



RAJAGIRI VISWAJYOTHI
COLLEGE OF ARTS AND APPLIED SCIENCES
VENGOOR , PERUMBAVOOR KERALA- 683546

An ISO 9001 : 2015 Certified Institution

Affiliated to Mahatma Gandhi University, Kottayam | Approved by AICTE



CRITERION 7

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 Institutional Values and Social Responsibilities

2019-2024

Submitted to



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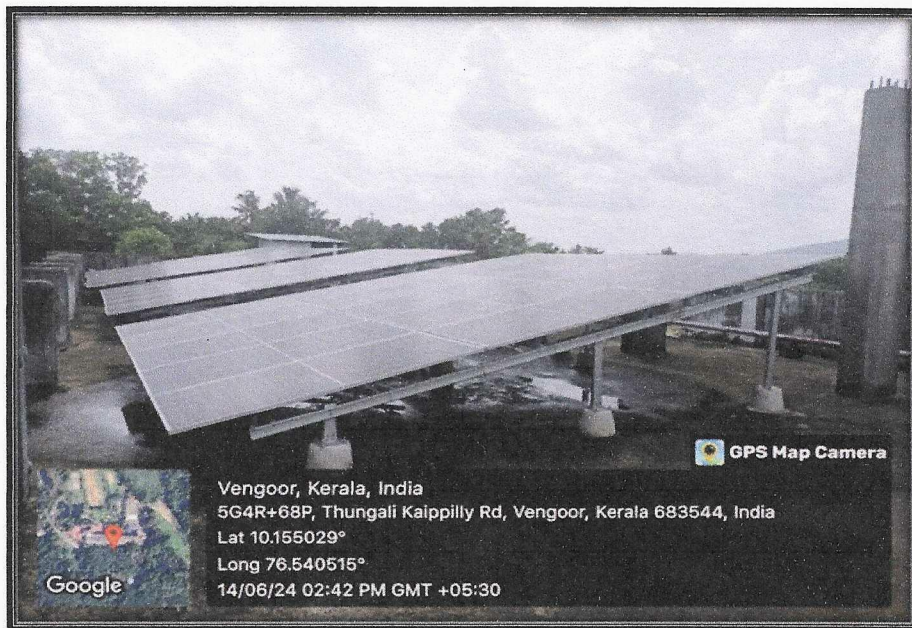
7.1.2 Reports of Alternate Sources of Energy

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1. Solar Panels

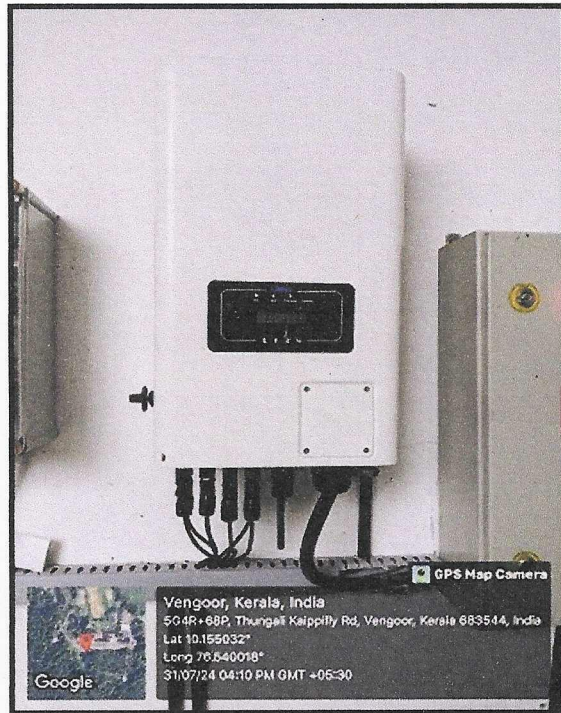
Rajagiri Viswajyothi College of Arts & Applied Sciences has joined hands with Kerala Electricity Board to install rooftop **On-Grid Solar Panels**. This partnership signifies a pivot stride toward a sustainable future by utilizing the potential of clean renewable solar energy.

Name	On-Grid Solar Panels and Connected Electrics
College Participation	Signed an agreement with KSEB on 25.05.2023
Capacity of Power Plant	30.24 kWp On-Grid Solar Power Plant for Rooftop Installation
Location	Main Building Rooftop
Year of Implementation	27.11.2023



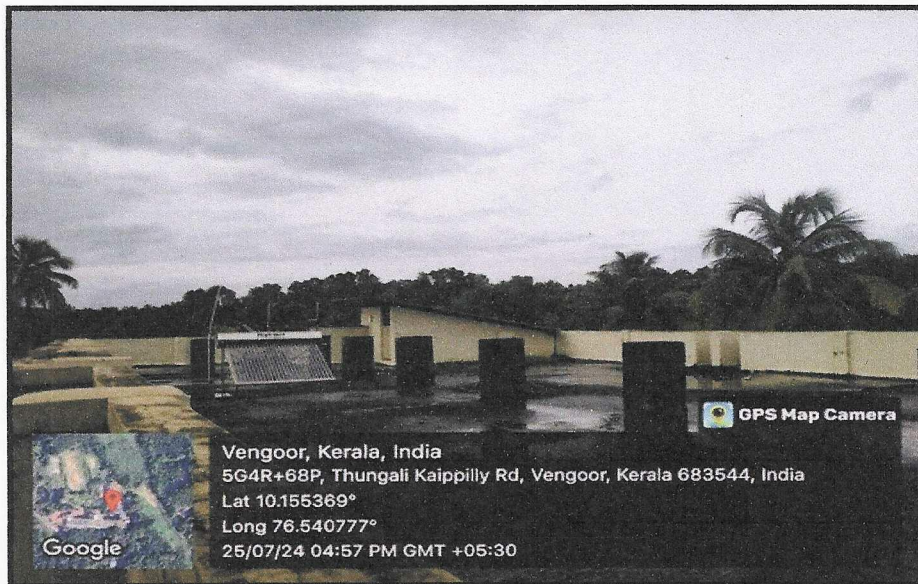
On-Grid Solar Panel Rooftop Installation for the Main Building, RVCAS and Switch Board





Solar Inverter Installation at RVCAS

2. Solar Heater



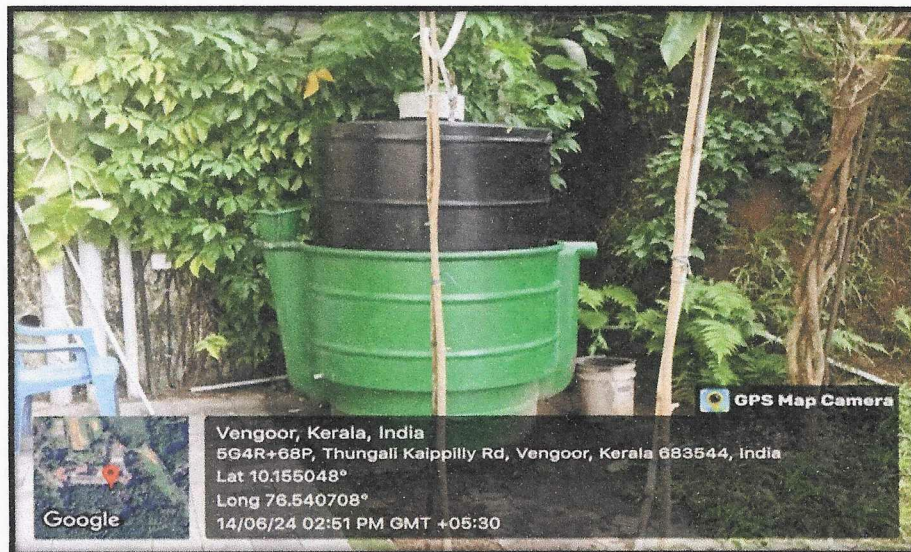
Solar Water Heater Rooftop Installation for the Hostel Building, RVCAS



3. Biogas Plant

At Rajagiri Viswajyothi College of Arts & Applied Sciences, Vengoor, a **Biogas** facility near the college canteen efficiently transforms kitchen waste into clean fuel, which is used for cooking and significantly reduces dependence on traditional energy sources. This versatile biogas unit serves both as an effective tool for energy conservation and a solution for waste management.

Nature of Facility	Portable Biogas Plant with Water Jacket
Year of Implementation	2023
Capacity	15 kg per day
Diameter	2.5 meter
Output Gas Per day	2 m ³



Biogas Plant Installed at the College Canteen



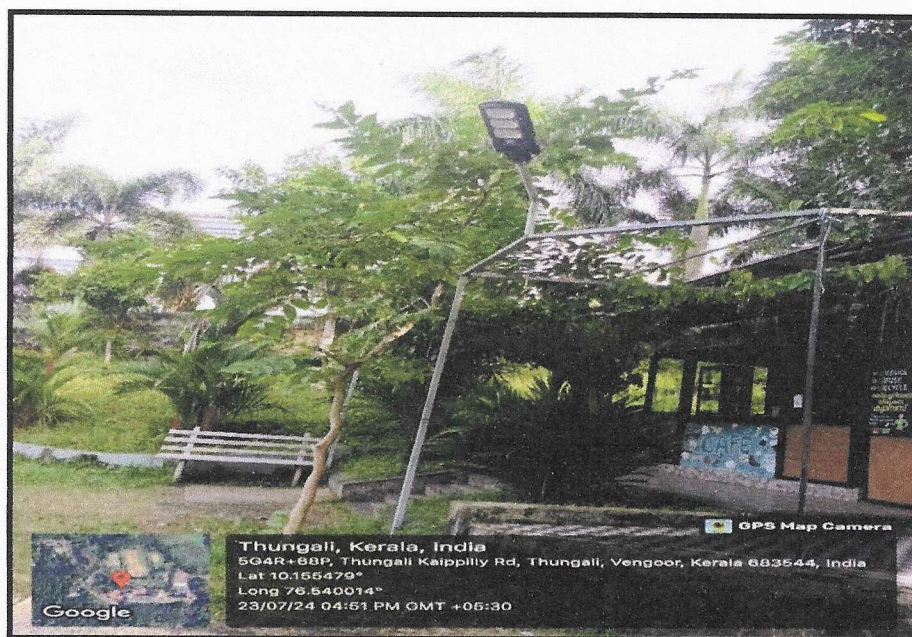
4. Solar Street Lamps

Rajagiri Viswajyothi College of Arts & Applied Sciences, committed to sustainability, has undertaken several initiatives to minimize its environmental footprint. Among these is the installation of 10 **Solar Street Lamps** across the campus. These lights harness solar power, reducing the college's dependence on conventional energy sources & contributing to carbon emission reduction efforts. The enhanced illumination not only improves campus safety but also enriches the overall environment. Future plans include expanding the installation of solar street lights & exploring advanced technologies to further decrease the college's ecological impact.



Street Light Located Near Lindeza





Street Light Located Near the Cafeteria

5. Solar Auto Sensing Lights

Rajagiri Viswajyothi College of Arts & Applied Sciences has adopted **Solar Auto Sensing Lights** across its campus as part of its commitment to sustainability and environmental consciousness. These lights harness solar energy during the day and automatically adjust their brightness based on ambient light levels. By incorporating solar auto sensing lights, the college not only enhances the functionality and aesthetics of the campus but also sets a positive example of sustainable practices in education.





Solar Auto Sensing Lights on the Campus



6. Energy Conservation Awareness Campaign

The **Energy Conservation Awareness Campaign** at Rajagiri Viswajyothi College of Arts & Applied Sciences is a proactive initiative aimed at fostering energy conservation awareness among students, faculty, and staff. The campaign emphasizes the importance of small, yet impactful, actions that contribute to energy savings and environmental sustainability. A key element of the campaign is the strategic placement of informative posters throughout the campus. These posters serve as constant reminders for everyone to switch off electrical appliances and devices when not in use. The message on the posters is simple yet powerful: "Save Energy. Switch Off When Not in Use." This reinforces the idea that individual actions, such as turning off lights, fans, and other electronic devices, can collectively lead to significant energy savings.



"Save Energy": Posters Above Switch Boards



7. Transparent Mirror Classroom

At Rajagiri Viswajyothi College of Arts & Applied Sciences, **Transparent Mirrors** are utilised in classrooms to enhance both functionality and energy efficiency. These mirrors help in maximizing the use of natural light by reflecting it deeper into the classroom. This reduces the reliance on artificial lighting during daylight hours, creating a brighter and more conducive learning environment.

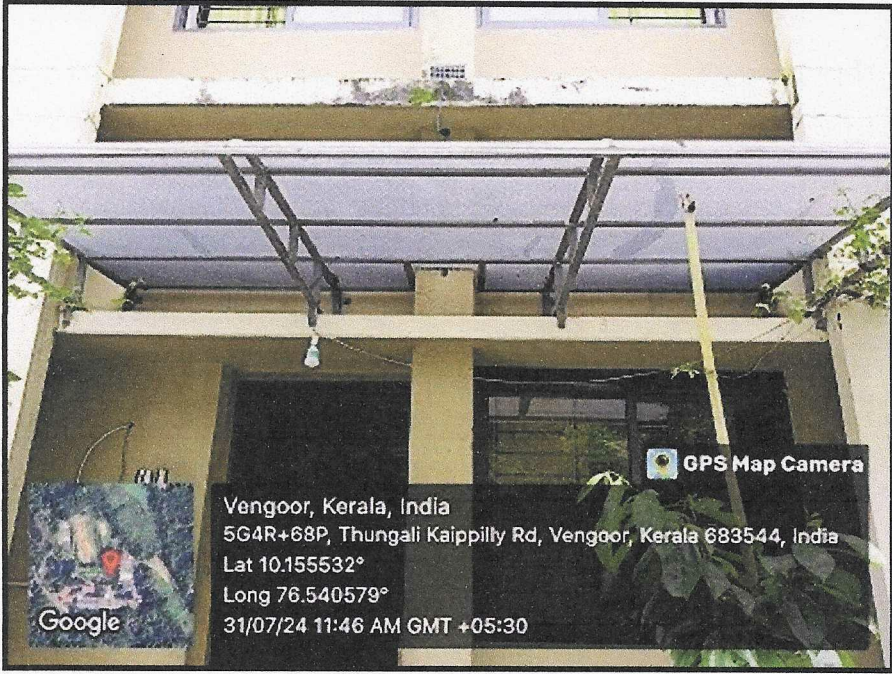


Transparent Mirror Classroom



8. Polycarbonate Sheet Roofing

As part of its sustainability goals, Rajagiri Viswajyothi College of Arts & Applied Sciences, uses **Polycarbonate Sheets** for roofing. These sheets contribute to better thermal regulation, helping maintain comfortable indoor temperatures and reducing the need for excessive heating or cooling. The use of polyethylene sheets aligns with the college's commitment to reducing its environmental footprint through sustainable building practices.

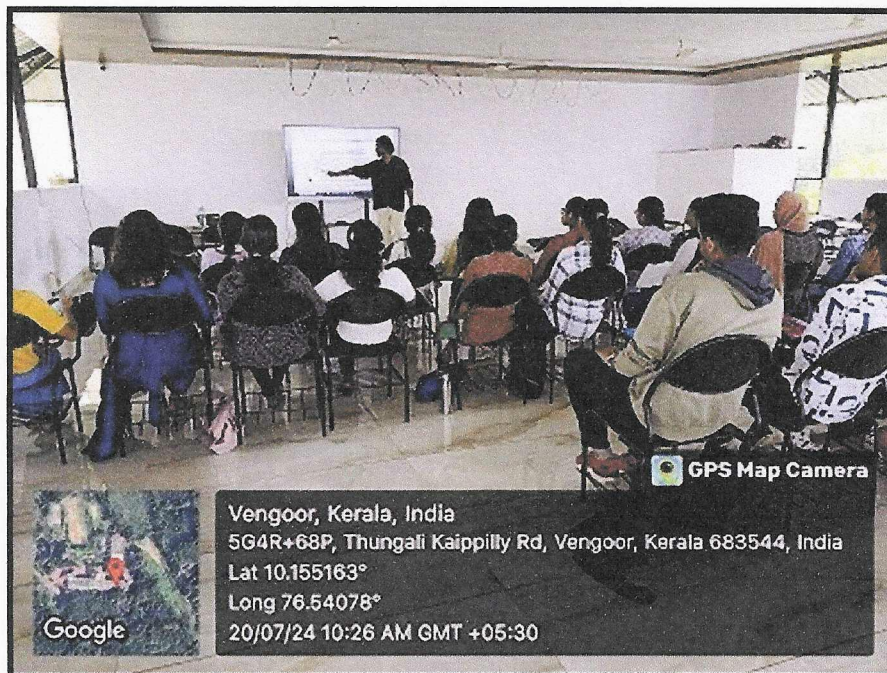


Polyethylene Sheet Roofing of the Canteen



9. Multi-Purpose Open Lecture Hall

The college features a **Multi-Purpose Open Lecture Hall** designed to maximise open natural lighting. The lecture hall allows natural light and wind into the room through its design with windowless low walls, reducing the need for artificial lighting. The hall is used for hosting both curricular and co-curricular activities, making it a flexible space for a wide range of events.

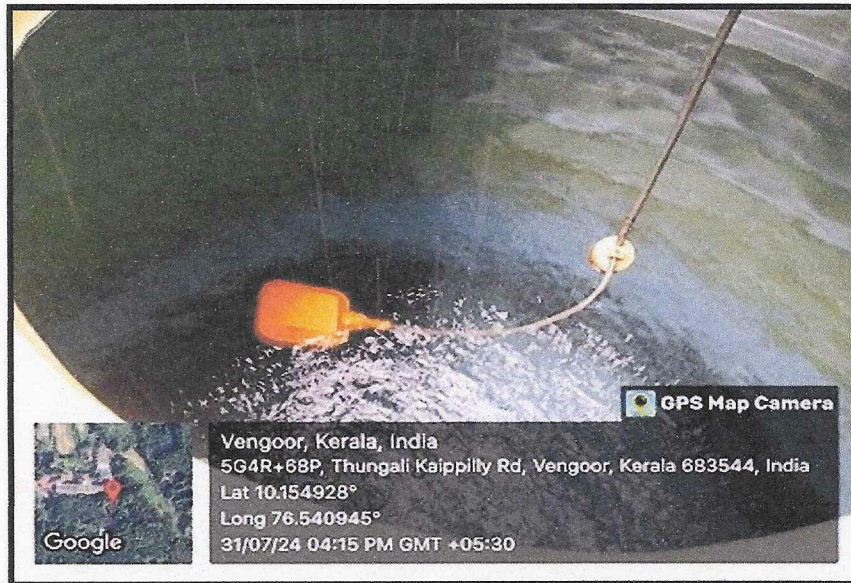


Invited Lecture at the Multi-Purpose Open Lecture Hall



10. Floating Valve

Rajagiri Viswajyothi College uses a **Floating Valve** inside the water tank. It maintains the water level automatically by allowing water to flow into the tank as needed and stopping the flow into the tank as needed and stopping the flow when the tank is full. It helps prevent water wastage by ensuring the tank does not overflow, aligning with the college's sustainability goals.



A Floating Valve inside the Water Tank



11. Rainwater Harvesting

Rajagiri Viswajyothi College is committed to environmental sustainability through its innovative **Rainwater Harvesting System**. This initiative captures and channels rainwater from the roofs of campus buildings into an underground storage pit, effectively integrating water conservation into the college's green practices. By capturing rainwater, the college not only conserves valuable water but also mitigates soil erosion, protecting the campus landscape from runoff. Additionally, this system helps lower utility costs by providing an alternative water source for irrigation and other non-potable uses.

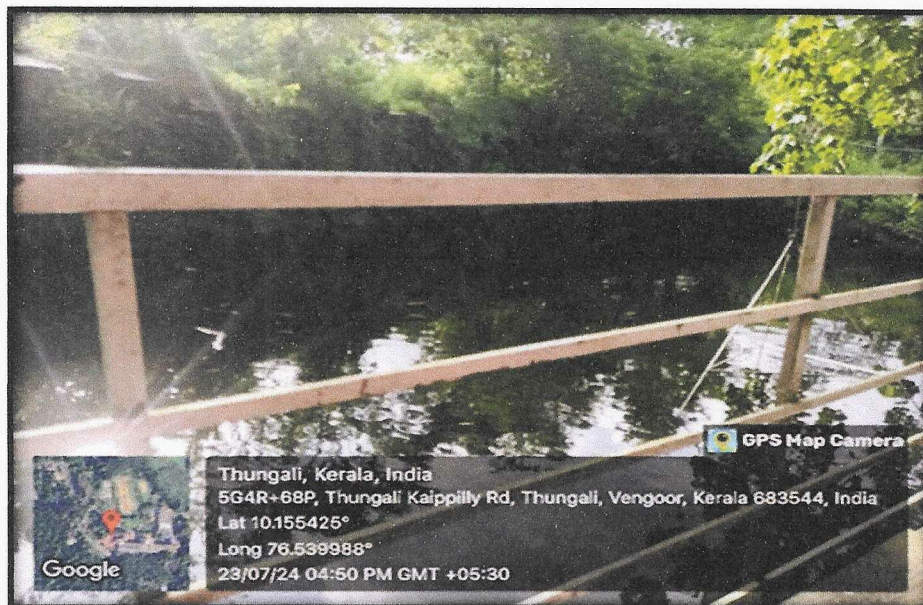


Underground Storage Pit of Rainwater Harvesting System



12. Waterscape

At Rajagiri Viswajyothi College of Arts & Applied Sciences, a rainwater harvesting system effectively channels water from the rooftops to a campus pond called **Waterscape**. This innovative approach maximizes the collection of rainwater runoff, directing it into the pond where it is stored and utilized. The pond serves as a crucial reservoir, supporting irrigation needs and maintaining the campus's green spaces. The Open Recharge Pit, a strategically designed man-made water body, captures additional rainwater, further enhancing the college's ability to manage and conserve water. Together, these systems not only facilitate sustainable water use but also contribute to reducing dependence on external water sources, exemplifying the college's commitment to efficient resource management.



Waterscape on Campus



13. Open Water Recharge Pit

The **Open Water Recharge Pit** at Rajagiri Viswajyothi College is a sustainable initiative designed to enhance groundwater levels and provide an alternate source of water. The pit captures and allows rainwater to percolate into the ground, replenishing the aquifers and boosting groundwater reserves. This helps in maintaining a stable water table, especially during dry periods. By harnessing natural rainfall, the recharge pit reduces dependency on external water sources and supports the college's sustainability goals.



Pond and Open Water Recharge Pit on the Campus



14. Oxygen Zone

Rajagiri Viswajyothi College, renowned for its commitment to sustainability and environmental consciousness, features a unique and vibrant space on its campus known as the **Oxygen Zone**, a natural archway entirely made of plants. It is covered with an abundance of climbing plants and foliage, forming a canopy of green that provides a serene and cool atmosphere. The living archway, with its dense plant cover, not only adds to the aesthetic appeal of the college grounds but also plays a crucial role in improving air quality and offering a space for relaxation and rejuvenation.



Students at the Oxygen Zone



15. Wisdom Path

The **Wisdom Path** initiative of Rajagiri Viswajyothi College is a notable project aimed at combining the benefits of a traditional library with the calming and refreshing environment of a garden. This initiative reflects a growing trend to integrate natural elements into educational spaces to enhance learning and well-being. The Wisdom Path features inviting seating areas where students can immerse themselves in their studies amid the beauty of nature. Designed with student comfort in mind, these spaces will offer ample shade, privacy, and a serene atmosphere. The library will embrace natural light and gentle breezes, creating a refreshing and conducive setting for reading and reflection.

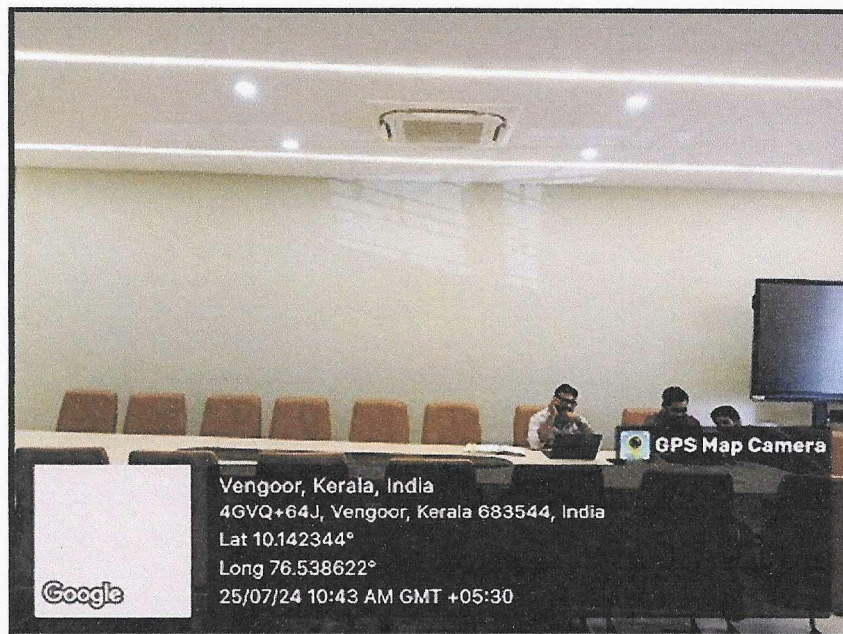


Quiet Study Moments at Wisdom Path



16. LED Lights

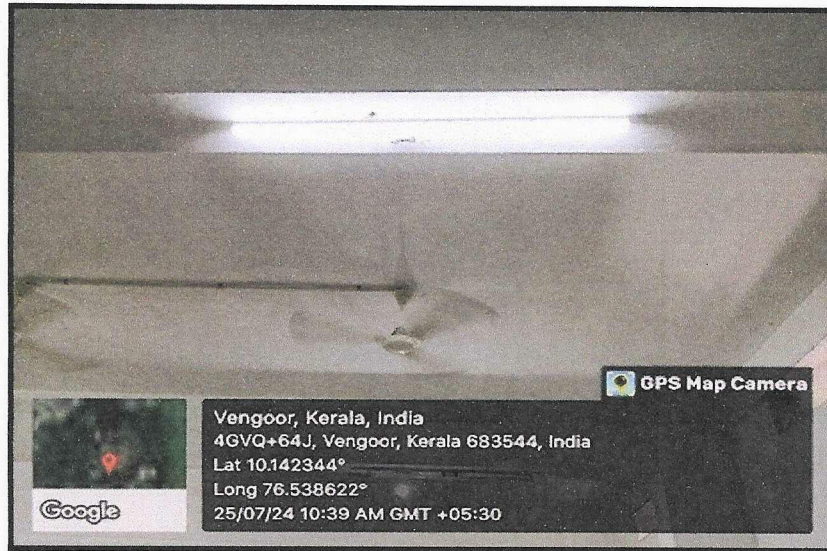
Rajagiri Viswajyothi College of Arts & Applied Sciences demonstrates its commitment to sustainability through the use of energy-efficient **LED Lights** and tubes across the campus. By opting for LED technology, the college significantly reduces its energy consumption, contributing to a smaller carbon footprint and an eco-friendlier environment. LED lights and tubes are known for their high energy efficiency, consuming up to 75% less energy compared to traditional incandescent bulbs. They also have a longer lifespan, which means fewer replacements and reduced waste. This choice aligns with the college's broader sustainability goals, ensuring that energy conservation is a priority in everyday operations.



LED Lights Illuminating RVCAS Board Room



17. LED Tubes



LED Tube Lights in the Classroom

18. Smart Air Conditioners

In its ongoing efforts to promote sustainability and energy efficiency, Rajagiri Viswajyothi College of Arts & Applied Sciences has integrated smart technology into its campus infrastructure by utilizing smart air conditioners (ACs) and smart fans. These remote-controlled devices are a significant upgrade that allows for more precise and efficient energy management. **Smart ACs and Fans** are designed to optimize energy usage by adjusting their operation based on real-time needs, such as occupancy and temperature changes. With remote control capabilities, the college can manage these devices more effectively, ensuring they are used only, when necessary, thereby minimizing energy wastage.



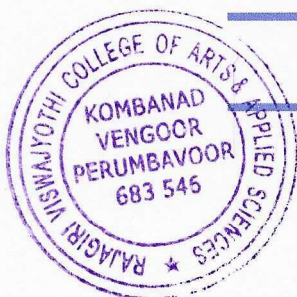


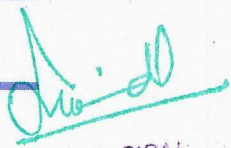
Air Conditioner in the Board Room

19. Smart Fans



Smart Fan in the Board Room




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