on learning and reinforce core scientific concepts through observation-based and interactive experiments.

The experiments focused on a range of fundamental physics phenomena, including heat transfer, refraction, centrifugal force, and atmospheric pressure. By engaging directly with these concepts through visual demonstrations and practical tools, students developed

a deeper understanding of the principles involved and enhanced their analytical and observational skills.

These lab sessions exemplified the importance of experiential learning in science education, fostering curiosity, critical thinking, and a genuine interest in scientific exploration.

OBJECTIVES

- To **visualize and understand** scientific concepts through working models, experiments, and diagrams.
- To encourage **active participation and curiosity** among students.
- To improve **observation, reasoning, and analytical thinking** skills.
- To connect **theory with real-life applications** for deeper understanding.
- To promote **teamwork and interest** in scientific exploration.

DAY-1

EXPERIMENT NO. 1 - Colour changing acid-base experiment



PIC 1 : EX-1



GPS Map Camera



Jamshedpur, Jharkhand, India

Gautam Apartments, Old Farm, Kadma,
Jamshedpur, Jharkhand 831005, India

Lat 22.804793° Long 86.163455°
01/04/2025 08:13 AM GMT +05:30

PIC 2 : EX-1

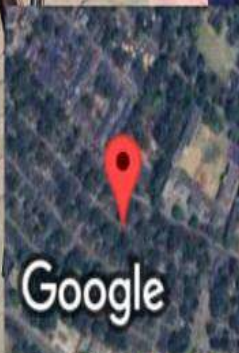
DAY- 2

EXPERIMENT NO. 2 “ Refraction of light”





GPS Map Camera



Jamshedpur, Jharkhand, India

R537+w92, Kadma, Jamshedpur, Jharkhand
831005, India

Lat 22.804742° Long 86.16352°

02/04/2025 08:07 AM GMT +05:30

PIC-2, EXP 2

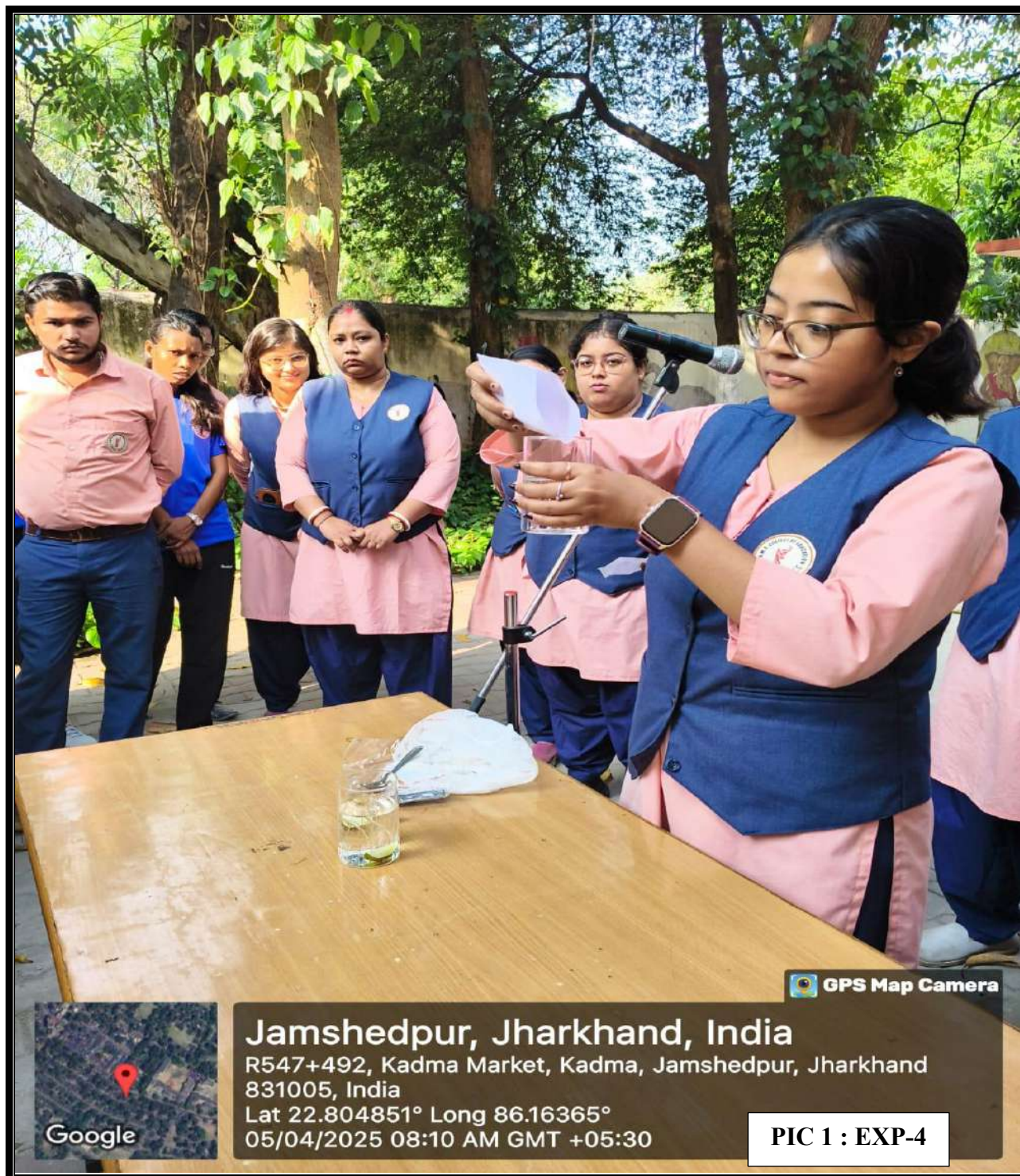
DAY- 3

EXPERIMENT NO.3 COLOUR CHANGING CABBAGE (acid-base) REACTIONS



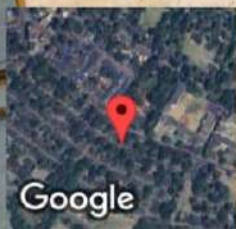
DAY- 4

EXPERIMENT-4 “Density of water”





GPS Map Camera



Google

Jamshedpur, Jharkhand, India

R537+w92, Kadma, Jamshedpur, Jharkhand 831005, India

Lat 22.804784° Long 86.163511°

05/04/2025 08:10 AM GMT +05:30

PIC 2 : EXP-4

DAY- 5

EXPERIMENT- 5: STATIC CHARGE



GPS Map Camera

Jamshedpur, Jharkhand, India

Gautam Apartments, Old Farm, Kadma,
Jamshedpur, Jharkhand 831005, India

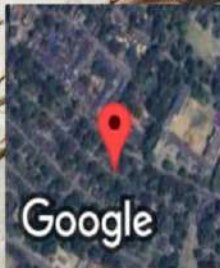
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04/04/2025 08:10 AM GMT +05:30

PIC 1 : EXP-5



GPS Map Camera



Jamshedpur, Jharkhand, India

Gautam Apartments, Old Farm, Kadma,
Jamshedpur, Jharkhand 831005, India

Lat 22.804792° Long 86.16346°

04/04/2025 08:10 AM GMT +05:30

PIC 2 : EXP-5

DAY -6

EXPERIMENT- 6: INVISIBLE INK





Jamshedpur, Jharkhand, India

Gautam Apartments, Old Farm, Kadma, Jamshedpur,
Jharkhand 831005, India

Lat 22.804793° Long 86.163444°
09/04/2025 08:11 AM GMT +05:30

PIC 2 : EXP-6

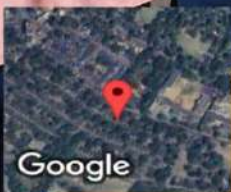
DAY -7

EXPERIMENT- 7: LAVA LAMP EXPERIMENT





GPS Map Camera



Jamshedpur, Jharkhand, India

R547+492, Kadma Market, Kadma, Jamshedpur, Jharkhand
831005, India

Lat 22.804778° Long 86.163495°
16/04/2025 08:12 AM GMT +05:30

PIC 2 : EXP-7

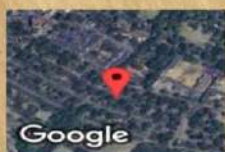
DAY- 8

EXPERIMENT – 8: AIR PRESSURE





GPS Map Camera



Jamshedpur, Jharkhand, India

Kadma Main Rd, Kadma, Jamshedpur, Jharkhand 831005, India

Lat 22.804658° Long 86.1634°

21/04/2025 08:10 AM GMT +05:30

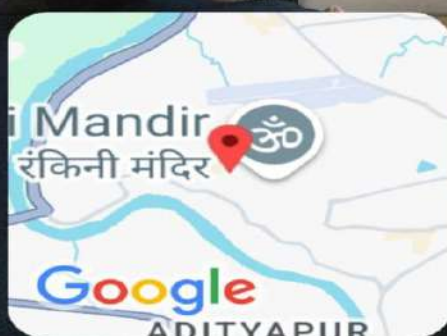
PIC 2 : EXP-8

DAY- 9

EXPERIMENT- 9: DENSITY OF WATER



PIC 1: EXP-9



Geo-Tagging Camera

2025/04/24 08:21

Jamshedpur, Jharkhand, India

R537+W92, Kadma, Jamshedpur,
Jharkhand 831005, India

Lat 22.804923 Long 86.163669

PIC 2 : EXP-9

DAY – 10

EXPERIMENT- 10 “SURFACE TENSION OF WATER”



PIC 1 : EXP-10

DAY- 11

EXPERIMENT NO. 11 STATIC CHARGE



DAY-12

EXPERIMENT – 12: SPECIFIC HEAT OF WATER





Geo-Tagging Camera

2025/04/26 08:14

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R537+W92, Kadma, Jamshedpur, Jharkhand

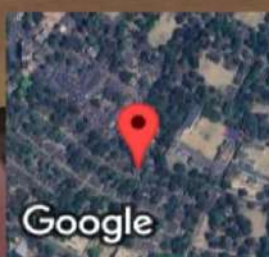
831005, India

Lat 22.804903 Long 86.163675

PIC 2 : EXP-12

DAY- 13

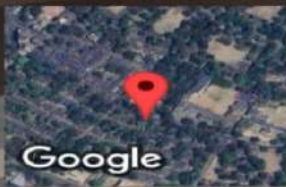
EXPERIMENT-13 WATER MINISCUS EXPERIMENT



Jamshedpur, Jharkhand, India

R537+w92, Kadma, Jamshedpur, Jharkhand 831005, India
Lat 22.804913° Long 86.163662°
28/04/2025 08:25 AM GMT +05:30

PIC 1 : EXP-13



Jamshedpur, Jharkhand, India

R547+493, Kadma Market, Kadma, Jamshedpur, Jharkhand
831005, India

Lat 22.804962° Long 86.163704°
28/04/2025 08:25 AM GMT +05:30

GPS Map Camera

PIC 2 : EXP-13

DAY- 14

EXPERIMENT NO. 14: INVISIBLE FIRE EXPERIMENT



Jamshedpur, Jharkhand, India

R537+w92, Kadma, Jamshedpur, Jharkhand 831005, India

Lat 22.804916° Long 86.163666°

30/04/2025 09:02 AM GMT +05:30

PIC 1 : EXP-14



PIC 2 : EXP-14

DAY- 15

EXPERIMENT- 15 : EFFECT OF AIR RESISTANCE



DAY- 15

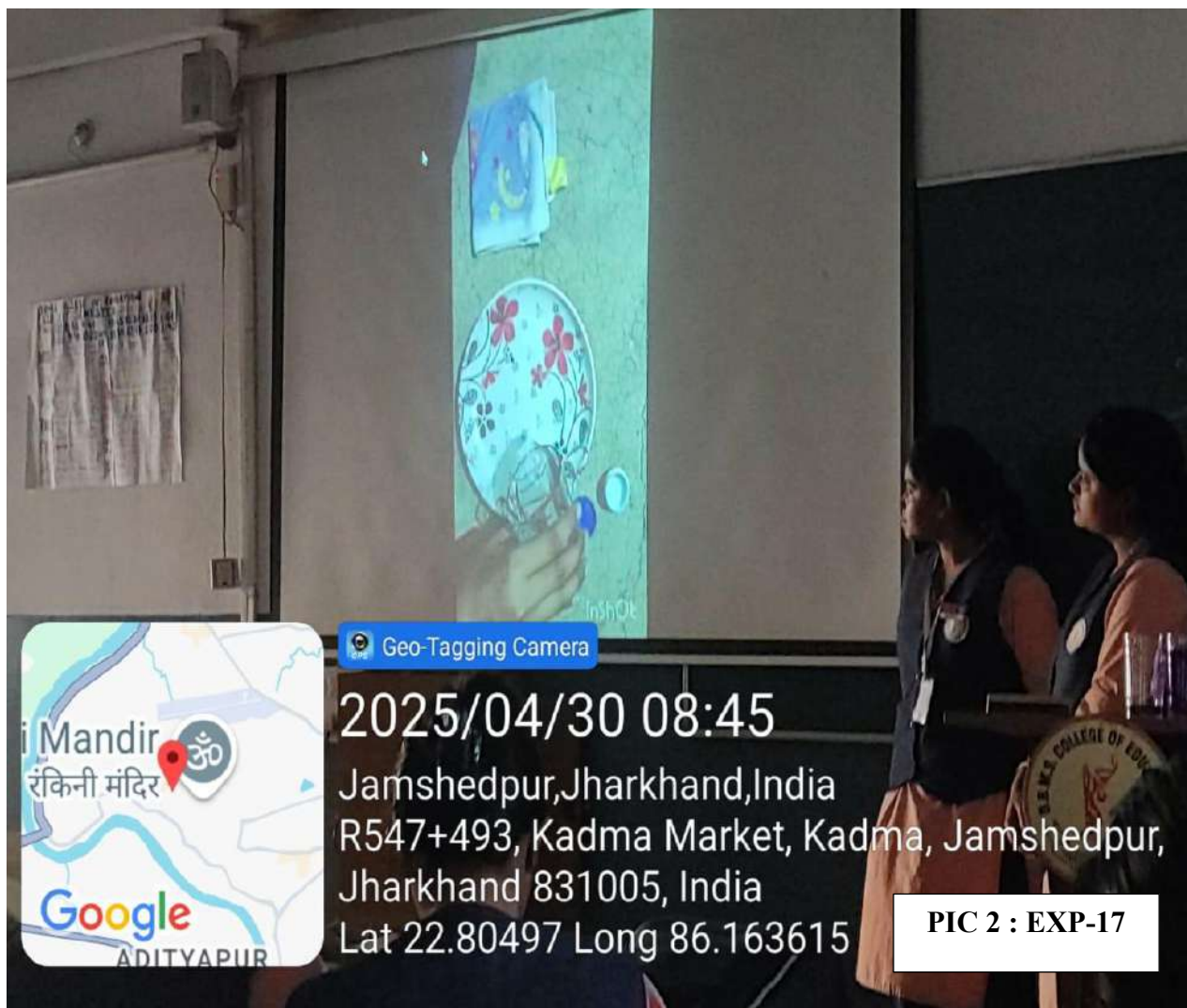
EXPERIMENT NO.- 16 ATMOSPHERIC PRESSURE



DAY- 15

**EXPERIMENT NO. 17 SURFACE TENSION EXPERIMENT
UNDER VIRTUAL LAB**





Geo-Tagging Camera

2025/04/30 08:45

Jamshedpur, Jharkhand, India
R547+493, Kadma Market, Kadma, Jamshedpur,
Jharkhand 831005, India
Lat 22.80497 Long 86.163615

PIC 2 : EXP-17

FEEDBACK:

CONCLUSIONS:

The Visual Science Lab has greatly enhanced our understanding of scientific concepts by allowing us to learn through observation, interaction, and experimentation. Using models, charts, and hands-on activities made difficult topics easier to understand and more interesting to explore.

It also helped improve our skills in observation, logical thinking, teamwork, and problem-solving. This practical approach to science has deepened our curiosity and made learning more enjoyable and effective.

Overall, the Visual Science Lab is an excellent way to bridge the gap between theory and real-life applications, preparing us for future scientific learning.