



S.A.S. GOVERNMENT DEGREE COLLEGE

(AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM)

Phone: [08818 252189](tel:08818252189), E-mail: narayanapuram.jkc@gmail.com

NARAYANAPURAM, ELURU DISTRICT-534406



Open Day School/College

**Organized by Department of Physics on
07.02.2026**

Permission Letter

04.02.2026
Narayanapuram

To
The Principal
SAS Govt. Degree College
Narayanapuram

Respected madam,

Subject: Request for Permission to Organize Open Day Programme on 07.02.2026 – Reg.

@@@@@

We respectfully request you to kindly grant permission to organize an **Open Day Programme** in our college on 07th February 2026.

The main objective of this programme is to invite school and junior college students to our campus and provide them with an opportunity to explore our laboratories, academic facilities, and various departments. It will help in creating awareness about higher education opportunities and motivate them towards pursuing science and other academic courses.

Students and faculty members will actively participate in demonstrating experiments, exhibits, and academic activities. This programme will also enhance communication skills and confidence among our students.

We assure you that the event will be conducted in an organized and disciplined manner under the guidance of faculty members.

We kindly request you to consider our application and grant permission for the same.

Thanking you madam,

Yours sincerely,

Dr B Venkatesulu Reddy
Lecturer in Physics
SAS GDC Narayanapuram



S.A.S. GOVERNMENT DEGREE COLLEGE

(AFFILIATED TO ADIKAVI NANNAYA UNIVERSITY, RAJAMAHENDRAVARAM)

Phone: [08818 252189](tel:08818252189), E-mail: narayanapuram.jkc@gmail.com

NARAYANAPURAM, ELURU DISTRICT-534406



APPROVAL LETTER

With reference to the request submitted regarding the organization of an **Open Day Programme** on 07.02.2026, permission is hereby granted to conduct the same in the college premises.

The programme may be organized as proposed, ensuring the participation of students and faculty members. All necessary arrangements should be made properly, and the event must be conducted in a disciplined and systematic manner.

The concerned staff are instructed to take responsibility for the smooth conduct of the programme and ensure that all rules and regulations of the institution are followed.

This approval is granted in the interest of academic development and student engagement.

Principal

SAS Govt. Degree College
Narayanapuram

1. Flywheel

Theory:

A flywheel is a rotating mechanical device used to store rotational energy. It works on the principle of moment of inertia—the heavier and faster it rotates, the more energy it stores.

Explanation:

When energy is supplied, the flywheel spins and stores energy. When needed, it releases this energy smoothly, helping machines run steadily (e.g., in engines).

2. Compound Pendulum

Theory:

A compound pendulum is a rigid body that swings about a fixed horizontal axis. It follows the principles of oscillatory motion and center of gravity.

Explanation:

The time period depends on the distribution of mass and distance from the pivot. It helps determine gravitational acceleration (g).

3. Solar Cell

Theory:

A solar cell works on the photovoltaic effect, where sunlight is directly converted into electricity.

Explanation:

When light falls on the cell, electrons move and generate electric current. It is used in solar panels for clean energy production.

4. Photocell (Photoelectric Cell) Characterization

Theory:

It is based on the photoelectric effect, discovered by Albert Einstein.

Explanation:

When light falls on a metal surface, electrons are emitted. The current produced depends on light intensity and frequency. This experiment studies that relationship.

5. Solar Fan

Theory:

A solar fan uses solar energy to run a motor.

Explanation:

Solar panels convert sunlight into electricity, which powers the fan. It demonstrates renewable energy use and energy conservation.

6. Optical Fiber

Theory:

Optical fibers work on the principle of Total Internal Reflection.

Explanation:

Light travels through the fiber by reflecting continuously inside it without escaping. It is used in communication systems (internet, cables).

7. Total Internal Reflection Experiment

Theory:

When light travels from a denser medium to a rarer medium at a certain angle (critical angle), it reflects completely inside.

Explanation:

This experiment demonstrates how light can be trapped and guided, which is the working principle behind optical fibers.

8. Solar Cooker

Theory:

A solar cooker uses solar energy and heat absorption principles.

Explanation:

Sunlight is trapped using mirrors or glass, converting it into heat energy. This heat cooks food without fuel, making it eco-friendly.

Conclusion

These experiments demonstrate important physics concepts like energy conservation, optics, oscillations, and renewable energy. They help students understand how scientific principles are applied in real-life technologies.

Evidence:







Programme Feedback Report

The Open Day / Science Programme conducted on 07.02.2026 in our college was highly successful and well-received by all participants. The event provided a valuable platform for students to demonstrate their knowledge and practical skills through various scientific experiments and models such as flywheel, compound pendulum, solar cell, optical fiber, and solar cooker.

The visiting school and junior college students showed great interest and enthusiasm in observing the experiments. The explanations given by our students were clear, interactive, and informative, which helped the visitors understand the concepts easily.

The programme also helped our students improve their communication skills, confidence, and subject knowledge. Faculty members guided the students effectively, ensuring smooth organization and discipline throughout the event.

Overall, the programme achieved its objective of creating awareness about science and promoting interest in higher education. It was an enriching and meaningful learning experience for both participants and visitors.

Principal