

ENERGY CONSERVATION

***** Roof-top Grid Connected Solar Power Plants:

The college has started its energy conservation by installing 20kW and 2kW solar power plant on the rooftop of Administrative Building and Library respectively. Both Solar Photovoltaic (SPV) systems are estimated to afford an annual energy generation of 32,880 units (5units \times 22kWp \times 320days) for captive use under ideal conditions. The energy output of the solar panels meet the energy requirement of the college and excess power produced by the solar panels are supplied to the power grid of MSEB.



Unit-1

Solar Panel at rooftop of administrative building with 16 modules





Solar Panel at rooftop of administrative building with 16 modules

Unit-2



Solar Panel at rooftop of administrative building with 40 modules





Unit-3



Solar Panel at rooftop of Library with 16 modules



Installation work of solar panel at library roof-top



***** Solar Water Heaters at Roof-top:

Solar water heaters use natural sun light to heat water. The girls and boys hostels of the college are equipped with solar water heaters with storage facility, ensuring hot water supply at all times. There are 26 units of solar heaters on the rooftop of Girls' Hostels providing hot water for bathing. Also, there are 18units of solar heaters on the rooftop of Boys Hostel providing hot water for bathing.

Sr. No.	Name of Hostel Wing	No. of Units	Capacity (in
			Liter)
1.	Girls' Hostel New Wing	10	5000
2.	Girls' Hostel A Wing	04	4800
3.	Girls' Hostel B Wing	04	6000
4.	Girls' Hostel C Wing	04	4800
5.	Girls' Hostel D Wing	04	2000
6.	Boy's Hostel	18	9000
Total		44	31600



Solar Heater at Rooftop of 'New' Wing of Girls Hostel





Solar Heater at Rooftop of 'A' Wing of Girls Hostel



Solar Heater at Rooftop of 'B' Wing of Girls Hostel







Solar Heater at Rooftop of 'C' Wing of Girls Hostel



Solar Heater at Rooftop of 'D' Wing of Girls Hostel







Solar Heater at Rooftop of Boy's Hostel



Solar Heater at Rooftop of Boy's Hostel





Sensor based Energy Conservation

Sensor-based lights are a type of lighting system that automatically adjusts their brightness or turns on/off based on environmental conditions or human presence. This technology is installed in the book section of college library. This technology offers several advantages over traditional lighting methods. It is Energy efficient, cost savings, convenience, security and environmental friendliness.



Lights turn off when no one is at book section



Lights turn on when detecting movement at book section

Use of LEDs/Power-Efficient Equipments

The college has adopted a policy to make use of LEDs as they reduce operating costs and satisfy students and faculty demand for green energy and eco-friendly solutions. The college has installed LEDs in all buildings and premises of the campus. Principal's office, IQAC office, Administrative office, Library, Auditorium, Conference Room, Boys' and Girls' Common Room, Virtual Classrooms, Language Lab, Computer Labs, Science Lab, Departmental Offices, and all classrooms have LED bulbs to save energy. Our students are instructed to use electricity wisely and signage's are displayed to reinforce appropriate use of electricity.

Sr. No.	Particular	Quantity
1	LED Tube light	1005
2	LED light	588
3	LED panel square	210
4	Star Surface light	56
5	HF lamp	22
6	CFL Tube light	112
7	CFL bulbs	427
Total	·	2420

Total No. of Energy Efficient lights Installed in College



LED lights in front of Principal's cabin





LED lights in office corridor



LED lights in Administrative office





LED lights in Conference Hall



LED lights in the Library





LEDs in Statistics Practical Lab



LED lights in classroom





LED panels in the corridor of Vocational center



Use of LEDs in Computer Department



