Environment-cum-Green Audit Report Waste Management and Energy Audit Report

for

S. S. V. P. Sanstha's Late S. D. Patil alias Baburao Dada Arts, Commerce and Late M. D. Sisode Science College

Shindkheda Dist. Dhule, Maharashtra-425406

May 2024

Audit executed jointly by JEEDNYASA Foundation and Yashaswi Bhavah



Yashaswi Bhavah Environment Management System

Date: 20/05/2024

The Principal

То

S.S.V.P. Sanstha's Late S. D. Patil alias Baburao Dada Arts, Commerce and Late M. D. Sisode Science College

The environment-cum-green audit report along with waste management and energy audit report of S. S. V. P. Sanstha's Late S. D. Patil alias Baburao Dada Arts, Commerce, and Late M. D. Sisode Science College Shindkheda, Dist.- Dhule was developed by the JEEDNYASA Foundation and Yashaswi Bhavah after conducting a survey of the college campus, veshirifying records, and engaging with students, teaching and non-teaching staff.

The audit was conducted on May 11, 2024. The institution's green initiatives are detailed in the green audit report, which also offers recommendations and suggestions for enhancing environmental sustainability.

The data collected for the S. S. V. P. Sanstha's Late S. D. Patil alias Baburao Dada Arts, Commerce and Late M. D. Sisode Science College Shindkheda can be utilized as a valuable resource for resource management, campus greening, future project planning, and as a document for the college's sustainable development. The college will be able to prioritize the implementation of future initiatives and identify areas in need of improvement based on the existing data.

We anticipate that the management will be dedicated to the implementation of the green audit recommendations. We are delighted to present this green audit report to the college's authorities.

> JEEDNYASA Foundation and Yashaswi Bhavah

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About the College

Shri Shivaji Vidya Prasarak Sanstha's Late S. D. Patil alias Baburao Dada Arts, Commerce and Late M. D. Sisode Science College Shindkheda is one of the branches of S.S.V.P. Sanstha Dhule which runs with the vision of "Bahujan Hitay, Bahujan Sukhay" and mission "We commit to Impart Higher Education among the students belonging to Drought Prone and Mofussil Area". At present, the president of the Sanstha is Hon'ble Annasaheb Dr. Bhaidasji Chudaman Patil, the Chairman of executive board of the Sanstha is Hon'ble Babasaheb Kunalji Patil (MLA, Maharashtra state). The college runs under the College Development Committee presided by Hon'ble Bapusaheb Prafullakumarji Madhukar Sisode. This college is a unique educational institution that provides the modified programmes to the students of rural area. Our focus is on an inclusive environment that develops the academic and the social / emotional/ research need of all students. Our college is affiliated with the Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, and is recognized by UGC, New Delhi under section 2(f), and 12(B) status. The College is also permanently affiliated. The campus ensures the right atmosphere for the students to pursue their education. The College is reaccredited for the third cycle by NAAC and awarded with B Grade CGPA 2.14. Being affiliated to North Maharashtra University, Jalgaon, College follows the rules and regulations of North Maharashtra University Jalgaon.

Introduction

Pollution of the environment, inefficient resource utilization, inadequate waste management, climate change, ecosystem degradation, and biodiversity loss. This has prompted organizations to implement environmental management systems as a systematic approach to environmental management.

Environmental auditing is a procedure that evaluates an organization's environmental performance in accordance with the environmental policies and objectives established by the Government of India. The objective of a green audit is to determine the environmental impact of its practices. In order to assess the current situation on campus, an internal environmental audit (Green Audit) is implemented as part of this practice. In light of this, it is imperative that the institute implement the Green Campus system. The environmental auditor ensures the safety of the natural resources by appropriately monitoring the waste disposal system in the Institutes.

The auditor conducted a Green Audit of the college premises on May 11, 2024. The team developed protocols and a questionnaire in advance of the audit. The audit team conducted a comprehensive inspection of the entire college campus, including the library, classrooms, washrooms, seminar hall, staff rooms, administration office, department, and practical laboratories. The institute was operating as expected during the audit.

By adopting a systematic approach to environmental management, management can acquire the necessary information to establish long-term success and explore opportunities for contributing to sustainable development.

- 1. Preventing or reducing adverse environmental impacts in order to safeguard the environment.
- 2. Attenuating the organization's potential negative impact from environmental factors.
- 3. Assisting the organization in fulfilling its compliance obligations.
- 4. Evaluate the effectiveness of the environmental management information systems and instruments.
- 5. Ensure that the pertinent national, local, or other laws and regulations are adhered to.
- 6. Reduce the likelihood of human exposure to environmental, health, and safety hazards.

Environmental Impact Assessment (EIA) Methodology

Environmental Impact Assessment (EIA) is a methodical procedure that is designed to identify, foresee, and assess the environmental consequences of proposed actions. Its purpose is to facilitate the decision-making process with respect to the substantial environmental consequences of a project.

The methodology for conducting the environment and green audit encompassed a variety of tools, including the preparation of a questionnaire, a physical inspection of the campus, the observation and evaluation of the greenery, the interviewing of key individuals, and the provision of recommendations, analysing the various environmental parameters using tools and machinery.

It operates on a variety of levels, such as water conservation, water management, energy conservation, tree planting and refuse management, e-waste management, green area management, and paperless work. In light of this, the audit's specific objectives are to assess the effectiveness of the environmental sustainability management control framework. It has the potential to significantly influence the learning environment and student health. The audit's criteria, methods, and recommendations were determined by the identifications.

Objectives of Green Audit

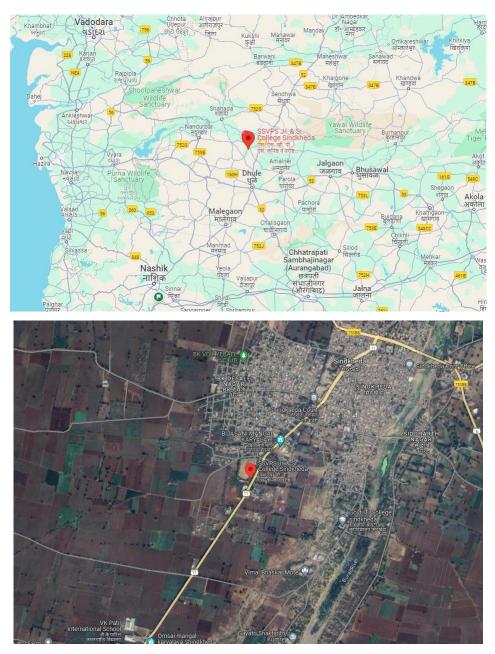
A conducive learning environment is fostered by a clean and wholesome environment, which facilitates effective learning. There are numerous initiatives worldwide to resolve environmental education concerns. The Green Audit is the most ecologically sound and expedient method of addressing environmental issues. It is a form of professional care that is the responsibility of each individual who is a part of the economic, financial, social, and environmental factors. The necessity of conducting a green audit on college campuses is due to the fact that students become cognizant of the benefits of green auditing, which include the preservation of the environment, and they become responsible citizens of our nation. Therefore, it is imperative to implement green audits at the college level. An environmental management system is designed to achieve the following objectives:

- 1. Improved environmental performance.
- 2. Compliance obligation fulfillment.
- 3. Fulfillment of environmental objectives.

Geographical location of the auditee

The campus of Late S. D. Patil alias Baburao Dada Arts, Commerce and Late M. D. Sisode Science College is having 5.21 acres of total area out of which the built area is 4907 sq. meters. The approach road is congested due to the presence of a national highway and a significant amount of traffic. The predominant land use in the region is residential and institutional.

The Latitude is 21.265256499661255 and longitude is 74.73863927237413.



Geographical location

Green Audit Procedural Steps

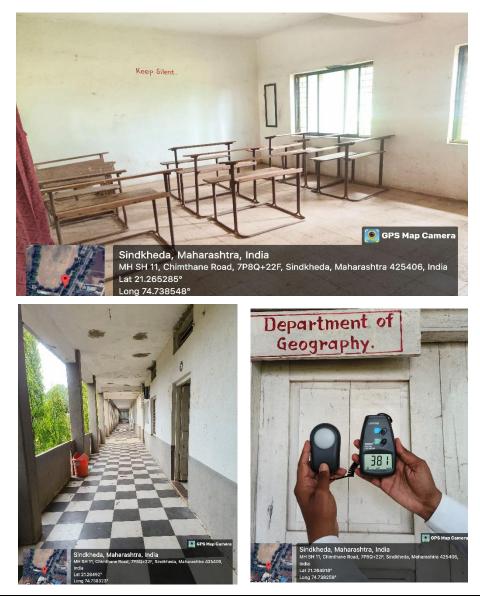
The green audit procedural steps encompassed 15 primary areas, which were further subdivided into subareas. The following areas were examined for compliance, and the assessment was conducted using a variety of assessment instruments, including visual inspection, questionnaires, checklists, surveys, and instrumental analysis.

- A. Day light design and ventilation
- B. Water efficiency
- C. Rainwater harvesting
- D. Indoor air quality
- E. Energy usage and efficiency
- F. Temperature and acoustic control
- G. Waste water management
- H. Paper waste management
- I. E-waste management
- J. Solid waste management
- K. Liquid waste management
- L. Universal access and efficient operation and maintenance of building
- M. Green belt
- N. Botanical garden
- O. Green programs (green initiatives)

A. Daylight design and ventilation

Classrooms that are well-ventilated, featuring large glass windows and broad doors. Nevertheless, the windows are covered to prevent noise.

- 1. The corridors are spacious and have a lofty ceiling.
- 2. In order to mitigate glare, light-colored draperies are installed on the windows; however, they permit sunlight to enter.
- 3. The classrooms and corridors are equipped with LED tube lighting, which reduce electricity consumption.
- 4. Fans are installed in classrooms to facilitate ventilation.
- 5. Air conditioners are installed in computer laboratories.
- 6. Windows and exhaust fans are installed in bathrooms to facilitate the dispersion of heat, fumes, and aromas.



B. Water Efficiency

The main source of water is borewell to the institute. Water used in institute for many purposes like drinking, flushing, cleaning the toilets, and in various labs are chemistry, Microbiology, Biotechnology, Botany and Zoology.

Major observation during the audit are listed below:

- 1. Each floor has drinking water coolers (Make Blue star) with water purifiers.
- 2. Water is used for toilet flushing.
- 3. Water is used for floor cleaning .(Mops are used for floor cleaning)
- 4. Wash basins are provided with well working conditions.
- 5. In all water coolers eco-friendly refrigerants are used.
- 6. No leaking faucets were seen anywhere. If water leakage is observed, maintenance department is called immediately to attend to the complaints.
- 7. Rainwater harvesting, a sustainable source of water, is practiced.

C. Rainwater Harvesting

The groundwater can be recharged through the use of a rainwater harvesting facility. Provision has been made in the college building design for the capture of rainwater. PVC piping is incorporated into the building design at numerous locations. The rainwater is transported through the conduit and disposed of in the concealed underground well located on the rear side of the college building. The college building's rear side contains a substantial soak basin into which the rainwater is discharged. In contrast to an exposed well, it is entirely covered in pebbles and stones. The percolation rate of a recharge pit is significantly lower than that of an exposed well. The absence of hydrostatic pressure in the pit results in the water percolating at a sluggish pace. Concrete is used to conceal the soak basin in order to prevent any inconvenience. The soak basin is also covered, which provides additional space for student parking. The precipitation that is collected subsequently serves to replenish the groundwater. A groundwater recharge trench enables the rainfall to replenish the bore well and groundwater by replenishing the underground aquifers.



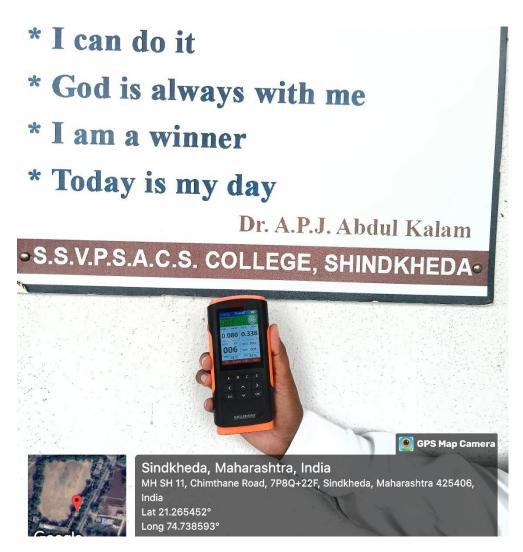
D. Indoor Air Quality

Indoor Air Quality (IAQ) refers to the air quality within and around buildings & structures, and it relates to the health and comfort of building occupants. Some common indoor pollutants are listed below:

- 1. Ammonia- Produce at the time of chemistry practical
- 2. Hydrogen Sulphide-Produce at the time of reaction.
- Carbon monoxide Sources of carbon monoxide are incomplete combustion of fossil fuels.
- 4. Carbon dioxide Due to human respiration
- 5. Particulate matter Due to construction and maintenance activities

The measure observations under indoor air quality is as below

- a) Washrooms are with exhaust fan.
- b) Several indoor plants were observed in the entire campus.



E. Energy Efficiency

- 1. The institution has a total of 75 computers in operational condition, which are the primary areas of electricity consumption.
- 2. Three air conditioners are present in the premise
- 3. The Principal's office, Vice-Principal's office, and Canteen all utilize refrigerators.
- 4. In order to conserve electricity, the design of buildings ensures that the optimum amount of natural light and air is utilized.
- 5. It was noted that windows with curtains are installed in class rooms, laboratories, faculty rooms, and seminar halls, which facilitates the passage of natural sunlight and, consequently, encourages the conservation of electricity.
- 6. The classrooms are spacious and feature large windows that facilitate the continuous circulation of fresh air, thereby requiring minimal electricity.
- 7. The campus is equipped with LED lights that are both energy-efficient and environmentally beneficial. LED lights are 25 times more durable than incandescent lighting and can save energy by up to 75%.
- 8. The structure is naturally ventilated.
- 9. The majority of the computers are equipped with LED displays. When they are not in use, computers are turned off.
- 10. The institute ensures that no electricity is wasted by conducting regular inspections following the conclusion of classes/lectures and office hours.
- 11. Implement signage that encourages users to turn off lights and ventilation in order to conserve energy.
- 12. Placing posters near electrical outlets will encourage students to be environmentally conscious.

F. Temperature and Acoustic Control

- 1. White-washed rooms & passages improve the lighting conditions.
- 2. Acoustic control walls are provided in seminar hall and meeting rooms, which are designed to minimize the exposure to sound.
- 3. Other temperature control systems were not available in the premise.
- 4. The external temperature was found to be 29°C during day time.
- 5. The sound level was found to be below 50 dB in and out of the class.





G. Waste Water Management

The following are the primary observations regarding effluent management:

- 1. The main channel is linked to the ground water recharge tank, and the sanitary wastewater generated from washrooms is connected to the main channel.
- 2. The sewerage system is also connected to the wastewater generated from the canteen.
- 3. Effluent is produced by the chemistry laboratory, which is also connected to the sewerage system.

H. Paper Waste Management

The institution has implemented measures to reduce and prevent the use of paper, as refuse paper is the primary solid waste produced on its premises. It was noted that:

- The use of technology is encouraged, and many official processes, such as sanctioning leave and accounting, are conducted without the use of paper. In accordance with the policy of the Maharashtra government
- 2. Internal notices and communication with all departments are primarily conducted via SMS and email.
- 3. In order to mitigate excessive paper consumption, prints and reproductions are executed on both sides of the page.
- 4. All students and faculty members are informed of significant paper notices that are displayed on the notice boards and communicated through SMS services that are available in the college.
- 5. Software is employed to operate the library. The library Additionally, there are numerous electronic publications accessible. It is beneficial to minimize paper waste.

I. E-Waste Management

It was observed that:

- 1. E- Waste is collected and resold to the retailers who contact the college and thus the college ensures recycling.
- 2. In few cases, the college donates old machines to the schools in the vicinity.

J. Solid Waste Management

It was noted that,

- 1. The combined refuse is immediately transferred to the waste collection van of the local municipal corporation.
- 2. In partnership with the local municipal corporation, the biodegradable waste is sent for compost making.
- 3. The Department of Microbiology provided the microbial culture for waste management, thereby coordinating the vermicomposting of solid refuse in numerous housing societies during the Swachh Bharat Abhiyan. The college's endeavors were beneficial to the Municipal Council.
- 4. Separate color code wastage bins were observed at 4 places designated for dry recyclable and wet biodegradable waste.
- 5. The canteen produces substantial amounts of biodegradable and nonbiodegradable waste, which is disposed off appropriately.

K. Liquid Waste Management

- The guidelines are followed in the processing of liquid waste from the Chemistry, Microbiology, and Biotechnology laboratories.
- 2. Taps that drip or leak are periodically rectified to ensure that water is utilized efficiently.
- 3. The garden and lawn are maintained using processed water.

L. Universal Access and Efficient Operation and Maintenance of Building

- 1. The premises, which encompasses a variety of classrooms, a seminar hall, a library, and a canteen, are easily accessible.
- 2. A ramp facility is available for differently abled individuals.
- 3. The access and staircases are spacious and uncluttered, which enables a secure evacuation in the event of an emergency.
- 4. Handrails are installed on one side of the staircase to ensure safety.
- 5. The emergency exit staircase is equipped with expansive windows that facilitate the passage of sunlight.
- 6. Four fire extinguishers are accessible in the event of an emergency with valid expiry.





M. Green Belt

The college's campus is expansive, and there is ample space for landscaping, with the exception of vegetation located near compound walls. The Swachh Bharat Abhiyan was actively supported by the faculty and students. Numerous rallies, media campaigns, and campus cleanup initiatives were implemented by students.

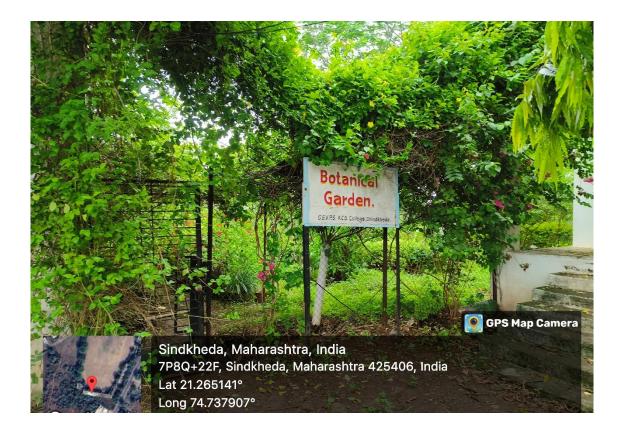
Green Campus: Greenery encompasses the entire campus. The ground has patches of lush lawn. Evergreen trees encircle the playground. The drip irrigation system was observed. The trees are maintained by non-teaching staff with the help of faculty of Department of Botany.





N. Botanical Garden

The college is maintaining botanical garden with various herbs, shrubs and trees.



O. Green Programs (Green initiatives)

- 1. **Plastic-Free Campus:** The campus is plastic-free. Consequently, the college has implemented numerous environmentally friendly initiatives and has been designated as a plastic-free campus.
- The college endeavors to prevent the use of plastic by providing students with environmental education and counseling. The students participate voluntarily in the "No to Plastic" campaign.
- 3. Bicycle Use: Students are increasingly aware of environmental issues. Consequently, there is a growing number of students and staff members who prefer to use bicycles.
- 4. Pedestrian-friendly roads were utilized by students and staff.
- 5. National Service Scheme (NSS) The National Service Scheme is designed to serve society without bias and to incorporate social welfare into the lives of students. NSS volunteers are responsible for the organization of blood donation camps, the maintenance of sanitation, the promotion of health awareness, and any other activities that may be necessary.
 - The NSS unit of the college initiated a village adaption initiative.
 - Tree plantation programs were carried out by staff & students every year.
 - Under NSS, students have participated in 'Swachh Bharat Abhiyaan', cleanliness programs at campus area, Shindkheda taluka.
 - Students actively take part in bus stand cleaning as well as public places cleaning activities.
 - NSS conduct Student rallies for awareness about cleanliness in public.





Recommendations/Suggestions

For Improving Energy Consumption:

- 1. Installation and use of Solar panel to increase energy efficiency.
- 2. A diagram should be included in every classroom and laboratory that has a central switch board, which should connect the location of the tube lamp, fan, and other devices to the corresponding switch. This will guarantee that the appropriate fitting is activated or deactivated, thereby reducing the need for superfluous operations and saving time.
- 3. Implement an energy conservation awareness initiative for students and staff.
- 4. Informing students and staff to turn off all electrical devices when not in use, notices and signage can be posted or displayed near switches and on notice boards.

Water Conservation:

- 1. The utilization and recycling of water systems is essential on campus, regardless of their size (small, medium, or large).
- 2. Install water-saving faucets, such as dual flushing systems in restrooms and tap aerators, to reduce water consumption.
- 3. The installation of waterless urinals may be considered as a means of reducing water consumption.
- 4. Promote the efficient use of water. Inform students and staff about water conservation and usage by means of screen savers in computer laboratories and notices.
- 5. The filtration procedure is used to conserve and recycle waste water.

Paper and other Solid Waste Reduction:

- 1. The maintenance of solid refuse generated on the premises requires the awareness of students and staff, both teaching and non-teaching.
- 2. Optimize the recycling procedure. This can be achieved by forming a group in which students can donate personal apparel, literature, and other materials to impoverished students. This may constitute an ecological program initiative.

- 3. In order to encourage the segregation of biodegradable refuse and the recycling of waste, training and awareness programs should be implemented.
- 4. Biodegradable refuse from the canteen can be used to undertake composting.

Others:

- 1. An environmental advisory committee could be established.
- 2. Encourage environmental awareness as an integral component of coursework in a variety of academic disciplines.
- 3. Community service and research initiatives.
- 4. Utilize all recycling facilities, including those provided by the City Municipality and private entities, to dispose of waste such as glass, cans, white, colored, and brown paper, plastic bottles, batteries, print cartridges, cardboard, and furniture.
- 5. Implement an environmentally responsible purchasing policy and strive to develop and execute a strategy that mitigates the environmental consequences of its purchasing decisions.
- 6. A small bio-gas initiative can be implemented at the canteen to manage biodegradable waste.
- 7. Guarantee that an audit is conducted annually and that action is taken in accordance with the audit report, recommendations, and findings.
- 8. Create a College Environmental Committee that will be responsible for the enactment, enforcement, and review of the Environmental Policy.
- 9. Commemorate the fifth of June annually as "Environment Day" and plant trees to enhance the campus's greenery.

Annexure

- 1. Design for daylight and ventilation
- 2. Water efficiency
- 3. Indoor air quality
- 4. Usage of electricity
- 5. Onsite energy generation
- 6. Temperature and acoustic control
- 7. Wastewater management
- 8. Paper waste management
- 9. E-waste management
- 10. Solid waste management
- 11. Universal access and efficient operation and maintenance of building

1. DESIGN FOR DAYLIGHT AND VENTILATION

S.		
No.	Question	Yes/No
1.	Corridors are wide with good ceiling height. All the corridors receive good daylight.	Yes
2.	Classrooms, Labs and Library have high ceiling with wide doors and large windows. Windows are kept open to adequate daylight.	YES
3.	Classroom walls, corridors and labs are white-washed, this enhances the daylight received.	YES
4.	Curtains are provided on some of the windows to avoid glare.	YES
5.	Laboratories are provided with exhaust fans to disperse heat, fumes and odours.	YES
6.	Stair cases receive daylight through special openings (Jali's) provided at mezzanine floor	YES

2. WATER EFFICIENCY:

S. No.	Question	Yes/No
1.	What are sources of water? (Municipal water supply/Ground water)	Municipal water supply/Ground water
2.	Is there any borewell where the institution is getting water supply from? If, yes how many?	Yes, 1
3.	Give estimated running hours of pumps or borewell?	2 Hours
4.	Rainwater harvesting system / ground water recharge system available?	Yes
5.	Water coolers available? If yes, how many?	Yes, 2
6.	Drinking water purifiers available? If yes how many? Which system is used for water purification?	Yes, Aqua guard
7.	Single / dual flush system available in toilets?	Single Flush
8.	Are there any signage available in washroom for water conservation?	Yes
9.	Is rejected water from AC and waste water from water purifier used anywhere?	Yes
10.	Sprinkler system for plants/garden?	Yes

Details of water tanks present in the campus.

Location	Tank Capacity	Type (Underground/
		Overhead)
Roof Top	1000 Ltrs- 6 Tanks	Overhead
Roof Top	2000 Ltr 1 Tank	Overhead
Roof Top	500 Ltr. – 2 Tank	Overhead

3. INDOOR AIR QUALITY

S. No.	Question	Yes/No
1.	Indoor air quality test carried out or not? (If carried out please provide report)	Yes
2.	What are the types of air conditioning system used? (Please provide details and numbers of air conditioners)	3 AC
3.	Is any air purifier system in place? If yes give details of kind and number.	NO
4.	Are exhaust fans used in toilets and labs?	Yes
5.	Are indoor plants present in the campus?	Yes

4. USAGE OF ELECTRICITY:

S. No.	Question	Yes/No
1.	What are the major areas of energy consumption?	Classrooms, seminar hall
2.	Is power backup system inverter and batteries available? If yes, how many?	Yes, Three
3.	Any energy conservation measures are employed in your campus?	
4.	Any signage at electrical board for save energy?	NO
5.	Solar powered electricity available or not? If yes, give certificate obtained from the system provider company.	Yes

5. Onsite Energy Generation:

S. No.	Question	Input
1.	What type of fuel is used in canteen? (LPG/PNG)	LPG
2.	Is Diesel/Gas Generator available in the campus? If available mention rating and average running hours per month.	NO
3.	How many cylinders are used in all labs of the college?	05

6. TEMPERATURE AND ACOUSTIC CONTROL:

• Following are locations where tree were found

Entrance, area near ground, Corners in the surrounding and plants all over the building and campus.

• Source of noise pollution found around the campus?

No

7. WASTEWATER MANAGEMENT:

S. No.	Question	Yes/No
1.	Is sewage water treatment plant available? If yes give details of capacity, working, etc.	No
2.	If answer to above question is yes, state whether the treated water is used anywhere or not.	

8. PAPER WASTE MANAGEMENT:

S. No.	Question	Input
1.	What is the method of handling old papers such as rough papers, paper notices, question papers and answer sheets?	Sold to scraper
2.	Is printing done on both sides of pages?	Yes
3.	What are the sources of internal communication inside the campus? (paper notices/emails/whatsapp groups)	Whatsapp group
4.	Approximate number of pages used per month.	150

9. E-WASTE MANAGEMENT:

• Any system or policy available for disposal of E waste?

Lesser E Waste in the campus.

10. SOLID WASTE MANAGEMENT

S. No.	Question	Input
1.	Whether waste segregation is practiced and use of blue and green dustbins for different waste is practiced?	Yes
2.	How waste is disposed off?	Through Municipal
3.	Whether have any tie-up with scrap agency or corporation for waste disposal?	Yes Municipal

11. UNIVERSAL ACCESS AND EFFICIENT OPERATION AND MAINTENANCE OF BUILDING:

S. No.	Question	Input
1.	Are ramps provided for differently-abled people inside the campus?	yes
2.	What is the width of staircases provided in the campus?	4 Feet
3.	Is the road with pavement from campus entry gate up to premise?	yes
4.	Are directional exit signages displayed at every location inside the campus?	No
5.	Is fire-fighting installation such as Fire Hydrant, Hose Reel and Fire Extinguishers available?	Yes
6.	Is Fire Safety Training Given to staff? (mention last training date and attach attendance sheet if available)	Yes

SN	Requirements and checklists of the audit	Yes / No / N.A.
1.	Adequate number of Dust Bins as per Guidelines (Red, Yellow, Blue, and Black & Green Bins) are made available in the campus for various wastes, collection, segregation and disposal.	Yes
2.	Record Register for waste disposal and Puncture proof Containers for Sharps / Blue Bags are made available in the campus	Yes
3.	Mutilators (Needle / syringe cutters) and calibrated weighing machines for biomedical wastes collection*	Yes
4.	Personal protected materials like Gloves, Caps, Masks, Aprons & Gum boots etc. used are adequately made available as per the Guidelines in the campus.	Yes
5.	Around 1% fresh Sodium hypochlorite or Bleaching Powder solution is made available as per guidelines*	Yes
6.	Mercury Spill Management, kit, Post Exposure Prophylaxis Kit and Blood spill Management kit are available*	Yes
7.	Proof of Licensed Companies signed MoU with the Organization for wastes collection as per the Govt. regulation	Yes
8.	Norms are being followed by the Organization as per the Central and State Government Pollution Control Board	Yes
9.	Different Forms, Formats, Annual Report, etc. are available for waste collection and mode of transportation	Yes
10.	Availability of a trained dedicated with skilled personals for waste management.	Yes
11.	Is the waste segregated at the site of generation? If not, where are they segregated?	Yes
12.	Is the infectious waste and non infectious waste mixed at the source of generation?*	Yes
13.	Is e-wastes, wood wastes, construction wastes, plastic wastes, hazardous wastes and biomedical wastes mixed at the source of generation?	Yes
14.	Is the waste covered in covered bins? and Is the bins filled up to more than ³ / ₄ th level ?	Yes
15.	Is the bins cleaned with soap and disinfectant regularly and bins are overfilled? And is the stored waste kept beyond 48-72 hrs?*	Yes
16.	Is the waste transported in closed containers or open bags? and Are the waste collection bins/Trolleys/wheel barrow used for transporting wastes?	Yes
17.	Is the personal protective gears like mask and gloves used while collecting the wastes from the site of deposition?	Yes
18.	Whether the concept of E-Waste management is followed in the campus?	Yes
19.	Has a Management Representative, E-Waste Specialist, Laboratory Staff been assigned?	Yes
20.	Whether E-Waste management practices included in the purchase policy of electronic items?	Yes

12. WASTE MANAGEMENT QUESTIONNAIRE

21.	Whether an authorised refurbrisher appointed to manage	Yes
21.	the E-waste	105
22.	Are the E-Waste refurbished and used again in the	Yes
	Institution?	
23.	Whether the importance waste and their implications on	Yes
	environmental and personal hygiene through awareness	
	programmes are conducted for stakeholders?	
24.	Signing MOU with Government and NGOs ensure proper	Yes
	handling of waste materials	
25.	Whether construction and wood wastes are subjected to	Yes
	reuse them in the same organization campus?	
26.	Whether plastic wastes are burnt inside the campus? Any	Yes
	air pollution due to plastic materials burning takes place ?	
	Projects and dissertation works, scholarly publication on	Yes
27.	various wastes and their management carried out by staff	
	members and students	
20	Whether hazardous wastes are properly discarded in	Yes
28.	which acids, solvents and salts are disposed after diluting	
<u> </u>	with water and poured after buried in the soil	X 7
20	Have programmes for the achievement of plastic free area	Yes
29.	objectives and targets been established and implemented	
	as on today? Any display board is made in the campus?	N7
30.	Are recycling of plastic polymers promoted in the campus	Yes
	among the stakeholders?	X 7
31.	Wood waste are collected and recycled properly and they	Yes
	used for fuel and degradation / green manuring purposes?	Vee
32.	Residual wastes are properly disposed in the campus after	Yes
	burring the soil with proper dilution with water	

* Applicable for Hospitals/Labs/Pharmaceutical Industrial sectors

Particular	Collection (Kg/	Collection	Name of collecting
	Year)	Frequency	agency
Plastic waste	20	10	Nagar Panchayat
			Corporation
Construction and	120	5	Local
demolition waste			
Bio-waste	2	2	Local
E-Waste	0	0	Local
Hazardous Waste	0	0	Local