



Green Audit Report

Smt. Salunkabai Raut Arts & Commerce College
Wanoja, Tal. Mangrulpir , Dist. Washim 444403, Maharashtra



(For the AY 2022-2023)

Prepared by

AiM Sustainability Services

Pune



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Acknowledgement

Green Audit Assessment Team would like to express grateful thanks to the management of Smt. Salunkabai Raut Arts & Commerce College, Wanoja, for assigning this important work of Green Audit. We appreciate the cooperation of our Team for completion of study. Our special thanks to

Sr. No.	Name	Designation
1	Smt. Kamlabai J. Raut	President
2	Shri. Ramdas N. Raut	Vice-President
3	Smt. Shushilabai R. Raut	Secretary
4	Shri. Ramdas P. Raut	Treasurer
5	Dr. Marotrao S. Raut	Member
6	Shri. Pralhad B. Raut	Member
7	Shri. Manohar B. Raut	Member
8	Shri. Dnyandeorao P. Raut	Member
9	Shri. Tulsiram P. Chambhare	Member

Sincere thanks to all for giving us necessary inputs to carry out this very vital exercise of Green Audit. We are also thankful to environment committee and other staff members who were actively involved while collecting the data and conducting field measurements.

Environment Committee

Sr. No	Name	Designation
1	Dr. D.R.Gawande	Chairman
2	Prof. D.D.Bhagat	Co-ordinator
3	Prof. P.N.Lahase	Member
4	Dr. M.V.Pathrikar	Member
5	Dr. V.P.Ubhale	Member
6	Dr.G.B.Ghonagate	Member
7	Prof. B.S.Dongare	Member
8	Prof. Ku. J.M.Bhagat	Member
9	Ku. Vaishnavi Raut	Student Representative
10	Pratham Sinkatwar	Student Representative

We sincerely hope and believe that the efforts made by the present Green Audit Committee will be helpful for Smt. Salunkabai Raut Arts & Commerce College, Wanoja and we hope that it becomes a responsibility of all the stakeholders of this college campus to follow the proposed management plan suggested in the report to reduce our impact on our environment.



Picture 01: College Main Building Smt. Salunkabai Raut Arts & Commerce College, Wanoja



Picture 2: Internal view of college building Smt. Salunkabai Raut Arts & Commerce College, Wanoja



Green Audit Team

Dr. Anuradha Borekar: The evaluation of criteria as per chapter 7 of “National Assessment and Accreditation Council (NAAC) - Manual for Affiliated/Constituent UG & PG Colleges, December 2021 and Chapter VII of “Guidelines for the Creation of the Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) by Accredited Institutions” is done by Dr. Anuradha. Dr. Anuradha also examined the “performance indicators of Green Audit & Green Audit Parameters/ Projects performed” as a Lead Auditor from AIMSS. She performed several Environment and Green Campus audits at various academic institute as per NAAC guideline. Dr. Anuradha secured the M.Phil. (Botany, Molecular Biology, Biotechnology and plant breeding), Ph.D. (Water quality assessment, Water conservation, Biodiversity and Environment).

Mr. Ajit Ghule: Technical advisor for Green Audit. He performs onsite survey. He is graduate in Social Science and having 5 years of experience in Green Audit.

Disclaimer

Green Audit Team has prepared this report for Smt. Salunkabai Raut Arts & Commerce College, Wanoja based on input data submitted by the representatives of Institute. Complemented the report with the best judgment capacity of the expert team. While all reasonable care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered. It is further informed that the calculations are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements, or forecasts in the report.

Prepared by:

A handwritten signature in blue ink, appearing to read 'Anuradha Borekar', followed by a period.

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Abbreviations

AHU: Air Handling Unit

BEE: Bureau of Energy Efficiency

CFL: Compact Fluorescent Lamp

COP: Coefficient of Performance

CPCB: Central Pollution Control Board

DG: Diesel Generator

ECRM: Energy Consumption Reduction Method

EF: Emission Factor

HSD: High Speed Diesel

HOD: Head of Department

HVAC: Heating, Ventilation, And Air Conditioning

ISO: International Standardisation Organisation

Km: Kilometer

kV: kilo Volt

kW: kilo Watts

Lab: Laboratory

LED: Light-Emitting Diode

MNRE: Ministry of New and Renewable Energy

MSEDCL: Maharashtra State Electricity Distribution Co. Ltd.

NSS: National Service Scheme

UGC: University Grant Commission

WHO: The World Health Organization

TR: Tons of Refrigeration



Executive Summary

In accordance with the requirement of chapter 7 of “National Assessment and Accreditation Council (NAAC) - Manual for Affiliated/Constituent UG & PG Colleges, December 2019” Risk-Based Audit conducted at Smt. Salunkabai Raut Arts & Commerce College, Wanoja for Academic year 2022-23. Site Visit to perform the Green Audit at college was done in April 2023. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. With this in mind, the specific objectives of the audit were to evaluate the adequacy of the management control framework of Environment Sustainability as well as the degree to which the Departments follow the applicable regulations, policies and standards. During the initial planning of the audit, an analysis was conducted in order to identify, evaluate and prioritize the risks associated with the environmental sustainability. The analysis was based upon an examination of the policies, supportive documents that govern the environmental sustainability, on data analysis, and on the results of preliminary interviews with personnel considered key in the environmental management in the campus. The criteria and methods used in the audit were based on the identified risks. The methodology used included physical inspection of the campus, review of the relevant documentation, and interviews. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.

Statement of Assurance

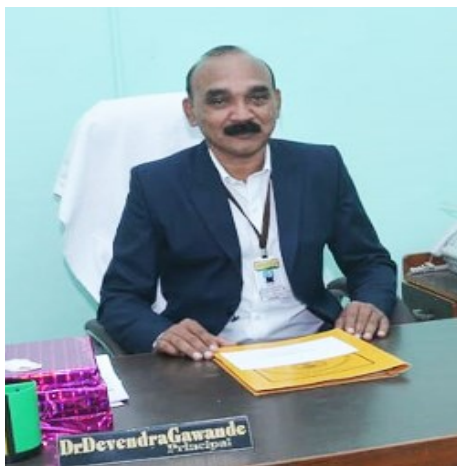
This audit has been conducted in accordance with the NAAC Green Audit requirement. In our professional judgement, sufficient and appropriate audit procedures were completed, and evidence gathered to support the accuracy of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit with the established criteria. Green Audit Report is prepared for the academic session 2022-23.

Summary of Findings

The main findings of the audit show that, in general, all the departments and students are aware about the need for environmental protection at a general level. It was also observed that a number of best practices such as maintaining potted plants, rain water harvesting system, waste management (compost pit), water management, application of day light, cross ventilation, carpooling, biodiversity, plantation, e-waste disposal, gender equity, health checkup plan, blood donation camp, vaccination camp, health and safety facilities, Divyangjan student facility etc. are followed in the campus. Nevertheless, on detailed review, it was observed that, as the college is continued implementing Green Policy, several best practices are in pipeline. In addition, certain processes could benefit from further review in order to improve their efficiency, and consistency. This report explained the opportunity for improvement. Please refer chapter 5 for more details.

Chapter 01: Introduction

From the Principal's Desk



Dr. Davendra Gawande

B.Com, M.P.Ed., Ph.D.

Smt. Salunkabai Raut Arts & Commerce College, Wanoja.

Dnyanganga Shikshan Prasarak Sanstha was established in the year 1984 at Wanoja Dist. Washim. It has been working to uplift the lives of deprived section of society in rural area. The vision, mission and objectives of the institution are as under:

Vision:

Our vision is to facilitate human development of the students of socially and economically backward classes as well as to attract the SC, ST, OBC, towards higher education for their overall development.

Mission:

- a. To run educational institute to impart valuable service in the field of education to the students residing in the area, especially to those who are economically and socially backward.
- b. To provide library facility and computer knowledge to the students to face the challenges of the competitive world.
- c. To stimulate the academic environment for the up gradation in teaching, learning process in rural area.
- d. To render the service to the nation through works of educational institution.

Objectives:

1. To provide higher education to the students of this region.
2. To promote discipline, determination, devotion and social dedication among the students.
3. To spread the moral message of the great Indian Icons like Swami Vivekanand, Dr. Babasaheb Ambedkar, Mahatma Gandhi, Sant Gadge Baba, and Sant Tukdoji Maharaj.
4. To update the knowledge of the student and to make them able to face the challenges of the competitive world.



5. To developed all-around personality of the students of this area through NSS,NCC ,Cultural activities and extra-curriculum activities.
6. To provide an opportunity of getting higher education to the rural students from various cast and categories specially from the students of ST,SC,OBC, categories.
7. To promote and support the Government sponsored welfare Programme for the benefits of the society.
8. To discharge the social responsibility.
9. To make the rural people aware about the importance of higher education.
10. To make college a tool to liberate the students from the shackles of the past and embrace the challenges of global opportunities.
11. To impart quality education without discrimination, irrespective of caste ,creed ,religion and gender.
12. To promote innovation, creativity and entrepreneurship among the learners.
13. To impact skill-oriented education that enables the learners to improve employable competencies in the context of changing economic order.

The vision, mission and objectives of the institution are communicated to the students, teachers, staff and others stakeholders through board displays, college prospectus, website of the college and notice board.

Reference - http://www.smtsalunkabairaut.com/Principal_Desk.html

About College

Smt. Salunkabai Raut Arts & Commerce College, Wanoja was established on 23rd September 1984. It was started by Dnyanganga Shikshan Prasarak Sanstha Wanoja. The founder members of this institution, thought being farmers, wanted to do something for the society of this rural area. They founded an education institution aiming to provide secondary and higher education to the students in the surrounding area mainly economically and socially backward and the wards of agricultural labours and farmers, who otherwise would have been deprived of the opportunity of getting higher education. Keeping this in view they put their efforts in right direction and they succeeded in their mission. The college has been rendering valuable service in the field of education to the students of not only the village of Wanoja but near about 10 villages too for the last 31 years."

"The College started initially with Arts faculty with enrolment of 37 students in 1984 and Commerce faculty with enrolment of 40 students in 1985. At present the strength of the college is up to 775. Since then, our college has been providing education in the faculty of Arts & Commerce from Junior college MCVC to graduation. It has competent teacher staff, well equipped library, Computer lab, spacious class rooms and green campus area vast playgrounds etc. The institution affiliated to Sant Gadgebaba Amravati University Amravati Maharashtra the college also gained the status of 2 F 12 B by UGC in September 2011 In January 2005 the college has been accredited with C + grade by NAAC Bangalore.

Reference - http://www.smtsalunkabairaut.com/about_college.html



Chapter 02: Green Audit

The process of assessing the environmental impact of an organization, process, project, product, etc. Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The “Green Audit” aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the Institute whose exercises can cause risk to the health of inhabitants and the environment. Green audit can be one of the initiatives for such institutes to account their “*energy conservation, water resource use as well as wastewater, E-waste, solid waste generation, biodiversity, rain water harvesting, waste recycling (solid/liquid waste management, e-waste management), carbon neutral, green practices, social aspects*”. Green Audit process can play an important role in promotion of environmental awareness and sensitization about resource use. It can create consciousness towards ecological values and ethics. Through Green Audit, one gets a direction as how to improve the condition of environment and society.

The National Assessment and Accreditation Council (NAAC), which is an autonomous body funded by the University Grants Commission of Government of India, has made ‘Environmental Consciousness’ mandatory criterion (Criterion VII) for grading educational institutes.

NAAC criteria VII Environmental Consciousness:

Universities are playing a key role in development of human resources worldwide. Higher education institutes campus run various activities with aim to percolate the knowledge along with practical dimension among the society. Likewise, different technological problems higher education institutes also try to give solution for issues related to environment. Different types of evolutionary methods are used to assess the problem concerning environment. It includes Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Carbon Footprint Mapping, Green audit etc. National Assessment and Accreditation Council (NAAC) which is a self- governing organization that declares the institutions as Grade according to the scores assigned at the time of accreditation of the institution. Green Audit has become mandatory procedure for educational institutes under Criterion VII of NAAC. The intention of green audit is to upgrade the environmental condition inside and around the institution. It is performed by considering environmental parameters like water and wastewater accounting, energy conservation, waste management, air, noise monitoring etc. for making the institution eco-friendlier. Students are the major strength of any academic institution. Practicing green actions in any educational institution will inculcate the good habit of caring natural resources in students. Many environmental activities like plantation and nurturing saplings and trees, Cleanliness drives, Bird watching camps, no vehicle day, Rainwater harvesting, etc. will make the students good citizen of the country. Through Green Audit, higher educational institutions can ensure that they contribute towards the reduction of Global warming through Carbon Footprint reduction measures.

Goals of Green audit:

Institute has conducted a green audit with specific goals as:

- Identification and documentation of green practices followed by Institute
- Identify strength and weakness in green practices
- Conduct a survey to know the ground reality about green practices
- Analyze and suggest solution for problems identified from survey
- Assess facility of different types of waste management
- Increase environmental awareness throughout campus
- Increase social awareness throughout campus
- Identify and assess environmental risk
- Motivates staff for optimized sustainable use of available resources



- The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem

Scope of Work:

The purpose of the audit is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institute. With this in mind, the specific objectives of the audit were to evaluate the adequacy of the management control framework of Environment and Social Sustainability as well as the degree to which the Institute are in compliance with the chapter 7 of “*National Assessment and Accreditation Council (NAAC) - Manual for Affiliated/Constituent UG & PG Colleges*”. Therefore, the main objective of this green audit is to get a third-party verification on the quality of various natural / social aspect and to evaluate the opportunities of improvement, possible best practices.

Objectives:

The main objective of this green audit is to assess the environmental quality, social awareness and the management strategies being implemented in the campus. The specific objectives are:

- To identify and analyze significant environmental issues.
- To monitor environmental management practices.
- To monitor social awareness practices
- To examine the current practices that can impact the environment.
- To create environment and social awareness among the various stakeholders of the Institute.
- To prepare a Green Audit Report on green practices followed by different Departments, support services and administration
- To prepare a checklist of flora and fauna diversity in and around the college campus.
- To find out various sources of organic and solid waste generation and mitigation possibilities.
- To suggest sustainable energy usage and water conservation practices.
- Continuous assessment for betterment in performance in green practices and its evaluation.

Methodology

To perform green audit, the methodology included different techniques such as physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following area to summaries the present status of environment and social management in the campus:

- Onsite field visits were conducted by the Green Audit Team
- Enquiries were conducted amongst different stakeholders to know about the various components in connection with water use, energy consumption and waste disposal, biodiversity, renewable energy use, carbon footprint, social aspects etc.
- The water quality analysis was done using standard protocols
- Air quality analyses of the college campus were carried out using standard protocol
- The noise levels were measured using a Sound Level Meter at selected sampling stations during the day time within the campus
- Lux measurement was done at the classroom, library, offices and laboratories
- Electricity consumption and management
- Water consumption and management
- Waste management
- Biodiversity status of the campus

Chapter 03: Target Areas of Green Audit

Environmental Aspects:

1. Water

Water which is precious natural national resource available with fixed quantum. The availability of water is decreasing due to increasing population of nation, as per capita availability of utilizable water is going down. Due to ever rising standard of living of people, industrialization, urbanization, demand of fresh water is increasing day by day. The unabated discharge of industrial effluent in the available water bodies is reducing the quality of these ample sources of water continuously. Hence, the national mission on water conservation was declared by the then Hon. Prime Minister Narendra Modi as 'Jal Shakti Abhiyan' and appealed to all citizens to collectively address the problem of water shortage, by conserving every drop of water and suggested for conducting water audit for all sectors of water use.

Water assessment can be defined as a qualitative and quantitative analysis of water consumption to identify means of reducing, reusing and recycling of water. Water assessment is nothing but an effective measure for minimizing losses, optimizing various uses and thus, enabling considerable conservation of water in irrigation sector, domestic, power and industrial as well. A water assessment is a technique or method which makes possible to identify ways of conserving water by determining any inefficiencies in the system of water distribution. The measurement of water losses due to different uses in the system or any utility is essential to implement water conservation measures in such an establishment. Please find below reference for permissible limit of Drinking Water as per Indian Standard Drinking Water — Specification (Second Revision) ICS13.060.20

https://cpcb.nic.in/wqm/BIS_Drinking_Water_Specification.pdf

Table 1 Organoleptic and Physical Parameters
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Colour, Hazen units, <i>Max</i>	5	15	Part 4	Extended to 15 only, if toxic substances are not suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a) Test cold and when heated b) Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, <i>Max</i>	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, <i>Max</i>	500	2 000	Part 16	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.

2. Air

Air quality in the academic institute is very important for the health of the students, faculty and staff of the institute. The air pollution sources in the college campus are wind, storm, pollen grains, natural dust, vehicular emissions, fire and laboratory fumes etc. Therefore, air quality assessment in the college campus is necessary.

Reference: https://cpcb.nic.in/uploads/National_Ambient_Air_Quality_Standards.pdf

3. Noise

Noise pollution is unwanted and unpleasant sound which can deteriorate human health and other living organisms present in the Environment. At workplace machines, traffic, vehicles create occupational noise. Employees and occupants are exposed to this harmful noise. Due to this occupant can face many health problems such as headache, hearing impairment, hypertension, heart problem, annoyance and sleep disorder. Noise Pollution Monitoring process is a part of Environmental Monitoring & Testing as noise pollution is also increasing exponentially in recent years. Noise intensity distracts the day today working in college campus. Noise intensity is measured in dB. Permission limit as CPCB and WHO guideline is as below.

Reference: <https://cpcb.nic.in/who-guidelines-for-noise-quality/>

In WHO noise quality guidelines, values are summarized with regard to specific environments and effects. Foreach environment and situation, the guideline values take into consideration the identified health effects and are set, based on the lowest levels of noise that affect health (critical health effect). Guideline values typically correspond to the lowest effect level for general populations, such as those for indoor speech intelligibility. Noise guideline values are for the onset of health effects from noise exposures.

Specific Environment	Time Base (hours)	Standard limits as per WHO guidelines	
		LAeq [dB]	LAm _{ax} , fast [dB]
School class rooms and pre-schools, indoors	During class	35	-
School, playground outdoor	During play	55	-

4. Energy

Consumption of energy helps in understanding the success towards green environment. Lesser the consumption of energy more contribution the environment is. Electricity can be used efficiently by replacing CFL bulbs and tube lights with LED lamps and fluorescent tubes wherever possible and use of LED screens in place of CRT. Star rated Air conditioners should be placed in place of old air conditioners. Efficiency of air conditioners should be increased by minimizing the leakage using through open doors and cupboards of the room. Infrastructural changes that allow maximum natural light but minimizes heat in-grace help in reducing the use of electricity. Simple practices like cleaning skylights and lamps will increase the luminosity. There should not be any idle energy consumption.

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances and vehicles. Energy use is clearly an important aspect of campus sustainability.

The Standards & Labelling Programme is one of the major thrust areas of BEE. A key objective of this scheme is to provide the consumer an informed choice about the energy saving and thereby the cost saving potential of the relevant marketed product. The scheme targets display of energy performance labels on high-energy end-use equipment & appliances and lays down minimum energy performance standards.

Presently, S&L program covers star rating for 26 appliances/equipment. List of the appliances covered under the ambit of Star Labelling is as given below:

Reference: <https://beeindia.gov.in/content/standards-labeling>



For Lighting systems in schools

Reference: https://www.partnershipsforschools.org.uk/documents/Design/SSLD_4_Lighting_systems.pdf

5. Carbon Footprint

Carbon footprint is the total amount of Green House Gases (GHGs) emitted in terms of carbon dioxide by a person, institute, company, state or country. Carbon footprint is typically given in tons of CO₂ equivalent per year. For calculation of carbon footprint the basic data regarding direct and indirect sources of emission of Green House Gases is needed. How we get around and commute to and from college each day has an impact on the environment through the emission of greenhouse gases into the atmosphere by the burning of fossil fuels (such as petrol). The most common greenhouse gases are carbon dioxide, water vapor, methane, nitrous oxide and ozone. Of all the greenhouse gases, carbon dioxide is the most prominent greenhouse gas, comprising 402 ppm of the Earth's atmosphere. The release of carbon dioxide gas into the Earth's atmosphere through human activities is commonly known as carbon emissions

Reference: <https://www.carbonfootprint.com/> and <https://ghgprotocol.org/standards>

Emission factor reference:

CEA: <https://cea.nic.in/cdm-co2-baseline-database/?lang=en>
https://cea.nic.in/wp-content/uploads/baseline/2023/01/version_18.zip

DEFRA: <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

6. Waste Management

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, glass, dust etc. Furthermore, solid waste often includes wasted material resources that could otherwise be channelled into better service through recycling, repair and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The present Prime Minister of India Sri Narendra Modi launched 'Swachh Bharat Abhiyan' (Clean India Mission) on 2nd October 2014. In this mission, the proper use of dust/waste bins is one of the major priorities. For the implementation of this mission, collective mass effort is necessary. For proper segregation and management, proper use of waste bins is the only solution for waste management purpose in the college campuses.

E waste management reference: https://cpcb.nic.in/uploads/Projects/E-Waste/e-waste_amendment_notification_06.04.2018.pdf
<https://mpcb.gov.in/waste-management/electronic-waste>



Solid waste management reference: <https://www.mpcb.gov.in/waste-management/municipal-solid-waste>

https://www.mpcb.gov.in/sites/default/files/solid-waste/msw_rules_2016.pdf

Biomedical waste management: <https://mpcb.gov.in/waste-management/biomedical-waste>

7. Green Belt/ Biodiversity status

To conserve this biodiversity, our first need is to learn about the existing diversity of the place. Unless we know whom to conserve, we will not be able to plan proper conservation initiatives. Also, it is important to understand the biodiversity of an area so that the local people can be aware of the richness of biodiversity of the place they are living in and their responsibility to maintain that richness.

This study allows us to understand the faunal and floral diversity of the surrounding areas of the college premises and their interrelationship

Reference: <https://www.worldwildlife.org/pages/what-is-biodiversity>

Biodiversity is all the different kinds of life you'll find in one area—the variety of animals, plants, fungi, and even microorganisms like bacteria that make up our natural world. Each of these species and organisms work together in ecosystems, like an intricate web, to maintain balance and support life. Biodiversity supports everything in nature that we need to survive: food, clean water, medicine, and shelter.

Social Aspects:

“Social Auditing is a process that enables an organization to assess and demonstrate its social benefits and limitations. It is a way of measuring the extent to which an organization lives up to the shared values and objectives it has committed itself to. Social auditing provides an assessment of the impact of an organization's non-financial objectives through systematically and regularly monitoring its performance and the views of its stakeholders.”

A. Health and Safety

The very purpose of greening of educational campuses is to ensure that the student's study and grow up in a healthy environment, giving out the best of their physical and intellectual contributions to the society. The method for assessing the physical wellbeing of the educational institution has been decided as follows:

- i. Examine the prevalence of sickness leave, if there are any.
- ii. Examine the first aid and medical facilities available for resident students and staff.
- iii. Evaluate the atmospheric quality, drainage systems and land pollution – if any within the campus; and Assess the achievements of students in sports and games, especially in inter collegiate and inter- Institute contests.

https://www.ugc.ac.in/pdfnews/4006064_Safety-of-Students-Guidelines.pdf

https://www.education.gov.in/sites/upload_files/mhrd/files/SOP_Guidelines_for_reopening_schools.pdf https://www.ugc.ac.in/pdfnews/4613471_Guidelines.pdf



B. Accessibility to Divyangjan and Gender Justice

Right of Persons with Disabilities Act, 2016 prohibits discrimination against individuals with physical and mental disabilities. Institute shall be is against all kinds of discrimination on any grounds including disability. Institute shall intend to advance a comprehensive and inclusive teaching and learning environment in which incapacitated students and employees are not distraught or treated unfavourably. The institute must aim to design its programs, administrations, and activities accessible to the students. All the authorities of the institute shall strive in order to extend a help hand towards the differently abled so as to make sure about the Benefits of grounds programs, administrations, and activities.

- Institute shall have Inclusive Culture to avoid discrimination, exploitation and exclusion of DisableStudents and Staff from all spheres of work and education.
- Institute shall create suitable regulatory mechanism for effective delivery of services to Disable Students and Staff of the institute
- Institute shall ensure implementation of all legislations with respect to persons with disabilities.
- To provide accessible and inclusive education at the institute.
- Institute shall ensure full participation of persons with disabilities and to provide them the equal opportunities for development.
- Institute shall provide necessary budget allocation to achieve above objectives.

Reference:

https://www.ugc.ac.in/pdfnews/1604485_person-with-disabilities-Uni.pdf

https://www.ugc.ac.in/pdfnews/7348678_Guidelines_Exam-Divyangjan-JAN-2019.pdf

<https://disabilityaffairs.gov.in/content/page/guidelines.php>

<https://disabilityaffairs.gov.in/upload/uploadfiles/files/Corrigendum-08-02-19.pdf>

https://disabilityaffairs.gov.in/upload/uploadfiles/files/Guidelines-29_08_2018.pdf

https://upload.indiacode.nic.in/showfile?actid=AC_CEN_25_54_00002_201649_1517807328_299&type=notification&filename=Guidelines%20notification_04.01.2018.pdf

C. Gender Justice:

Reference: <https://www.un.org/sustainabledevelopment/gender-equality/>





Goal 5: Achieve gender equality and empower all women and girls

Gender equality is not only a fundamental human right, but a necessary foundation for a peaceful, prosperous and sustainable world.

There has been progress over the last decades: More girls are going to school, fewer girls are forced into early marriage, more women are serving in parliament and positions of leadership, and laws are being reformed to advance gender equality. Despite these gains, many challenges remain: discriminatory laws and social norms remain pervasive, women continue to be underrepresented at all levels of political leadership, and 1 in 5 women and girls between the ages of 15 and 49 report experiencing physical or sexual violence by an intimate partner within a 12-month period. The effects of the COVID-19 pandemic could reverse the limited progress that has been made on gender equality and women's rights. The coronavirus outbreak exacerbates existing inequalities for women and girls across every sphere – from health and the economy, to security and social protection. Women play a disproportionate role in responding to the virus, including as frontline

healthcare workers and caregivers at home. Women's unpaid care work has increased significantly as a result of school closures and the increased needs of older people. Women are also harder hit by the economic impacts of COVID-19, as they disproportionately work in insecure labour markets. Nearly 60 per cent of women work in the informal economy, which puts them at greater risk of falling into poverty. The pandemic has also led to a steep increase in violence against women and girls. With lockdown measures in place, many women are trapped at home with their abusers, struggling to access services that are suffering from cuts and restrictions. Emerging data shows that, since the outbreak of the pandemic, violence against women and girls – and particularly domestic violence – has intensified.

C. Child Labor-

Article 24 of the Indian constitution clearly states that, "No child below the age of fourteen years shall be employed to work in any factory or mine or employed in any hazardous employment." The Child Labour (Prohibition and Regulation) Act of 1986 designates a child as a person who has not completed their 14th year of age. It aims to regulate the hours and the working conditions of child workers and to prohibit child workers from being employed in hazardous industries.

Government has enacted the Child Labour (Prohibition & Regulation) Amendment Act, 2016 which came into force w.e.f. 1.9.2016. The Amendment Act completely prohibits the employment of children below 14 years. The amendment also prohibits the employment of adolescents in the age group of 14 to 18 years in hazardous occupations and processes and regulates their working conditions where they are not prohibited. The amendment also provides stricter punishment for employers for violation of the Act and making the offence of employing any child or adolescent in contravention of the Act by an employer as cognizable. In order to achieve effective enforcement of the provisions of the Act, the amendment empowers the appropriate Government to confer such powers and impose such duties on a District Magistrate as may be necessary. Further, the State Action Plan has been circulated to all the States/UTs for ensuring effective implementation of the Act.



Government of India has notified the amendment in the Child Labour (Prohibition and Regulation) Central Rules after extensive consultation with the stakeholders. The Rules provide broad and specific framework for prevention, prohibition, rescue and rehabilitation of child and adolescent workers. It also clarifies on issues related with help in family and family enterprises and definition of family with respect to child, specific provisions have been incorporated in rules. Further, it also provides for safeguards of artists which have been permitted to work under the Act, in terms of hours of work and working conditions. The rules provide for specific provisions incorporating duties and responsibilities of enforcement agencies in order to ensure effective implementation and compliance of the provisions of the Act.

Reference:

1. [Child Labour \(Prohibition and Regulation\) Amendment Rules, 2017](#)
2. [Child Labour \(Prohibition & Regulation\) Amendment Act, 2016](#)
3. [Child Labour \(Prohibition and Regulation\) Act 1986](#)
4. [Constitutional Provisions for Child Upliftment](#)
 - i. [Article 21 A: Right to Education](#)
 - ii. [Article 24: Prohibition of employment of children in factories, etc.](#)
 - iii. [Article 39: The State shall, in particular, direct its policy towards securing](#)
5. [Legislative Provisions Prohibiting and Regulating Employment of Children](#)
6. [ILO core conventions related to Child Labour](#)
7. [National Policy on Child Labour](#)
 - i. [Policy](#)
 - ii. [Right to Education Bill](#)



Chapter 04: Audit Framework and detailed findings

The following audit framework is used for conducting Green Audit in 2022-2023. The framework also lists the findings and observations for every criterion

Checklist Question	Response from Institute																																	
Organizational Level Efforts																																		
Do you have a campus green team?	<p>Yes, audit team verified the Green Campus committee submitted by institute</p> <table><tr><th>Sr. No</th><th>Name</th><th>Designation</th></tr><tr><td>1</td><td>Dr. D.R.Gawande</td><td>Chairman</td></tr><tr><td>2</td><td>Prof. D.D.Bhagat</td><td>Co-ordinator</td></tr><tr><td>3</td><td>Prof. P.N.Lahase</td><td>Member</td></tr><tr><td>4</td><td>Dr. M.V.Pathrikar</td><td>Member</td></tr><tr><td>5</td><td>Dr. V.P.Ubhale</td><td>Member</td></tr><tr><td>6</td><td>Dr.G.B.Ghonagate</td><td>Member</td></tr><tr><td>7</td><td>Prof. B.S.Dongare</td><td>Member</td></tr><tr><td>8</td><td>Prof. Ku. J.M.Bhagat</td><td>Member</td></tr><tr><td>9</td><td>Ku. Vaishnavi Raut</td><td>Student Representative</td></tr><tr><td>10</td><td>Pratham Sinkatwar</td><td>Student Representative</td></tr></table>	Sr. No	Name	Designation	1	Dr. D.R.Gawande	Chairman	2	Prof. D.D.Bhagat	Co-ordinator	3	Prof. P.N.Lahase	Member	4	Dr. M.V.Pathrikar	Member	5	Dr. V.P.Ubhale	Member	6	Dr.G.B.Ghonagate	Member	7	Prof. B.S.Dongare	Member	8	Prof. Ku. J.M.Bhagat	Member	9	Ku. Vaishnavi Raut	Student Representative	10	Pratham Sinkatwar	Student Representative
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Does any Environmental Audit conduct earlier?	Yes, The institute regularly conducts the quality audits on environment and green campus.																																	
Have you established an environmental mission/vision for your campus?	<p>Yes, audit team verified the Environmental vision/mission:</p> <p>The institutional environment and green initiatives are confirmed through the following</p> <p>1.Green Campus audit</p> <p>2.Recognitions/awards by “District Disaster Management department”</p> <p>3. Beyond the campus environmental promotional activities</p>																																	
Have you set environmental goals for your campus?	<p>Yes, During discussion with Green Committee, we noted below upcoming initiatives</p> <p>1] Solid Waste management</p> <p>2] 100 % coverage of Drip Irrigation for all plantation places in campus</p> <p>3] Rainwater Harvesting for 100 % Roof Coverage Area.</p> <p>4] Development of Lawn and Garden in various places in Campus</p> <p>5] Construction and maintenance of Compost pit for the proper management of garden waste</p> <p>6] MOU with vendor for recycling of E-waste management</p>																																	



<p>Do you encourage sustainable behavior via?</p> <ul style="list-style-type: none"> ➤ education campaigns? ➤ Poster, placard, message, stickers ➤ contests? ➤ awards? 	<ul style="list-style-type: none"> ➤ Institute has undertaken various initiatives as part of the National Service Scheme (NSS) program, such as organizing plantation drives and cleanliness campaigns. Every year, the NSS team leads a tree plantation program both within and outside the campus. Additionally, tree plantation drives are also carried out during N.S.S Special camps. ➤ The institute is dedicated to promoting the conservation of snake and animal biodiversity, and consistently takes initiatives to protect and preserve their lives. One such program is the NSS (National Service Scheme), which encourages students and staff to actively participate in activities that promote the conservation of biodiversity. Through these initiatives, the institute aims to raise awareness about the importance of protecting these species and their habitats, as well as inspire individuals to take action towards ensuring their survival. ➤ Audit team observed the messages like "Switch off" light when not in use" at various location. There is no award scheme established by institute.
<p>Are sustainability concepts and environmental literacy integrated across disciplines? between the environment, society?</p>	<p>The institute has taken a proactive approach towards identifying and addressing environmental and social concerns on campus, and has established a dedicated committee to lead sustainability efforts. The core green campus committee works towards implementing the best environmental practices among students and staff, in order to create a greener and more sustainable campus.</p> <p>One noteworthy initiative that has been spearheaded by the NSS team is the annual plantation program. This program encourages students to participate in tree-planting activities, which not only helps to beautify the campus but also contributes to mitigating the effects of climate change. Through such initiatives, the institute is striving towards creating a more eco-friendly and socially responsible campus community.</p>
<p>Are staff encouraged to teach sustainability concepts, including the relationship</p>	<p>Yes, Environmental sustainability is an integral part of the curriculum across all streams of education at this institution.</p>
<p>What are the environment and social awareness programs conducted in the campus?</p>	<p>Audit team reviewed below awareness program via celebrations of several days by institute under NSS.</p> <p>All National & International Days are celebrated in the campus.</p> <ul style="list-style-type: none"> • Yoga Day • Tree Plantation • Environmental Day • Women's Day • NSS Day • Pulse Polio • Water Conservation • Sanitary pad Distribution



Does it include key stakeholders?	<p>Yes. Below key stakeholders are recognized by Green campus Committee.</p> <ul style="list-style-type: none"> • Administration • Staff • Student 														
Does it meet regularly?	Yes, frequency of meeting is Twice in a year														
Is it empowered to recommend projects to campus leadership?	Yes														
Does Institute participate in National and Local Environmental Protection Movement?	Yes, Institute always participate in local environmental protection movement														
Is it empowered to recommend projects to campus leadership?	<p>Yes, It's great to hear that the institute has installed a rooftop solar PV module to generate electricity, and the entire campus is using solar energy. Solar PV (photovoltaic) technology is an excellent source of renewable energy that harnesses sunlight and converts it into electrical energy.</p> <p>Additionally, the institute management has implemented several eco-friendly initiatives, such as the construction of rainwater harvesting systems and installation of drip irrigation system throughout the campus. These projects not only promote sustainability but also demonstrate the institute's commitment to preserving the environment.</p>														
Energy Audit															
Have you done an energy audit? (Personal, classroom, campus)	Yes, in year 2022, the college conducted Green Campus Audit through external agency.														
List ways that you use energy in your Institute. (Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others)	<p>Below energy sources and application observed.</p> <ul style="list-style-type: none"> • Electricity and Solar energy – Lamps, fan, Lab equipment's, pump, AC, computers, refrigerator, microwave etc. • HSD – Institute vehicle, DG set 														
Do you track your energy use and cost? (Personal, classroom, campus)	<p>Yes, institute keep the track of monthly electricity bill, HSD consumption.</p> <p>LPG Consumption : Institute do not require LPG cylinder.</p> <p>Diesel Consumption= 100 Lit</p> <table border="1"> <thead> <tr> <th>Month-Year</th><th>Unit consumed from MSEDCCL(KWh)</th></tr> </thead> <tbody> <tr> <td>April 2022</td><td>79</td></tr> <tr> <td>May 2022</td><td>223</td></tr> <tr> <td>June 2022</td><td>185</td></tr> <tr> <td>July 2022</td><td>84</td></tr> <tr> <td>August 2022</td><td>70</td></tr> <tr> <td>September 2022</td><td>138</td></tr> </tbody> </table>	Month-Year	Unit consumed from MSEDCCL(KWh)	April 2022	79	May 2022	223	June 2022	185	July 2022	84	August 2022	70	September 2022	138
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Average Monthly Electricity bill ?	Average monthly electricity bill=131.33 units												
Do you offer energy conservation lessons and programs?	Yes, Environmental sustainability is the dedicated subject in each stream of education. Environment subject is compulsory for all II-year students.												
Do you encourage responsible energy use via? <ul style="list-style-type: none"> ➤ education campaigns? (Lights Off, Power Down, Energy Conservation Month) ➤ incentives? ➤ contests? 	Yes, Various "PUT THE LIGHTS OFF" stickers have been strategically placed at few locations in the college campus to promote the efficient use of electricity. These efforts demonstrate the college's commitment to sustainability and creating an eco-friendlier environment.												
Do you use natural lighting when possible?	Yes, The planning and construction of the college's labs and classrooms have resulted in 80% of them being exceptionally well-ventilated and illuminated with natural light. The use of daylight has been well-implemented in all areas of the campus, including classrooms, laboratories, and offices.												
Do you use task lighting instead of overhead area lighting?	Mostly day light is used at classroom and laboratories.												
Have you installed lighting occupancy sensors?	No												
Do you use natural ventilation/windows when possible?	<p>The college has taken measures to ensure that all its areas, including classrooms, administrative buildings, the library, laboratories, washrooms, and corridors, are optimized for natural ventilation and lighting. The presence of windows and cross ventilation throughout the campus enables a consistent circulation of fresh air and natural light, leading to a pleasant and healthy atmosphere for students, staff, and visitors.</p> <p>The incorporation of natural light and ventilation into the campus design has several benefits, including reducing the need for artificial lighting and air conditioning, which promotes sustainability practices.</p> <p>Overall, the college's focus on maximizing natural ventilation and light is an excellent example of its commitment to promoting a healthy and sustainable environment.</p>												
Have you enabled the power management settings on your	Yes, all computers are kept in sleep mode, when not in use, screen savers are disabled, power off label, when not in use.												



computers/monitors/all-in one machines?	
Do you purchase ENERGY STAR® certified equipment?	Yes, The college is committed to promoting the purchase and use of energy-efficient lighting such as LED lamps, By encouraging the use of such products, the college not only reduces its energy consumption and carbon footprint but also saves money on utility bills.
Have you maximized the efficiency of your refrigerators/freezers by? <ul style="list-style-type: none"> ➤ unplugging mini refrigerators/freezers and using communal ones? ➤ setting energy-efficient temperatures for your refrigerators (36°- 40° F) and freezers (0°- 2° F)? ➤ ensuring refrigerators/freezers properly seal? ➤ keeping the refrigerator/freezer full? ➤ cleaning condenser coils on the back of the refrigerator/freezer? 	NA
How many LED bulbs has your Institute installed? Mention use (Hours used/day for how many days in a month)	LED= 40 lamps (9w) 4 Hrs. / Day
How many fans are installed in your Institute? Mention use (Hours used/day for how many days in a month)	14 Ceiling fans (Average 4 hours per day, approx. 24 days in month) It's recommended that to install BEE 5star rating EE Ceiling fan.
How many air conditioners are installed in your Institute? Mention use (Hours used/day, for how many days in a month)	NA
How many computers are there in your Institute? Mention the use (Hours used/day for how many days in a month)	40 Computers (Average use 4 hours per day, approx. 24 days in month)
How many photocopiers/printers are installed by your Institute?	6 printers (Average use 4 hours per day, approx. 24 days in month)



(Hours used/day for how many days in a month).	
How many scanners are installed by your Institute? (Hours used/day for how many days in a month).	2 scanners (Average uses 2 hours per day, approx. 24 days in month)
How many inverters your Institute installed? Mentions use (Hours used/day for how many days in a month)	1 inverter installed Capacity of inverter 1 kw
How many electrical equipment are used in different labs of your Institute? Mention the use (Hours used/day for how many days in a month)	NA
No. of streetlights in your institute	2 streetlights
No. of TV in your institute and hostels	1 TV
How many boards displayed for saving energy awareness?	"Switch off, when not in use" boards are placed at majority of electric panels.(Approximate 10 boards are displayed)
Renewable Energy	
Are any alternative energy sources/nonconventional energy sources? employed / installed in your Institute? (Photovoltaic cells for solar energy, windmill, energy efficient stoves, etc..) Specify.	Yes. It's great that the institute has installed a 1-kilowatt peak (KwP) solar PV module on its rooftop to generate energy. The 1 KwP solar PV module can generate a significant amount of energy during the day, providing a clean and renewable source of electricity for the institute. By using solar energy, the institute can reduce its reliance on grid electricity, which is often generated from non-renewable sources. It can also help to reduce the institute's electricity bills and promote sustainable practices. Overall, the installation of a 1 KwP solar PV module on the institute's rooftop is an excellent step towards promoting clean energy and sustainable practices.
Have you purchased renewable energy certificates for your campus' electricity use?	NA
Water Audit	
Have you done a water audit? (Personal, classroom, campus)	Audit team measured the TDS and PH of drinking water. Please refer annexure for reading.
What are the sources of water in your Institute?	Institute intake water from bore well. Sources of water are Bore well water and Aqua water. Aqua water is only used for drinking purpose.

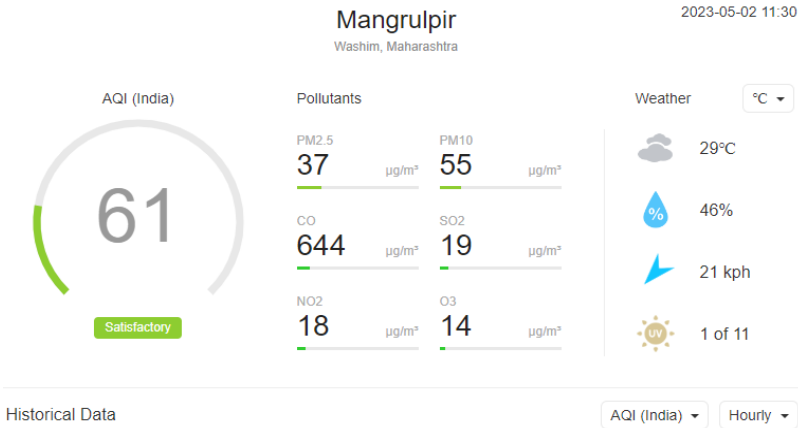


List uses of water in your Institute	The majority of water usage on campus is attributed to washrooms, and gardening.
Do you encourage responsible water use via? <ul style="list-style-type: none"> ➤ education campaigns? (Skip the Drip) ➤ incentives? ➤ contests? ➤ awards? 	Yes
Have you installed low-flow faucets, automatic faucets, and/or faucet aerators?	Recommendation: installation low-flow faucets, automatic faucets, and/or faucet aerators is recommended.
Do you use collected rainwater for onsite watering needs?	Yes, rainwater harvesting is installed at institute. Roof top water is collected into the rainwater harvesting pits. Roof top water is used to recharge the water table.
Have you optimized your irrigation system (if applicable) to? <ul style="list-style-type: none"> ➤ operate at night or early morning hours to minimize evaporation? ➤ water the minimum time and frequency necessary for the applicable vegetation 	Additionally, the college has installed a drip irrigation system to water the garden area, further conserving water resources. These sustainability initiatives reflect the college's commitment to promoting eco-friendly practices and minimizing its impact on the environment.
No. of motors used for pumping water from each well and HP of motor	1 number of 1 HP – Running 120 min daily
Quantity of water stored in your overhead water tank. (In liters)	Total 1000 Lit. water stored in the overhead water tank.
Where does waste water come from?	From washroom
Where does the wastewater go?	To the sewage water pipelines
What happens to the water used in your labs? Whether it gets mixed with ground water?	NA
Is there any treatment for the lab water?	NA



Is there any waste water treatment/ recycling System?	NA
No. of water coolers. Amount of water used per day. (In liters)	2 water coolers are observed during audit, but college needs to repaired and maintained that water coolers to get good quality of drinking water for staff and students.
No. of toilet, urinals. Amount of water used per day?	4
Amount of water used per day for garden use.	200lit
How often is the garden watered?	Once in a day(It depends on season. In rainy season no need of garden watering)
Total use of water in each hostel?	NA
Is there any water used for agricultural purposes?	NA
Does your Institute harvest rainwater? If yes, how many rainwater harvesting units are there?	Yes, rainwater harvesting system is installed at institute. Rooftop collected rainwater is used for recharging the water table. 2 rainwater harvesting system installed in the campus.
How many of the taps are leaky? Amount of water lost per day?	We have not found any leakages from taps.
Are there signs reminding people to turn off the water? Yes / No	No, we have not observed any sign regarding SAVE WATER in the campus. Recommendation- your campus needs to displayed signage promoting the conservation of water. This will be a positive step towards promoting sustainable practices and preserving our planet's natural resources.
Are there any waterless toilets?	NA
How many water fountains are there?	NA
Are there any water saving techniques followed in your Institute? What are they?	Yes, Below are the few techniques employed by institute <ul style="list-style-type: none"> • Rainwater Harvesting • Drip Irrigation for garden watering
Indoor and Outdoor Air Quality	



<p>Does Environmental Ambient Air Quality Monitoring conduct by the Institute?</p>	<p>We have measured the ambient air temperature and humidity. Air Quality Index are captured from web site: https://air-quality.com/place//141242c8?lang=en&standard=naqi_in</p> 
<p>Do you have indoor and outdoor plants to naturally clean the air?</p>	<p>Yes, These indoor and outdoor plants can aid in maintaining naturally fresh and clean air in the workplace. Indoor plants have been known to filter harmful toxins and pollutants from the air, promoting a healthier indoor environment.</p>
<p>Do you regularly replace air filters?</p>	<p>NA</p>
<p>Does stack monitoring of DG sets conducted by the Institute?</p>	<p>NO</p>
<p>Have you located printers in well-ventilated areas that minimize frequent/repeated exposure to students/staff?</p>	<p>Yes, Audit team observed printers are located in ventilated areas that minimize frequent exposure to students and staff.</p>
<p>Do you practice regular housekeeping practices to minimize dust and allergens?</p>	<p>Yes, institute developed regular housekeeping practice to minimize dust and allergens. Annual Cleaning Contract given to vender.</p> <p>Recommendation- Institute needs to improve housekeeping practices in order to minimize dust in classrooms and Labs. It helps to maintain clean air.</p> <p>To ensure a healthy and clean learning environment, it is crucial for institutes to prioritize their housekeeping practices. By implementing effective measures to minimize dust in classrooms and labs, institutes can significantly improve the air quality within their facilities. Regular cleaning and dusting of surfaces, as well as the use of high-efficiency air filters and vacuums, can help to remove and prevent the accumulation of dust particles. Additionally, proper storage and disposal of materials can also contribute to reducing dust levels. By promoting good housekeeping practices, institutes can create a safer and healthier learning environment for students and staff, ultimately enhancing their overall well-being and productivity</p>



Waste Management	
Have you done a waste audit? (Personal, classroom, campus)	Audit team took the data regarding segregation and disposal of biodegradable, non-biodegradable waste and e waste.
Does your institute generate any waste? If so, what are they	Yes, institute generates different kind of wastes, such as solid waste, Liquid waste, E-waste, biomedical waste etc.
What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	Institute doesn't keep record of every days generated waste. It is recommended that; Institute should start to maintain monthly data.
Do you know where your trash goes when it leaves your campus?	<p>Housekeeping staff are appointed on monthly basis to keep the campus clean. Garbage is collected regularly and disposed into pit. Extra garbage is collected and handed over to municipal corporation. Dustbins are placed at various places in the campus to collect solid wastes separately.</p> <p>In order to effectively manage biodegradable solid waste, particularly garden waste, it is important to implement proper disposal practices. Instead of collecting this waste at a single spot on the ground, institutes should consider constructing a compost pit. By doing so, they can avoid the negative environmental impacts of sending this waste to landfills and instead use it to create nutrient-rich compost. Composting provides an eco-friendly solution for disposing of organic waste and can also be a cost-effective alternative to traditional waste management methods. Therefore, instituting the construction of compost pits can be a positive step towards more sustainable and responsible waste management practices.</p>
Do you reduce cafeteria waste via? <ul style="list-style-type: none"> ➤ reusable trays, plates, bowls, cups/bottles, and serving ware? o minimizing use of products with excess packaging? (Plastic-wrapped utensils) ➤ engaging students to properly sort waste? ➤ engaging parents to reduce packaging waste and single-serve containers? 	NA
Do you reduce paper waste via?	Yes



<ul style="list-style-type: none"> ➤ encouraging digital reading, note-taking, and activities? ➤ setting printers and computers to default to duplex (double-sided) printing? ➤ reducing margins and white space on documents that must be printed? ➤ printing multiple pages per sheet? ➤ minimizing paper correspondence with families? ➤ opting out of unwanted mail? 	<ul style="list-style-type: none"> • Digital learning/reading is promoted at institute. • Double side printer is employed to reduce the paper consumption. The institute is environmentally conscious and committed to reuse paper and reduce office paper usage. Following are the creative ways the institute use to reuse papers. ➤ Drafts are printed on the unused side of the old papers before printing final documents. ➤ Papers are printed on both the sides. <p>Recommendation- To promote a reduction in paper waste, it is advisable for institutions to promote digital reading and activities while discouraging the unnecessary use of printing papers. This approach would encourage individuals to rely more on electronic media and reduce their dependence on paper-based materials, thereby reducing the amount of paper waste generated.</p>
<p>Do you provide recycling collection for additional recyclable materials—like plastic bags, CFL (spiral) light bulbs, batteries, drink pouches, candy wrappers, and electronics—that cannot go in the single-stream blue bins?</p>	<p>No, Institute needs to establish the MOU With Third Party vendor to Handle and Recycle the E-Waste, Which Includes Computer Peripheral, Batteries, Lamps, Circuits, Cables Etc.</p> <p>Overall, establishing an MOU with a third-party vendor for e-waste management would help institutions to reduce their environmental impact, comply with environmental regulations, and promote sustainable waste management practices.</p>
<p>Are cleaning products, grease, strippers, batteries, fluorescent lighting, science lab materials, and other potentially hazardous products disposed of properly?</p>	<p>Recommendation-</p> <p>To effectively manage electronic waste (e-waste) generated by institutions, it is essential to establish a memorandum of understanding (MOU) with a third-party vendor who specializes in e-waste handling and recycling. This MOU would ensure that the vendor is responsible for managing all e-waste generated by the institution, including computer peripherals, batteries, lamps, circuits, cables, and other electronic items.</p> <p>The vendor would be responsible for the proper handling, transportation, and recycling of e-waste to prevent environmental pollution and promote sustainable waste management practices. This would help to ensure that the institution complies with environmental regulations and reduces its ecological footprint.</p>
<p>Is there any waste wealth program practiced in the Institute?</p>	<p>No</p>
<p>Can you achieve zero garbage in your Institute? (Reduce, Recycle, Reuse, Refuse) If yes, how?</p>	<p>Institute identified and willing to implement some projects to achieve zero garbage by reduce, recycle, reuse, and refuse methods</p>



	Institute also developed few policies to segregate and dispose the different types of waste generated in the institute. But institute needs to improve waste management system.
Green Belt & Landscaping, including Biodiversity	
<p>Have you taken action to green your Institute yard through implementation of?</p> <ul style="list-style-type: none"> ➤ onsite composting? ➤ habitat gardens? ➤ native and drought-tolerant landscaping? ➤ livestock, fowl, bees, and other animals? ➤ tree planting and care? 	<p>Yes,</p> <p>To promote a sustainable and eco-friendly environment, institutes have taken a commendable initiative to make their campus green by organizing an annual tree plantation drive. By doing so, they not only contribute to the betterment of the environment but also provide a natural and refreshing atmosphere for their students and staff. However, the responsibility of maintaining the planted trees and plants lies with the institute as well. Hence, they have taken up the responsibility of nurturing and taking care of all the trees and plants on campus. This involves providing regular care and maintenance such as watering, pruning, and fertilizing, to ensure that the trees and plants thrive in a healthy environment. Such a holistic approach towards creating a sustainable environment not only benefits the institute but also serves as an inspiration for others to follow in their footsteps.</p>
Is there a garden in your Institute? Area?	Yes, garden is developed by institute. Gardens inside the college premises are found well maintained.
List the plants and trees in the garden, with approx. numbers of each species.	List of plants are given in annexure along with species.
Whether you have displayed scientific names of the trees in the campus?	Yes, scientific name of each plant is displayed within campus
<p>What are the vegetables cultivated in your vegetable garden?</p> <p>(Mention the quantity of harvest in each season)</p>	NA
Are you using any type of recycled water in your garden?	NA
List the name and quantity of pesticides and fertilizers used in your gardens?	Institute use compost in campus garden.
Whether you are doing organic farming in your Institute? How?	NA



Is there any botanical garden in your campus? If yes give the details of campus flora.	NA
What is the involvement of students in the green cover maintenance?	The National Service Scheme (NSS) team conducts annual plantation programs, whereby students are actively engaged in tree-planting initiatives. Through the NSS program, students are encouraged to participate in these initiatives and contribute to environmental conservation efforts by planting trees.
Plant Distribution Program for Students and Community	YES
Number of Tree Plantation Drives organized by Institute per annum. (If Any)	Every year institute organizes 4-5 tree plantation drives ,inside and outside the campus under the NSS. Details about these plantation programs are uploaded on the college website.
Birds and Animals Biodiversity (Fauna)	
List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)	<p>At campus area, majorly below Animals and Birds are found</p> <ul style="list-style-type: none"> • Squirrels (Sciuridae) • Chameleons(Chamaeleonid) • Butterflies • house sparrow(Passer domesticus) • Crows(Corvus) • Dogs • Rock Pigeon (Feral Pigeon)Columba livia (Feral Pigeon) • Common Hawk-Cuckoo Hierococcyxvarius • Different types of snakes are generally found in and around the campus.
Does your institute have a Biodiversity Programme or a KARUNA CLUB?	Although the institute does not have any official biodiversity programs, it has demonstrated its compassion towards animals by providing aid to them in times of distress. The institute has been proactive in helping animals in trouble and has even saved snakes on multiple occasions. Such actions are indicative of the institute's commitment to promoting a culture of empathy and compassion towards animals, which is an essential aspect of biodiversity conservation. Although there is no formal program, the institute's actions showcase their genuine concern for the welfare of animals and their willingness to go above and beyond to ensure their safety. These actions serve as a positive example for the entire community and highlight the importance of respecting and protecting biodiversity in our daily lives.



Does your institute keep artificial nests and water ponds to attract different birds in their migrating and breeding season?	<p>YES,</p> <p>The institute has implemented a thoughtful and proactive approach towards wildlife conservation by hanging artificial nests and water pots on the trees across the campus. This initiative is aimed at attracting migrating birds and providing them with a safe and conducive environment during their stopover at the campus. The artificial nests offer a comfortable place for the birds to rest and roost, while the water pots ensure that they have access to clean and fresh water, which is essential for their survival. By undertaking this initiative, the institute has not only contributed to the conservation of bird populations but also demonstrated its commitment to creating a sustainable and eco-friendly environment. This serves as an excellent example for other institutions to follow in taking a proactive role in promoting wildlife conservation.</p>				
Noise Level					
<p>Do you measure ambient noise level at</p> <ul style="list-style-type: none"> • Classroom • Near main gate • Near main building • Near admin building 	<p>Yes, audit team measured the dB level at below location</p> <ul style="list-style-type: none"> • Classroom • Near main gate • Near main building • Near admin building <p>Please refer annexure for reading.</p>				
Have you displayed boards in the library and other places for awareness to maintain silence in the Institute?	YES				
Carbon Footprint					
Annual Diesel consumption by DG generators in the institute?	100 Lit.				
Annual LPG consumption used in the institute (canteen and labs and hostel.)	NA				
Annual electricity consumption ?	<table border="1"> <tr> <td>Year</td><td>2022- 2023</td></tr> <tr> <td>TOTAL (KWh)</td><td>1576</td></tr> </table>	Year	2022- 2023	TOTAL (KWh)	1576
Year	2022- 2023				
TOTAL (KWh)	1576				
Scope 1 GHG Emission	AY 2022-2023 : 0.34 tCO ₂				
Scope 2 GHG Emission	AY 2022-2023 : 1.28 tCO ₂				
Transport					



<p>Do you provide green transportation infrastructure such as?</p> <ul style="list-style-type: none"> ➤ safe, connected, and accessible walkways and pathways? ➤ bike paths and/or lanes ➤ bike racks ➤ green vehicle priority parking? (fuel-efficient, alternative fuel, carpool) 	<p>The institute recognizes the importance of promoting sustainable transportation practices and has taken steps towards achieving this goal. A majority of the students come from nearby villages, and as a result, they often travel to the institute using local buses. This not only reduces traffic congestion but also minimizes the carbon footprint associated with individual transportation. In addition to this, the institute's staff members actively engage in carpooling, rather than commuting with their own vehicles. This practice helps to reduce the number of cars on the road, thereby contributing to the reduction of greenhouse gas emissions.</p> <table border="1" data-bbox="703 714 1356 842"> <tr> <th>Vehicles in institute</th><th>Numbers</th></tr> <tr> <td>Cycles</td><td>02</td></tr> <tr> <td>Two-wheeler</td><td>04</td></tr> <tr> <td>Four-wheeler</td><td>02</td></tr> </table> <p>Pedestrian-friendly pathways:</p> <p>College has pedestrian friendly pathway and used for entry of students, staff, visitors to office and college campus. The college has special ramps for Divyangjan.</p>	Vehicles in institute	Numbers	Cycles	02	Two-wheeler	04	Four-wheeler	02
Vehicles in institute	Numbers								
Cycles	02								
Two-wheeler	04								
Four-wheeler	02								
Provide details of Institute-owned motorized vehicles? Buses Cars Vans Other Total	NA								
Specify the type of fuel used by your Institute's vehicles, Diesel /Petrol/CNG/ LPG/ Electric.	NA								
Do you promote green transportation options that reduce vehicle air pollution?	<p>By promoting sustainable transportation practices, the institute is actively working towards reducing its environmental impact and creating a more sustainable future for all. Such initiatives can serve as a positive example for the wider community to adopt and contribute towards a cleaner and greener environment.</p> <p>Use of Bicycles/ Battery powered vehicles:</p> <p>Use of bicycle by student and faculty members promoting benefits of cycling and conservation of environment by minimizing fuel pollution.</p>								
Do you offer walking/biking field trips?	As part of NSS program, college students and staff participates in cycle rally or walking rally ,Such initiates are taken by institute.								
Purchase									
Have you done a purchasing audit? (campus)	Yes, we have collected the bills of major purchase to understand the environment friendly product.								
<p>Do you have a green product list for items such as?</p> <ul style="list-style-type: none"> ➤ green cleaning products? 	During review of purchase bills, we have seen below important purchase								



<ul style="list-style-type: none"> ➤ paper/paper products with minimum recycled content (at least 30% postconsumer waste) and responsibly managed and harvested trees? ➤ refillable pens/pencils? ➤ no- to low-odor (VOC) markers? ➤ no- to low-VOC paints? (Via Facilities) ➤ plates, cups, and serving ware that are reusable, contain minimum recycled content, and/or are recyclable/compostable? ➤ compostable bags for compost collection? ➤ rechargeable batteries and chargers? ➤ ENERGY STAR certified computers, monitors, printers, refrigerators, and other energy-using equipment? ➤ Water Sense labeled faucets, toilets, showerheads, and other water-using equipment? ➤ printers with duplexing (double-sided) functionality? 	<ul style="list-style-type: none"> • LED Lamps • Solar PV module • ENERGY STAR certified computers, monitors, printers. • Printers with duplexing (double-sided) functionality • Plates, cups, and serving ware that are reusable • Paper/paper products with minimum recycled content Incinerator etc.
Do you track your purchasing to ensure adherence to any green product guidelines?	Yes, during interview with admin staff, we noted that, Institute started monitoring each purchase is securitizing via green policy.
Social awareness	
Do you encourage staff and students to conduct social awareness programs?	<ul style="list-style-type: none"> • The institute is committed to providing a comprehensive education to its students and fostering their awareness of constitutional rights, values, duties, and responsibilities. This is accomplished through a variety of methods, including both academic and extracurricular programs. • Details of all social awareness programmes are uploaded on http://www.smtsalunkabairaut.com/docs/NSS/Report2021-2022.pdf • In addition to this many social programmes like seminars and workshops are conducted and celebrated on days of national importance by NSS cell to educate and create awareness among students. such as



	<ul style="list-style-type: none"> Independence Day, Republic day are celebrated every year with grand auspicious function and faculty, staff, students attends it.
Divyangjan Facility	
Number of Divyangjan students in your institute.	Yes 02 Divyangjan students are reported in current year.
Special facilities provided to Divyangjan student .	<p>To ensure equality, freedom, Justice and Dignity to the differently abled students-</p> <ul style="list-style-type: none"> ➤ Special ramps constructed for differently abled students for their conveyance in the campus ➤ Convenient seating arrangements and writer made available during examinations
Gender Equity Ratio	
Have you maintained gender equity ratio (Male/Female ratio) in your institute?	
<p>Gender equity</p> <p>No. Male and Female Staff</p> <p>No. Male and Female Student</p>	<p>Gender ratio</p> <p>Total Faculty – gender ratio:</p> <p>Men: 08 Women: 02</p> <p>Students AY 2022-2023</p> <p>Boys: 356 Girls: 129</p> <p>There is 40% strength of girl's student at Institute.</p> <ul style="list-style-type: none"> Institute believes in gender equality & gender justice in all of its intervention & practices. Keeping these principles in view, it is important to ensure an organizational climate which is free from discrimination & harassment. Internal Complaints committee is established in the college. The Committee is responsible for looking into any complaints filed by faculty, students & non-teaching staff about woman grievances in the campus.
Do you conduct and support women empowerment programs/ activities?	<p>Yes, Institute always supports women empowerment by providing health, safety and security facilities, such as,</p> <ul style="list-style-type: none"> Women empowerment cell Internal complaint committee CCTV cameras Complaint box provided by Mangrulpur police station Girls common room



	<ul style="list-style-type: none"> • Vending machine
Health and safety	
Is there a health surveillance Programme / Medical checkup once in a year?	<p>Institute have conducted below health surveillance programs</p> <ul style="list-style-type: none"> • Free medical checkup camp • Blood donation camp
Do you provide some health facilities for students and employees in your campus?(sports, yoga, meditation etc.)	<ul style="list-style-type: none"> • Yes, First Aid Box is kept in the Office • Institute also celebrates Yoga day to create awareness about health. • The institute offers a wide range of sports facilities to its students, with a well-equipped sports department that enables them to participate in state and national-level sports competitions every year. Engaging in sports not only enhances their physical well-being but also plays a significant role in maintaining their mental health. We believe that sports are an essential aspect of a student's overall development, promoting teamwork, leadership, and perseverance. As such, we encourage our students to take advantage of the sports facilities available on campus and participate in the various sporting events throughout the year.
Have you conducted health awareness camps or programmes in your institute?	<p>Yes. Institute have conducted below programs under NSS Scheme</p> <ul style="list-style-type: none"> • Free vaccination camp, Health Check Up Camp • Covid Vaccination Drive under Health Check Up Camp • blood donation camp • International Yoga Day
What are the safety measures for staff and students in your institute?	<p>The institute emphasizes more on the safety and security of students and staff.</p> <ul style="list-style-type: none"> • The important places in the institute such as Examination halls, class rooms, laboratories and corridor are under CCTV surveillance • The securities are deployed at strategic locations. • Institute has made mandatory for everyone to wear identity-cards in the college campus. • As a general safety feature fire extinguishers are strategically placed in the campus. • Disaster management training for students and staff conducted by institute
Are electrical/network cables in the campus organized properly to eliminate trip hazards?	<p>Yes, all electrical/ network cables in the campus are organized properly to avoid hazard.</p>



Are hazardous materials/chemicals in labs properly stored?	NA
Are floor surfaces clean, dry, level, not slippery or sticky and in good condition?	Yes, Housekeeping staff daily maintained and keep clean and dry surface in the campus.
<p>Health and Safety point of view, Do you fulfil below basic needs for staff and student?</p> <ul style="list-style-type: none"> • Adequate ventilation • Easily accessible emergency exits • Sanitation in cafeterias and restrooms • Access to potable water • Exposed or unmarked electrical wiring • Emergency response plan • Fire suppression equipment and evacuation plans 	<p>All classroom, admin building, library, laboratory, corridor are full of natural ventilation, windows. Cross ventilation across windows.</p> <p>Yes, proper arrangement of rest room and sanitation.</p> <p>Yes, good quality of potable water is available.</p> <p>Yes, College has Fire Extinguishers installed at few location for safety purpose</p>
Are fire extinguishers fully charged and have current inspection dates? All previous months should be signed off	No, maintenance and refill of fire extinguisher needs to check at periodic interval.
Are fire extinguishers and hoses, mounted, visible, and accessible?	Fire extinguishers in the institute are mounted in a way to easily visible and accessible to everyone.
Do staff and students know where the fire extinguishers are and how to use them?	YES
Are LPG cylinders located or stored in a manner to prevent them from creating a hazard by tripping, falling, or rolling? The cylinders should be stored upright and chained with protective cap in place (including empty containers).	NA



Are flammables and combustibles stored properly?	NA
Are procedures established for alerting staff and students of an emergency in the Institute (i.e., fire and shelter)?	No, Recommendation -Institute needs to established emergency exit plan for alerting staff and students in case of any emergency.
Child Labor	
Have you given an employment to the underage candidates? Are there any underage candidates working in your institute?	No, Any underage candidate is not working in the institute. The College is strictly against child labour.
Discrimination	
Do you protect your students and staff from discrimination based on origin, caste, race, religion, gender, political affiliation, and other attributes?	Yes. As per interviews of staff members, there are no incident recorded for discrimination based on origin, caste, race, religion, gender, political affiliation, and other attributes



Chapter 05: Audit Observations

Best Practices of Institute :

The institute acknowledges its responsibility towards promoting environmental consciousness and has taken proactive measures to implement sustainable and eco-friendly practices.

Aiming towards environment consciousness the Institute has executed the following activities at the campus:

1. Institute has undertaken various initiatives as part of the National Service Scheme (NSS) program, such as organizing plantation drives and cleanliness campaigns within and outside the campus.
2. The institute is dedicated to promoting the conservation of snake and animal biodiversity, and consistently takes initiatives to protect and preserve their lives
3. Dedicated dustbins are provided at different locations in campus to collect wet and dry waste.
4. Rain water harvesting project implemented to recharge the water table
5. Drip irrigation system provided to watering the garden plants and trees.
6. College campus garden developed and maintained with good biodiversity of plants and trees
7. The institute has taken a positive step towards promoting environmental conservation by placing water pots for birds on trees at specific locations.
8. Institute has installed energy efficient Lights at few locations .
9. The institute has installed solar photovoltaic modules to harness solar energy and reduce its carbon footprint, thereby moving towards carbon neutrality.
10. Various "PUT THE LIGHTS OFF" stickers have been strategically placed throughout the college campus.
11. To further enhance natural lighting, the campus has been designed with large windows that allow ample sunlight to penetrate, reducing the need for artificial lighting during daytime hours

Aiming towards Social awareness the Institute has implemented and conducted the following activities

12. All easily accessible facilities provided to Divyangjan student like ramp.
13. Institute has installed Fire Extinguishers at few locations and in Lab available for safety purpose
14. College also has very active Disaster management team of NSS students.
15. Institute has provided health facilities like First Aid Box for staff and students
16. Woman's day celebrations and woman's empowerment activities conducted
17. Installation of sanitary pad vending machine in girls common room.



18. The important places in the institute such as Main Examination halls, class rooms, laboratories and corridor are under CCTV surveillance.
19. Complaint Boxes are placed in campus to drop a complaints for girls and women.
20. Health awareness programmes, health checkup camp, free vaccination camp conducted
21. The NSS department Organizes Blood Donation Camps every year in the College.
22. The NSS department of college Organises Health checkup camps in its special camp at the adopted village It offers Collaborative services in the camp every year
23. The institution has adequate facilities for sports, games (indoor and outdoor) and cultural activities, it helps to overall development of the students
24. Institute also conducts various social awareness programmes to create awareness about Law, National unity, Human rights, Health and Diet, Responsibility towards Nation, Human values, etc. Details are uploaded on given link,
<http://www.smtsalunkabairaut.com/docs/NSS/Report2021-2022.pdf>
25. College also conducted Disaster management training Programme for staff and students.
26. Conducted seminars and group discussions on environmental and social education



Opportunity of Improvement :

1. Establish a purchase policy to promote environmentally friendly materials
2. Students and staff can be permitted to solve local environmental and social problems
3. Maintain minutes of meetings of environment and social committees; evaluate the effectiveness of various environmental programs conducted by the institutes. Set annual targets for Green Initiatives & monitor them closely. Create 'Green Champions'
4. Establish water, and energy management systems
5. Encourage efficient water use and reporting by installing water meters at key locations. Provide information on water usage and savings to students/ staff through notices, screensavers in computer labs.
6. Institute can start metering water consumption, measuring waste generation.
7. Remove damaged taps and install sensitive taps is possible
8. Installation low-flow faucets, automatic faucets, and/or faucet aerators is recommended.
9. Installation of sensor-based electrification items like fans, lights, etc. can save electricity.
10. Replace all tube lights by 100% energy efficient LEDs.
11. Replace old ceiling fans by new energy efficient fans.
12. Grey water/ sewage recycling system can be installed for flushing toilets. This will reduce the fresh water footprint.
13. Installation of waterless urinals can be considered to reduce water consumption
14. Recommendation- Institute needs to improve housekeeping practices in order to minimize dust in classrooms and Labs. It helps to maintain clean air.
15. Institutes should consider incorporating potted indoor plants in corridors and other designated areas, as well as implementing vertical gardening
16. To promote a reduction in paper waste, it is advisable for institutions to promote digital reading and activities while discouraging the unnecessary use of printing papers
17. Institute needs to establish the MOU With Third Party vendor to Handle and Recycle the E-Waste, Which Includes Computer Peripheral, Batteries, Lamps, Circuits, Cables Etc.
18. Reconstruction and proper management of compost pit in garden area.
19. your campus needs to displayed signage promoting the conservation of water.
20. college needs to repaired and maintained the water coolers to get good quality of drinking water for staff and students.



Reference list of Websites

- i. IEEE 519 - <http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=2227>
- ii. <http://mnre.gov.in/solar-energy/ch2.pdf>
- iii. BEE - <http://www.beeindia.in/>
- iv. ECBC - <http://beeindia.in/content.php?page=schemes/schemes.php?id=3>
- v. http://www.energymanagertraining.com/new_index.php
- vi. http://www.usailighting.com/stuff/contentmgr/files/1/92ffeb328de0f4878257999e7d46d6e4/misc/lighting_comparison_chart.pdf
- vii. <https://www.bijlibachao.com/lights/use-energy-efficient-lights.html>
- viii. <http://www.bijlibachao.com/air-conditioners/air-conditioner-selection-understand-tonnage-eercop-and-star-rating.html>
- ix. <http://www.indiawaterportal.org/sites/indiawaterportal.org/files/Roof%20Top%20Rainwater%20>
- x. https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php
- xi. <http://www.cea.nic.in/tpeandce.html>
- xii. <https://timesofindia.indiatimes.com/india/power-ministry-may-make-24-degree-celsius-as>
- xiii. http://smbscoll.edu.in/pdf/Environment_Committee.pdf
- xiv. http://smbscoll.edu.in/pages/vision_mission.php
- xv. http://smbscoll.edu.in/pages/principal_desk.php



Annexure 1: Reference Documents / Surveys

Sr. No.	Reference documents/ Survey
1.	Institute Registration details, pervious NAAC certificate
2.	Institute Awards, recognition
3.	Academic staff, designation and qualification
4.	Short note about institute including establishment details, area, subjects, faculty, staff, labs, students, campus etc. mission, vision, values, policy statement
5.	List of environmental issues identified by institute
6.	List of environmentally friendly practices, List of projects - energy conservation, rain water harvesting, waste recycling (solid/liquid waste management, e-waste management), renewable energy project, plantation etc.
7.	List of days celebration like – Environment day, energy day etc. with program details and photos
8.	Drinking water facility: Functionality of RO water plant
9.	Recycle of water: Utilization of RO reject water for gardening
10.	Natural resource utilization: Setup for rain water harvesting
11.	Information regarding canteen compost Management as applicable
12.	Information regarding garden waste management
13.	Information regarding liquid waste management
14.	Measures for maintaining cleanliness in campus
15.	Measures for garbage collection and disposal
16.	Plantation Measures – Biodiversity, list of species observed in the campus
17.	Measures for construction waste management (use of construction waste for filling purpose.
18.	Electricity Bills for duration of 12 months
19.	Roll of staff, students and management to save electricity in campus
20.	Lighting survey (number of tube lights, CFL and LED)
21.	AC survey (number of AC and their star rating)
22.	Rain Water harvesting (Photographs of the water harvesting structure)
23.	Initiatives by college for the community NSS camps, Swatch Bharat with photos
24.	Details about promotion of below programs. <ul style="list-style-type: none"> • Pedestrian-friendly pathways • Ban on the use of Plastics • Landscaping with trees and plants
25.	Outside campus plantation program implemented by Institute
26.	Policy statement by Leadership w.r.t. Environment conservation.

**Annexure 2 : Physical Structure of College**

The college is located in about **5 acres** of land.

No. of Floors	01
Departments	02
Laboratories	01
Conference halls	01
Libraries	01
Auditorium	01
Canteens	01
Hostel	01



Annexure 3 : Waste management

Different types of waste generated in the college and their disposal.

Types of waste	Particulars	Disposal method
E-waste	Computers, electrical and electronic parts	Collected in dedicated place.
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc.	collected in Dustbin hand over to scrap collector
Solid waste	Damaged furniture, paper waste, paper plates, food waste, Garden waste	Disposed according to material: if recyclable- to scrap collector
Waste water	Washing, urinals, bathrooms	in Drainage
Chemical waste	Laboratory waste	NA
Glass waste	Broken glass wares from the labs	In dustbin
Sanitary napkins	Medical waste	Incineration machine.
Others		



Annexure 4 : On site Measurement

Date:	05 April 2023
Ambient Temperature:	36 Degree Celsius
Relative humidity:	21 %

Lighting Survey

Location	Lux - Spot 01	Lux - Spot 02	Lux - Spot 03	Lux - Spot 04	Comment
Class room 01	320	217	175	870	OK, Lux level is within permissible limit. Classrooms are full of daylight.
Class room 02	410	250	165	620	
Class room 03	203	786	204	274	
Class room 04	243	460	360	198	
Class room 05	1451	250	510	360	

Water Quality Survey

Location	TDS (ppm)	pH	Comment
Aqua Drinking Water	281	8.72	OK, within permissible limit.

Ambient Noise level Survey

Locations	Average reading dB Level during Day time	Comments
Near main gate	53.6	OK
Near main building	60	OK
Near college office	58	OK
Classroom	43.8	OK



Annexure 5 : Carbon Footprint Calculation

AY 2022-2023

Scope	Annual Ele consumption (MWh)	EF (tCO ₂ /MWh)	tCO ₂	Ref of EF
2	1.576	0.815	1.28	CEA User guide ver18 (2022)
Scope	Annual HSD consumption (ton)	EF (tCO ₂ /ton)	tCO ₂	Ref of EF
1	0.085	3.954	0.34	Defra guideline 2020 (including WTT)
Scope	Annual LPG consumption (ton)	EF (tCO ₂ /ton)	tCO ₂	
1	0	3.298	0.00	Defra guideline 2020 (including WTT)

Scope 1	0.34	tCO ₂
Scope 2	1.28	tCO ₂



Annexure 6 : List of Plants and Trees Biodiversity

Sr.No	Botanical Name	Local Name	Quantity
1	Polyalthia longifolia	Ashoka	03
2	Annona Squamosa	Sitafal	02
3	Cassia fistula	Tappu	29
4	Azadirachta indica	kadulimb	45
5	Ficus religioose	Pimpal	01
6	Delonix regia	Gulmohar	14
7	Hibicus rosa sinensis	Jaswand	02
8	Nyctanthes arbor-tristis	Parijatak	01
9	Tecoma Stans	Yellow bells	08
10	Golden duranta, green duranta	Lal Mehandi	6 Rows
11	Thuja occidentalis	Vidya	09
12	Vinca rosea	Sadafuli	02
13	Mimusops elengi	Bakul	04
14	Grevillea robusta	Silver oak	01
15	Leucaena leucocephala	Subhabul	01
16	Terminalia Catappa	Badam	02
17	Tectona grandis	Sag	11
18	Aegle marmelos	Bel	01
19	Tamarindus indica	Chinch	01
20	Syzygium Cumini	Jambhul	02
21	Santalum album	Chandan	05
22	Ziziphus jujube	bor	02
23	Pithecellobium duice	English chinch	01
24	Eucalyptus camaldulensis	Nilgiri	01
25	Ficus benghalensis	Vad	01
26	Acacia nilotica	babhul	01
27	Tabernaemontana divaricate	tagar	01
28	Bougainvillea glabra	Bognavel	08
29	Lagerstromia speciose	Ice cream	07
30	Alstonia scholaris	Saptapami	02
31	Cactus spe	Cactus	04
32	Adenium obesum	Adenium	01
33	Crotons spe	Croton	09
34	Diphanbacia	-	02
35	Acacia leucophoea	Hiwar	04
36	Deonix floribunda	Sonmohor	12
37	Euphorbia spe	-	04
38	CAsabela thevetia	Kanher	05
39	Hibiscus rosa sinensis	Jasvand	06
40	Millettia Pinnata	Karanj	10

Annexure 7 : Awareness Programs Undertaken by Institute

Tree Plantation Programme in old age home



Intercollegiate Kabaddi sports coemption



Award achievement of Disaster Management Team



Health Checkup Camp



Annexure 8 : Best Practices of Institute

Display of "Switch off" stickers



Complaint box in campus from Mangrupir police station



Rain Water harvesting system



Drip irrigation system for watering the garden



Waste Management system

Solid waste management



Garden waste management(compost pit)



Excellent use of day light in library



scientific name of tree display in garden



Annexure 9: Awards and recognitions





Annexure 10: List of interviewed staff during green audit

Green Campus Audit	Attendance Register	
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☒ External Audit

☐ Internal Audit

☐ Experience Exchange Meeting

☐ Other:

Date: 5/4/2023

Location: Wanoja

TOPICS:

- Green Campus Audit.

Name	Position	Signature
Ku. J. M. Bhagat	Assistant Professor	J. M. Bhagat
Prof. D. D. Bhagat	Assistant Professor	D. D. Bhagat
Dr. M. V. Pathrikar	Professor	M. V. Pathrikar
Prof. P. N. Labase	Associate Professor	P. N. Labase
Dr. S. S. Kadu	Asst. Professor	S. S. Kadu
Dr. S. S. Borchate	Asst. Professor	S. S. Borchate
Prof. B. S. Dongare	Asst. Professor	B. S. Dongare