NAAC Criteria VII Institutional Values & Best Practices

7.1.2:

Alternate Energy, Energy Conservation, Waste Management, Water Conservation, Green Campus Initiatives & Disabled Friendly Environment (Geotag Photos)





Assessment Period: 2018 - 2023





Criteria VII : Institutional Values and Social Responsibilities

7.1.2: The Institution has facilities and initiatives for

| Sr. No. | Particulars | Pg. Nos. |
|------------|--|-------------|
| 1 | Part A : Alternate Sources of Energy : Solar Panel | 4 |
| 2. | Part B : Energy Conservation Measures | |
| | a. Energy Efficient Electrical Gadgets | 4 |
| | b. Replacement of Traditional lights with LED | 5 |
| | c. Big windows - Well-lit rooms | 6 |
| | d. Maintenance of Electrical Devices | 7 |
| | e. Sensor Prototype to switch on the lights and fans in Physics Laboratory | 7 |
| | f. "Switch of Lights" Poster in each class | 7 |
| 3. | Part C : Waste Management | |
| | a. Two bin Solid Waste Segregation System | 8 |
| | b. Composting | 8 |
| | c. E -Waste Management | 9 |
| | d. Liqiud Waste Management | 10 |
| 4. | Part D: Water Conservation | |
| | a. Water Conservation Measures | 11 |
| | b. Awareness measure for Water Conservation | 12 |
| 5. | Part E - Green Campus Initiatives | |
| | a. Landscaping with Turf grass to sequester pollutants in the air and QR Coding of plants | 13 |
| | b. Hydroponics | 14 |
| | c. Botanical & Medicinal Garden | 14 |
| | d. Green Canopy over the campus that provides shade and help mitigating pollution | 15 |
| W. War | Part F : Disabled Friendly Barrier free environment | |
| 7. | a. Disabled friendly washrooms | 16 |
| Sandra (W) | b. Ramp at the entrance | 16 |
| umbai-50 | c. Railing along stairs | 16 |





The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and non-degradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Options:

- A. 4 or All of the above
- B. of the above
- C. of the above
- D. 1of the above
- E. None of the above

Ans: 4 or all of the above







Part A. Alternate sources of energy: Solar Panel on the rooftop



Two solar panels in North -west direction on the College Terrace installed by the Department of Physics connected in series with output of 160 watts per hour and storing capacity of 24 volts.



Electricity generated by the solar panels is battery backed up which is utilized for Laboratory equipment used in the MSc Physics Laboratory

Part B : Energy Conservation Measures : Photographic evidences: Following are the representative photographic evidences under every head mentioned herewith.

a. Energy efficient Electrical gadgets



nergy saving **air conditioner** in Digi Space, seminar rooms, conference room, departmental cabins, laboratories etc. adjusted to **24**° C **for maximum saving of electricity**





2 star rated Refrigerators in Cafeteria and Laboratories:





b. Replacement of Traditional lights with LED Lights in classrooms



LED lights in classrooms, laboratories, departmental cabins, open space (garden), etc. ensuring conservation of energy

Mumbai-50







LED Lighting & Power Efficient Equipment in the College (e.g.: 3 Star Air Conditioner, LED Monitor, Day Lighting to reduce light Consumption)

c. Big windows in addition to LED Lights in Laboratory



LED beats, Exhaust fan in strategic locations in addition to Big windows for well-ventilated and well-in aboratories to minimise excess use of electricity even with room with full capacity

lumbai-50

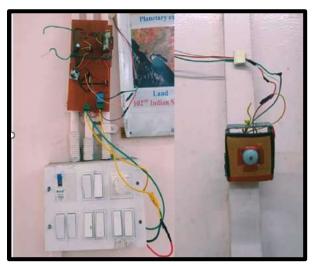




d. Maintenance of Electrical Devices



e. Sensor Prototype: Sensor based system which switches off light and fan when no activity is sensed for 5 mins. in Physics Lab



f. "Switch of Lights" Poster in each class









- C. Management of the various types of degradable waste management
- a. Solid Waste Management: 2 bin waste segregation method:







b. **Composting:** Leaf litter collected from the garden is processed through composting and vermicomposting which is reused for the plants in the campus







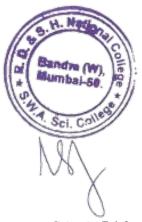
8





c. E-Waste Management in collaboration with "Karo Sambhav"





9





d. Liquid Waste Management: 2 kld Laboratory effluent Treatment plant is installed to treat chemical mixed liquid from Chemistry Laboratory and reuse it for watering the garden in the campus.



Liquid from Biology & biotechnology laboratories are channeled to a tank designed based on **Phytorid technology, patented by NEERI**.

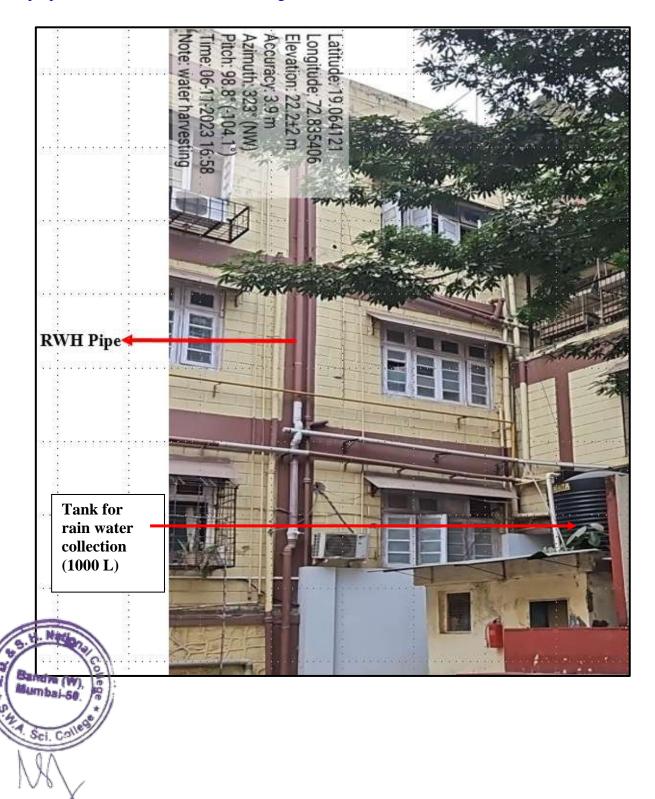






Part D: Water Conservation Measures:

a. Accumulated rain water and excess water from rooftop water storage tank and rooftop is brought down through pipes and stored in water collection tank especially kept for the said purpose in order to minimize the wastage of water.







Slanted Roop top with Water collection pipe channelled to the starage tank



b. Awareness measure for water conservation: Posters are put up to remind students to close the taps and not to waste water in every relevant location in laboratories and near







Criteria 7.1.2 : Environment friendly Facilities & Initiatives





E. Green Campus Initiatives

a. Landscaping with Turf grass to sequester pollutants in the air.



QR coding of plants on the campus:







b. Hydroponics system installed along the corridor on trial basis performs duel role-Provide vegetables and give shade thereby making the area cooler





c. Botanical & Medicinal garden

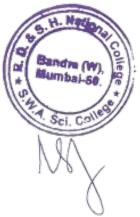






d. Green Canopy over the campus that provides shade and help mitigating pollution





15





F: Disabled Friendly Barrier free environment

a. Disable friendly washroom:



b. Ramp at the Entrance:



c. Railing along Stairs:



16