

GREEN AUDIT CERTIFICATE

is awarded for 2018-2021 to the

**Mahatma Gandhi Vidyamandir's
Loknete Vyankatrao Hiray Arts, Science and Commerce College,
Panchavati, Nashik-03**

**As part of the institution's initiatives for a Healthy & Sustainable University the audit was conducted.
We appreciate the immense efforts taken by Staff and students towards the Environment Protection and Conservation.**

Issued on 17th June 2021



**Mr. Ganeshrao A Zole
External Auditor**

**Assistant Conservation of Forest , (West) M.S
Maharashtra Forest Department
Government of Maharashtra**



MM CONSULTANCY SERVICES

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CERTIFICATE.

TO WHOMSOEVER IT MAY CONCERN.

This is to certify that Green Audit at MGVS LVH Arts, Science & Commerce College, Panchavati Nashik was conducted on 1st July 2023. College has submitted necessary data and credentials for scrutiny. The activities and measures carried out by the college have been verified. The efforts taken by the college towards environment and sustainability is highly appreciated and commendable.

This Certificate is valid till 30th June, 2024.

Certificate No.—GA/11/2022-23

Date—1st July, 2023.



Mukund V. Bhandare
Executive Director & Auditor,
For, MM Consultancy Services,
Nashik.

COMPREHENSIVE GREEN AUDIT REPORT
FOR
MAHATMA GANDHI VIDYAMANDIR'S
L.V.H. ARTS, SCIENCE & COMMERCE COLLEGE, PANCHVATI
NASHIK.



DATE OF AUDIT—JULY 1, 2023.

AUDIT CARRIED OUT BY—

MM Consultancy Services, Nashik



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ACKNOWLEDGEMENT.

MM Consultancy Services Nashik is grateful to the Principal Dr. B.S.Jagdale Sir & Management of Mahatma Gandhi Vidya Mandir Trust M.S.G. LVH Arts, Science & Commerce College, Panchavati Nashik for giving us an opportunity to carry out a detailed GREEN audit of their complex to identify potential for Green Initiatives taken in their complex to optimize environmental upgradation.

Environmental improvements by following green initiatives have gained utmost importance today for education institutions as environmental conditions are deteriorating day by day & therefore efficient GREEN management is the need of the hour. Apart from energy savings, Green Initiative effort leads to reduction in Greenhouse gas emissions which improves our environment to protect our planet earth from drastic climate changes & overall natural disturbance. We really appreciate the mission & vision of Shri Apurva Hiray & his team to acknowledge the importance of energy & environment upgrades for sustainable development for present & future generation.

National Assessment & Accreditation Council (NAAC) has also emphasized energy conservation & environment protection for educational institutions by providing an adequate platform for accreditation & Rating to encourage them for special efforts for these noble causes. Needless to say, our present & future generation can survive only if sufficient weightage & importance is given from our end to upgrade our present systems more in line with Nature & natural processes.

We are also grateful to Shri S.S. Tambe, HOD, Botany Dept. for necessary tech. inputs & proper co-operation provided for audit. Without his Initiative & urgency, this audit could not be successful & transparent for a healthy reference. It may be noted that our audit is not faultfinding exercise but is intended to bring about continual improvements in your college campus for the benefits of all of us incl. our future generation.

Our Sincere thanks to LVH College Team who provided us with adequate data & tech. information to make this audit successful.



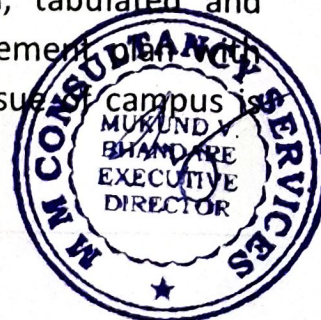
EXECUTIVE SUMMARY.

The future of humankind depends very much on our ability to change our lifestyles and agree to follow a low consumption pattern of living in terms of resources taken from the globe and return to a sustainable development path at the earliest. The opportunity window for restoring nature to its prolonged state of hosting life forms to flourish under its caring environs is according to scientists, very short and lasting only up to 2030. Within this time, with the willing actions of every citizen wherever they are, coordinated and directed actions should start and continue thereafter till a balancing stage is reached where moderate use of resources and mitigation actions for healing the hurts already inflicted, balance positively to a sustainable nature.

Eco campus is a concept implemented in many educational institutions, all over the world to make them sustainable because of their mass resource utilization and waste discharge in to the environment. MSG College believes that there is an urgent need to address these fundamental environmental problems and reverse the trends. 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.

Green Auditing of a Higher Education Institution is required as a part of Criterion VII (of the 7 criteria prescribed) under the Guidelines for Submission of the mandatory annual Internal Quality Assurance Report (IQAR) by Accredited Institutions. It works on the several facets of Green Campus including Water Conservation, Tree Plantation, Waste Management, Paperless Work, and Alternative Energy. With this in mind, the specific objectives of the audit was to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the Departments are in compliance with the applicable regulations, policies and standards.

Initially a questionnaire survey was conducted to know about the existing resources of the campus and resource consumption pattern of the students and staff in the college. In order to assess the quality of water and soil, water and soil samples were collected from different locations of the college campus and analysed for its parameters. Collected data was grouped, tabulated and analysed. Finally a report pertaining environmental management strength, weakness and suggestion on the environmental issues of the campus is documented.



INTRODUCTION.

Environmental audit or Green audit reflects evaluations that help us to identify environmental compliance and management system, implementation gaps, along with related corrective actions. Green audit is a useful tool to determine how and where the most energy or water resources are being used, the type and volume of waste generated and can then considerations be given on how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. Overall, it plays a vital role in imparting a better understanding of Green impact on campus to staff and students.

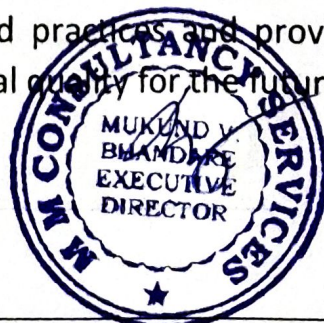
Need for green audit

As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent. In this context, it becomes imperative to adopt the system of the Green Campus for the Institutes which will lead to sustainable development. Besides, it also reduces a sizable amount of atmospheric carbon dioxide from the environment.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that accredits the institution according to the scores assigned at the time of accreditation. NAAC has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

Objectives of the audit.

- * Understanding the current practices of sustainability with regard to the use of water and energy, generation of wastes, transportation, purchase of goods, etc;
- * Establishing a baseline of existing environmental conditions with focus on natural and physical environment;
- * Creating awareness among students and staff concerning real issues of environment and its sustainability;
- * To create a report that document baseline data of good practices and provide strategies and action plans towards improving environmental quality for the future.



Loknete Vyankatrao Hiray Arts, Science and Commerce College, Panchavati, Nashik is one of the leading colleges of Nashik District. The college is affiliated to Savitribai Phule Pune University. The college is exclusively devoted to the education of the segregated and downtrodden class of society. The college belongs to the Mahatma Gandhi Vidyamandir (MGV) founded in 1952 by the Late Karmaveer Bhausahab Hiray, the Visionary Educationist, Freedom Fighter and pioneer of many socio-political movements in Maharashtra. The institute was founded with the motto of 'Bhahujan Hitay, Bhahujan Sukhay' (comprehensive welfare). The institute has a legacy of visionary leadership. In the next development phase, the institute flourished remarkably under the dynamic leadership of the Late Loknete Vyankatrao Hiray, the promoter of the institute.

The college has recently completed fifty years of its establishment. The college has been reaccruited with 'A' grade by NAAC and honored with the Best College Award, the most prestigious award of Savitribai Phule Pune University. The college avails co-education up to UG, PG and Ph.D. levels in Arts, Science, and Commerce as well as in the Vocational stream. There is a multidisciplinary education facility with a wide range of Programs across four streams of the college. We have an interdisciplinary education facility too and avail academic flexibility with multiple elective options. The college also facilitates advanced, job-oriented education and skill-based education for the students. The special features of the college are three years of integrated Vocational courses (B.Voc.), a number of short-term certificates, and Add-on courses. There are 11 Research Centers in the college. Apart from this, the college facilitates distance learning through the Open Distance Learning Centers of SPPU, YCMOU, and the Local Chapters of NPTEL. The college has an A Grade Skill Development center too.

The college avails all State Govt, Central Govt and University scholarships to the students. The college conducts many welfare schemes for the students that include Competitive Exam Cell, Career Guidance Cell, Placement Cell, etc. To enhance the digital literacy of the students the college runs Free-of-Cost Computer Training and also avails the training in regional language. We have taken special initiatives for Women's welfare and empowerment. There is Apoorva Dattak Yojana (scheme for the adaptation of the students) and the Orphan student are supported through the schemes. There is Niramay Arogya Kendra (Health Centre) for students.

The well-equipped library avails many e-resources, the facility of a Virtual library and a vast repository of e-content developed by faculty.



The college tries for the holistic development of the students through active NCC and NSS departments. The Department of Sports is well-equipped and have international Gold- medalist and University Rankers. The college facilitates students' participation in all curricular and extracurricular activities through State and National level competitions. The college avails the participation of girl students in NCC and has a long tradition of students participating in the RD parade.

Vision and Mission

Vision

विद्या विनियोगात् विकासः

Committed towards dedicated efforts for grooming students with proper application of knowledge and skills

Mission

- 1) To blend conventional and vocational education to develop entrepreneurship skills for self-reliance.
- 2) To develop life skills of students through experiential learning.
- 3) To enhance digital competency of students to face global challenges.
- 4) To imbibe scientific temperament among students leading them to research and innovation.
- 5) To inculcate constitutional values and ethics among students for national development.



METHODOLOGY.

In order to perform green audit, the methodology that included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations was adapted.

Onsite Visit.

Field visit was conducted by the Green Audit Team. The key focus of the visit was on assessing the status of the green cover of the Institution, their waste management practices and energy conservation strategies etc.

Focus Group Discussion.

The Focus Group discussions were held with staff members and the management focusing various aspects of Green Audit. The discussion was focused on identifying the attitudes and awareness towards environmental issues at the institutional and local level.

Energy and waste management.

With the help of Teaching, Non- teaching staff, students, Administrative officer, Building Management Engineer and electrical Supervisor, the audit team has assessed the energy consumption pattern and waste generation, disposal and treatment facilities of the college. The monitoring was conducted with a detailed questionnaire survey method.

The study covered the following areas to summarize the present status of environment management in the campus:

- * Water management
- Energy Conservation
- Waste management
- E-waste management
- Green area management
- Environmental Monitoring.



OBSERVATIONS & RECOMMENDATIONS.

1. WATER MANAGEMENT.

The study observed that the main source of water for the institute is received from recharge well. Water for potable purpose is received from Municipal corporation in a 35 KL underground tank on ground floor. Water is used for drinking purpose, toilets and gardening. The waste water from the RO water purifier is used for gardening purpose. During the survey, no loss of water is observed, neither by any leakages, or by over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 10000L/day, which include 2500 L/day for domestic, 3000 L/day for gardening & Lab purposes and 4500 L/day for drinking purpose.

Good Rain water harvesting initiatives have been observed in the college premises.

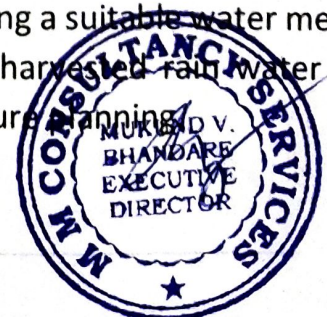
Harvesting of rain water is carried out during monsoon season from the Main Building.

Pipes carrying harvested rainy water from building terrace & Roofs have been provided around the building connected to common pipe leading to well by underground route.

Harvested rain water is used for recharge of well & also for Gardening. Recharging of well in the premises helps to improve the yield of existing borewells particularly in summer season & assists college management to save on additional bills on outside water tankers in dry season.

Recommendations—

- It is however recommended to further make use of terrace space of other buildings available to optimize rain water harvesting. As rain water is purest form of water, it could be conserved in large storage tanks for efficient use in summer season.
- Quality analysis of RO outlet water used for drinking purpose is available & within permissible limits as verified.
- There should be a suitable frequency to clean the underground & Terrace water storage tanks preferably every six months.
- Harvested rainy water should be measured by installing a suitable water meter on main piping discharging to well. Monitoring of harvested rain water on daily/weekly basis can provide adequate data for future planning.



2. ENERGY MANAGEMENT.

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. The study carried out also analysed the use of alternate energy resources that are eco-friendly.

The energy is utilized in the Campus for lighting, space heating and cooling, running of laboratory instruments, appliances, water heating, ground water pumping, cooking and transportation. The source of energy for all the buildings within the campus is through electricity only.

The institution consumes about 3467 Units per Month as indicated in the following Table. Besides, Concentrated Solar Power Plant of 10 KW Capacity having 16 solar panels is Installed in the Campus provides of the daily additional generation of 40 Units from solar Source. The campus contains Lights and fans in use. Average cost of power purchased from MSEDCL is estimated @ Rs.22.64 per KWH.

The entire campus including common facility centres are equipped with LED lamps and LED tube lights, except at few locations. Computers are set to automatic power saving mode when not in use. Also, campus administration runs on switch-off drill on regular basis. Noteworthy observation in the campus during our audit is provision of 95 % LED Lights in the campus.

Months	Units	Bill Amount-Rs.	Unit Rate Rs./Unit
Apr-23	4452	97857	21.98
Mar-23	3606	82518	22.88
Feb-23	2983	70071	23.49
Jan-23	2889	68927	23.86
Dec-22	3411	78302	22.96
Nov-22	3482	79537	22.84



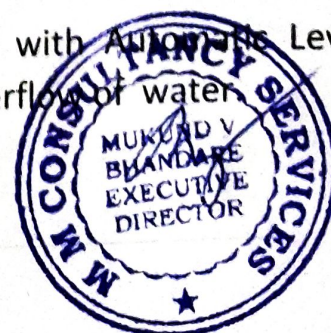
Oct-22	3771	84868	22.51
Sep-22	3720	84124	22.61
Aug-22	2987	69888	23.40
Jul-22	3587	81232	22.65
Jun-22	3177	73663	23.19
May-22	3539	70900	20.03
TOTAL	41604	941887	22.64
Average	3467		

Energy Rating

After the complete survey and analysis of the campus as per ISO 50001:2018 Energy Management System Standards, we rate the campus Score 4/5.

RECOMMENDATIONS.

- As existing solar generation is 50% of present consumption, present solar water capacity may be enhanced to 20 Kw. Further credit for solar generation should be reflected in monthly electricity bill to accrue the benefits of solar plant. Presently there is no mention of solar generation in Bill & no credit is given by MSEB. This problem needs to be addressed on top priority.
- A suitable preventive maintenance program is recommended for execution every month to clean the solar panels for optimizing solar generation capacity as the collection of dust & sticky material on the panel surfaces affects drastically the efficiency of solar power generation.
- Existing Ceiling fans may be replaced stepwise with energy efficient BLDC Motor Fans to cut down electricity consumption of existing fans by more than 50 % and therefore capital investment made for this initiative could be recovered within one year.
- All Roof water storage tanks are already provided with Automatic Level Controllers & Level switch to save power as well as overflow of water.



WASTE MANAGEMENT.

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, 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 survey focused on volume, type and current management practice of solid waste generated in the campus.

Liquid Waste Management-

Water conservation is a key activity as water availability affects on the development of the campus as well as on all area of development such as farming, industries, etc. Keeping this view water conservation activity is carried out.

The waste water generated is disposed off into the underground sewage tanks/Pits through waste water drainage to municipal server. The source of wastewater is Domestic Waste Water i.e., Sewage water, Lab water & chemical wastes. The Sewage water mainly comes from Toilets of college, hostel, kitchen and canteen.

RECOMMENDATIONS-

- A Suitable Sewage Treatment Plant (SWP) is recommended to be installed to treat sewage water for recycling & reuse purpose. Treated water can be used for Gardening. As water scarcity is becoming serious issue day by day, recycle & reuse of waste water is highly recommended.
- Sludge generated from SWP can be effectively used to produce manure which can be utilized for various plants in the Campus.

Solid Waste Management-

Waste generated from tree droppings and lawn management are major solid wastes generated in the campus. Separate dustbins are provided for Bio-degradable and Plastic waste in order to segregate them at the source itself.

Single sided used papers are reused for writing and printing in all the departments to minimize the usage of papers. Important and confidential reports/ papers are sent for pulping and recycling after completion of their preservation period. Very less plastic waste (0.1Kg/day) is generated by some departments, office, garden and campus is declared as Plastic Free zone. Metal waste and wooden waste is stored and sent to authorize scrap agents for further processing. Glass bottles are recycled in the laboratories.



The college has separate bins to collect biodegradable and non-biodegradable waste generated in the campus. Regular meetings are conducted with ground staff regarding the cleanliness of the campus and proper disposal of waste.

Vermicompost is **the product of earthworm digestion and aerobic decomposition using the activities of micro- and macro organisms at room temperature**. Vermicomposting, or worm composting, produces a rich organic soil amendment containing a diversity of plant nutrients and beneficial microorganisms.

Vermicomposting is a kind of composting, certain species of earthworms are employed to make compost. It is basically a mesophilic process that employs microbes and earthworms. **The earthworms feed on organic waste material and excreted them out in a granular form (cocoons).**

Campus have already initiated Vermicomposting project in the cool zone to dispose off collected solid wastes on regular basis & thereby generating a compost which is used exclusively in Campus Garden.

RECOMMENDATIONS.

- Present Capacity of Vermicomposting is too less to dispose off huge solid wastes being generated in the Campus. It is therefore recommended to install high capacity disposal systems in a cool location. Apart from efficient disposal of solid wastes, the process can generate a good quality manure which can be sold in market if exceeded the campus demands.
- Regular cleaning & collection of solid wastes is recommended to avoid huge spread all over spoiling the beauty of Campus. Housekeeping efforts need to be increased to maintain the site clean & waste free.

E-Waste Management-

E-waste is a consumer and business electronic equipment that is near or at the end of its useful life. This waste makes up about 5% of all municipal solid waste worldwide. It is hazardous than other waste because electronic components contain cadmium, lead, mercury, and Polychlorinated biphenyls (PCBs) that can damage human health and the environment.

E-waste generated in the campus is of minimal quantity. It is being effectively managed, keeping in mind the environmental hazards that may arise if not disposed properly.

The cartridges of laser printers are refilled outside the college campus. Awareness programme was conducted by college regarding E-waste Management. The E-wastes and defective items from computer laboratories are being stored properly and recycled in effective Manner.



The dismantled hardware of personal computers are used in PC trouble shooting lab. The dismantled electronic spare parts are immediately sold for reuse. The minimal amount of e- waste that is generated is taken by external vendor with Proper MOU.

The Campus at present works on 70 % paperless functioning. Only critical circulars & Displays are printed out where necessary. 30 % Paper wastes are disposed off through Municipal take away system.

RECOMMENDATIONS.

- A wastewater treatment plant should be installed to recycle and reuse the waste water generated from domestic use.
- Use reusable resources and containers and avoid unnecessary packaging wherever possible.
- The management should take an initiative to purchase recycled resources when they are available.

GREEN AREA MANAGEMENT.

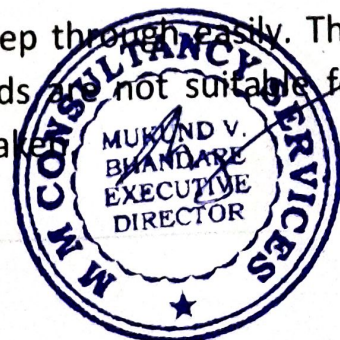
This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy enacted, enforced and reviewed using various environmental awareness programmes.

Many trees are maintained in the campus (around 132 species) to maintain the bio diversity. Various tree plantation programmes are being organized at college campus through NSS (National Service Scheme) unit and Management. This program helps in encouraging eco- friendly environment which provides pure oxygen within the institute and creates awareness among campus students. The plantation program includes various types of indigenous species of ornamental and medicinal wild plant species.

Botanical Garden exists in the premises without Barcode system provided for each of Trees planted. In spite of existing space restriction, the garden can be developed further as lush Green & needs further housekeeping. There is further scope for plantation in the back side ground area,

Roads-

Roads in college are laid with provision for rainwater to seep through easily. This enables the easy recharge of ground water. However, roads are not suitable for pedestrians which should be noted & corrective steps to be taken.



Plastic free campus

The usage of plastic in college is minimal. The staff and the students are not encouraged to use one time use plastic, plastic bags and disposable plastic things throughout the campus.

E – communication.

The principal's office, all the Departments of the college, Examination cell, and laboratories are very well connected with a good and efficient LAN network. Hence all the inter office correspondence is done through email. This reduces the usage of papers. Present paper usage is 60% which should be reduced to 30 % in future.

RECOMMENDATIONS.

- Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records.
- ➤ Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy.
- ➤ Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy.
- ➤ Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- ➤ Indoor plantation to inculcate interest in students, Bonsai can be planted in corridor to bond a relation with nature. Environmental monitor.
- 'Use of Bicycles & Battery operated vehicles is recommended in the Campus to eliminate Green gas emissions to improve the environment.
- Housekeeping inside & outside needs improvement. Also Toilet/Urinals cleaning should on regular basis to avoid unhygienic situation
- Canteen RO Unit should be repaired on priority.

ENVIRONMENTAL MONITORING.

As part of green audit of campus, the Green Audit Assessment Team has carried out the environmental monitoring of campus. This includes Illumination, Noise level, ventilation and indoor air quality of the class rooms. It was observed that illumination and ventilation is adequate considering natural light and air velocity present. Noise level in the campus is well below the limit.

Campus has maintained pollution free environment with good use of available resources.



CONCLUSION.

Though the institution is predominantly an Arts, Science & Commerce college, there is significant environmental research both by faculty and students. The environmental awareness initiatives taken by the management are substantial. The installation of solar Power Plant, Usage of Tree plantation through a gift on Birth Day celebration & Bar Coding for each tree in Botanical Garden practices are advised to make Campus more beautiful & Green. Besides, environmental awareness programmes initiated by the administration proves that the campus is going green. The Herbal garden maintained by the College is highly appreciable. Few recommendations are added for waste management and waste reduction using alternate eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus and thus aid in a sustainable environment and community development

Vermicomposting sites for solid waste treatment are noteworthy & should be expanded in capacity to take care of total solid waste generated in the Campus.

There is a vast scope to increase the present capacity of solar power plant generation by installing additional 10 KW solar plant as adequate roof top area is available in the campus. Optimizing use of renewable energy is the first step taken to reduce green house emission contributing a lot in Green Development.

Temperature/Humidity Display at the helm of the main building is remarkable & praiseworthy feature indicating a totally dedicated Team for taking green house project on management priority. This should be installed.

Students have been assigned responsibility for keeping the campus clean & it was a pleasure to note that students are equally cautious & interested in a noble cause of waste management.

Solar Street Lights to be effectively installed to beautify the campus in the evening & all credit should go to staff & Management for this wonderful scheme.

Last but not the least, Green awareness in the campus is of very high order & Team work is really appreciated. Lot of work has been done with initiative & awareness to keep College Campus Clean & Green & adequate maintenance is provided to sustain the efforts already taken.

Good Luck.



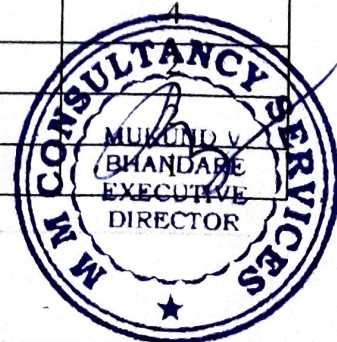
ANNEXURE I

List of plants in the college campus

SR. NO.	NAME OF THE PLANTS	NO. OF EACH SPECIES
1.	<i>Achyranthes aspera</i>	10
2.	<i>Aerva lanata</i>	8
3.	<i>Allamanda cathartica</i>	5
4.	<i>Aloe vera</i>	1
5.	<i>Alpinia galanga</i>	1
6.	<i>Andrographis paniculata</i>	4
7.	<i>Anthurium andraeanum</i>	8
8.	<i>Apama siliquosa</i>	1
9.	<i>Aralium</i>	3
10.	<i>Ardisia littoralis</i>	1
11.	<i>Aristolochia indica</i>	1
12.	<i>Asclepias curassavica</i>	3
13.	<i>Asparagus racemosus</i>	1
14.	<i>Azadirachta indica</i>	1
15.	<i>Begonia rex</i>	2
16.	<i>Biophytum sensitivum</i>	4
17.	<i>Blepharis boerhaaviaefolia</i>	3
18.	<i>Boerhaavia diffusa</i>	2
19.	<i>Bougainvillea spectabilis</i>	4
20.	<i>Brunfelsia americana</i>	1
21.	<i>Caesalpinia sappan</i>	1
22.	<i>Calanthe veratifolia</i>	2
23.	<i>Calliandra marginata</i>	1
24.	<i>Callistemon lanceolatus</i>	1
25.	<i>Calotropis gigantea</i>	1
26.	<i>Cananga odorata</i>	1
27.	<i>Cardiospermum halicacabum</i>	1
28.	<i>Catharanthus rosea</i>	4
29.	<i>Centella asiatica</i>	5
30.	<i>Chlorophytum sensitivum</i>	2
31.	<i>Cissus quadrangularis</i>	1
32.	<i>Clematis paniculata</i>	
33.	<i>Clitoria ternatea</i>	
34.	<i>Codiaeum variegatum</i>	



35.	<i>Coffeatravancorensis</i>	1
36.	<i>Colusvetiveroides</i>	1
37.	<i>Convolvulus</i>	2
38.	<i>Cordia</i>	1
39.	<i>Cosmospinnata</i>	3
40.	<i>Costuspictus</i>	2
41.	<i>Cuphacaminata</i>	3
42.	<i>Cyathula prostrate</i>	2
43.	<i>Cymbopogoncitrat</i>	1
44.	<i>Daturastramonium</i>	1
45.	<i>Dendrobiumjasminoides</i>	1
46.	<i>Desmodiumgangeticum</i>	2
47.	<i>Dorsteniaindica</i>	3
48.	<i>Dracaenaterminalis</i>	4
49.	<i>Dracaenaterniflora</i>	2
50.	<i>Durantaplumerii</i>	1
51.	<i>Durantarepens</i>	1
52.	<i>Ehretia</i>	1
53.	<i>Elephantopusscaber</i>	1
54.	<i>Epiphyllum</i>	
55.	<i>Eupatoriummayapana</i>	1
56.	<i>Euphorbiahirta</i>	4
57.	<i>Evodearoxburghiana</i>	1
58.	<i>Excoecariabicolor</i>	1
59.	<i>Ficussp.</i>	4
60.	<i>Gomphrenaglobosa</i>	3
61.	<i>Hameliapatens</i>	1
62.	<i>Hedychiumcoronarium</i>	1
63.	<i>Heliotropiumindicum</i>	1
64.	<i>Heliotropiumscabrum</i>	1
65.	<i>Hemidesmusindicus</i>	1
66.	<i>Hemigraphiscolorata</i>	1
67.	<i>Hibiscusrosa-sinensis</i>	2
68.	<i>Holarrhenaantidysentrica</i>	1
69.	<i>Ilysantheserrata</i>	9
70.	<i>Impatiensbalsamina</i>	4
71.	<i>Isotomalongiflora</i>	
72.	<i>Ixoracoccinea</i>	
73.	<i>Jacobina</i>	



74.	<i>Jatropha curcas</i>	1
75.	<i>Jatropha padagrica</i>	1
76.	<i>Jatropha pandurifolia</i>	1
77.	<i>Justicia beddomei</i>	3
78.	<i>Kaempferia galanga</i>	1
79.	<i>Knoxia mollis</i>	4
80.	<i>Lantana camara</i>	2
81.	<i>Loranthus longiflorus</i>	2
82.	<i>Mangifera indica</i>	2
83.	<i>Maranta bicolor</i>	1
84.	<i>Melastoma malabathricum</i>	1
85.	<i>Mentha piperita</i>	2
86.	<i>Micrococca mercurialis</i>	2
87.	<i>Mimosa pudica</i>	5
88.	<i>Mirabilis jalappa</i>	2
89.	<i>Murraya exotica</i>	1
90.	<i>Nicotiana glauca</i>	1
91.	<i>Nymphaea stellata</i>	5
92.	<i>Ocimum basilicum</i>	2
93.	<i>Ocimum sanctum</i>	1
94.	<i>Ophiorhiza hirsuta</i>	1
95.	<i>Oxalis corniculata</i>	3
96.	<i>Pentas lanceolata</i>	2
97.	<i>Pipturus albidus</i>	1
98.	<i>Phyllanthus urinaria</i>	10
99.	<i>Pimenta officinalis</i>	1
100.	<i>Piper longum</i>	1
101.	<i>Pistia stratiotes</i>	2
102.	<i>Plumbago indica</i>	1
103.	<i>Polka liliifolia</i>	1
104.	<i>Polygonum chinensis</i>	1
105.	<i>Rauwolfia canescens</i>	1
106.	<i>Rauwolfia serpentina</i>	1
107.	<i>Rosa indica</i>	2
108.	<i>Ruellia macrantha</i>	2
109.	<i>Ruellia aquistifolia</i>	1
110.	<i>Sansevieria roxburghiana</i>	1
111.	<i>Saraca asoka</i>	1
112.	<i>Scaveola</i>	1

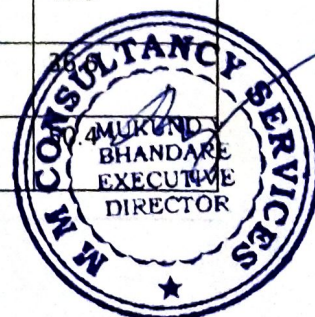


ANNEXURE II

LUX & NOISE MONITORING REPORT

Year: 2023-2024.

Sr.No.	Name of the Place	Latitudes (Degree, Declmal)	Longitudes (Degree, Declmal)	Light Meter /LUX (FC) (Time: Morning 9:30 to 10:30)	Sound Quality (DB) (Time: Morning 9:30 to 10:30)
1	College Entrance	20.005071°	73.803712°	111	54.6
2	Office Porch/ FM Radio Office	20.004915°	73.803852°	44	48.1
3	Office	20.07981°	73.803633°	320	21.5
4	Principal Cabin reception	20.004756°	73.803633°	256	16.2
5	Vice-Principal Cabin (Dr. Vinit Rakibe Sir)	20.004757°	73.803628°	258	34.2
6	New Conference Hall	20.00485°	73.803673°	28	49.8
7	Library	20.00476°	73.803658°	117	22.4
8	Library Study Room	20.00487°	73.803660°	276	15.4
9	Botany Department	20.004867°	73.803711°	250	41.8
10	Mathematics Department	20.004867°	73.803819°	40	46.3
11	Physics Department	20.004868°	73.803818°	365	41.6
Sr.No.	Name of the Place	Latitudes	Longitudes	Light Meter /LUX (FC)	Sound Quality (DB)
12	Electronics Department	20.004871°	73.803818°	37	42.9
13	Research Lab Chemistry	20.004492°	73.803747°	638	28.6
14	Department of Zoology	20.004491°	73.803748°	45	28.6



15	Notice Boards	20.004838°	73.803814°	370	52.2
16	IQAC	20.007427°	73.803875°	148	29.4
17	Store Room	20.007426°	73.803876°	132	22.3
18	Examination Department	20.007429°	73.803876°	253	48.6
19	Department of Commerce	20.004651°	73.804029°	406	49.1
20	IT Lab	20.004652°	73.804027°	452	37.4
21	Competitive Exam Cell/Jr.Library	20.004653°	73.804028°	432	16.3
22	Department of English	20.00491°	73.803919°	212	46.4
23	Department of History	20.00489°	73.803915°	302	62.3
24	Department of Political Science	20.004807°	73.803888°	237	54.6
25	Department of Marathi	20.004796°	73.803889°	602	59.0
Sr.No.	Name of the Place	Latitudes	Longitudes	Light Meter /LUX (FC)	Sound Quality (DB)
26	Department of Economics	20.004808°	73.803889°	267	60.4
27	Department of Hindi	20.0004805°	73.803893°	60	57.7
28	Information Technology Laboratory	20.00462°	73.804044°	9	62.4
29	NSS	20.00464°	73.804046°	13	58.4
30	Department of Psychology	20.004804°	73.80402°	513	50.6
31	Psychology Counselling Room	20.004803°	73.80401°	132	22.3
32	Hall No 14(Old Conference Hall)	20.004922°	73.804052°	656	55.4
33	Jr. Staff Common Room	20.004489°	73.803816°	756	56.2
34	Lecture hall Near Staff room	20.004664°	73.803912°	765	52.1
35	Department of Geography	20.00478°	73.80392°	1549	46.4
36	Department of B.Voc	20.004768°	73.803946°	940	



37	Ladies Common Room	20.004585°	73.803809°	432	60.2
38	Department of Chemistry	20.004582°	73.803810°	342	27.3
39	Hall no.11 (Third Floor)	20.004668°	73.803914°	765	52.1
Sr.No.	Name of the Place	Latitudes	Longitudes	Light Meter /LUX (FC)	Sound Quality (DB)
40	Hall no.12 (Third Floor)	20.004666°	73.803907°	1320	49.9
41	Hall no.13 (Third Floor)	20.005056°	73.804012°	1411	52.4
42	Biology Lab Jr.College	20.004597°	73.803816°	2057	54.8
43	Hall No.01 (Fourth Floor)	20.004447°	73.803784°	2345	53.6
44	Hall No.02 (Fourth Floor)	20.004442°	73.803779°	1301	54.6
45	Hall No.03 (Fourth Floor)	20.005519°	73.804109°	1330	48.0
46	Hall No.04 (Fourth Floor)	20.005714°	73.804251°	1894	57.4
47	Hall No.05 (Fourth Floor)	20.005714°	73.804251°	780	55.2
48	Hall No.06 (Fourth Floor)	20.004643°	73.803854°	2358	52.7
49	NCC Office	20.004587°	73.803813°	1624	26.4
50	Sports Department	20.004588°	73.803816°	1538	40.2
51	Play Ground	20.004589°	73.803821°	2435	62.3

Dr.R.A. Jadhav


Dr.M.P. Pagar

Department of Geography
Department of Geography



ANNEXURE III

DRINKING WATER ANALYSIS REPORT.

	<p>एम. जी. व्ही. बायोअॅनलिटिकल लॅबोरेटरीज माती आणि पाणी परिक्षण प्रयोगशाळा एल.व्ही.एच.मार्ग, कृषि महाविद्यालय, मालेगांव कॅम्प, ता. मालेगांव, जि. नाशिक मोबाईल नं. ९४०४७८५६३३</p>
<p>पावती क्र. ०० दिनांक: 25.03.2023</p> <p>नाव : MGV's Loknete Vyankatrao Hiray Arts, Science & Commerce College, Panchavati Nashik.</p> <p>गाव : Nashik जिल्हा: Nashik</p> <p>सर्व्हे नं. - 321/1/5/plot/5 ता. नमुना स्त्रोत: Tap Water Filter</p>	

पाणी परिक्षण अहवाल

पाण्यातील घटक	परिमाण	घटकाचे नमुन्यातील प्रमाण	घटकाचे सर्वसाधारण प्रमाण
सामु (pH)		7.19	६.५० ते ७.५०
विद्युत वाहकता / क्षारता (EC)	डे.सी. / मिटर	0.18	०.०० ते ०.२५
कॅटायन्स			
कॅल्शियम (Ca)	मि. इ. / लिटर	2.20	०.०० ते १.५०
मॅग्नेशियम (Mg)	मि. इ. / लिटर	4.00	०.०० ते ५.००
सोडियम (Na)	मि. इ. / लिटर	0.23	०.०० ते ४.००
पोटॅशियम (K)	मि. इ. / लिटर	0.01	०.०० ते १.००
ॲनायन्स			
कार्बोनेट्स (CO ₃)	मि. इ. / लिटर	0.00	०.०० ते १.५०
बायकार्बोनेट्स (HCO ₃)	मि. इ. / लिटर	7.20	०.०० ते १.५०
क्लोराईड्स (Cl)	मि. इ. / लिटर	5.20	०.०० ते २.००
सोडियम सोषम गुणांक (SAR)	मि. इ. / लिटर	0.13	०.०० ते १०.००
अवशेषात्मक सोडियम कार्बोनेट (RSC)	मि. इ. / लिटर	1.20	०.०० ते १.२५
कॅल्शियम ते मॅग्नेशियम गुणांक (Ca:Mg)		0.55	०.०० ते १.५

टीप : सदर अहवाल कायदेशिर बाबीसाठी वैध नाही.



प्रयोगशाळा प्रमुख
 एम.जी.व्ही. बायोअॅनलिटिकल लॅबोरेटरीज
 एच.एच.बी.बी. रोड, मालेगांव कॅम्प
 महाविद्यालय प्रयोगशाळा, नाशिक



PHOTO GALLERY.



SOLAR POWER PLANT

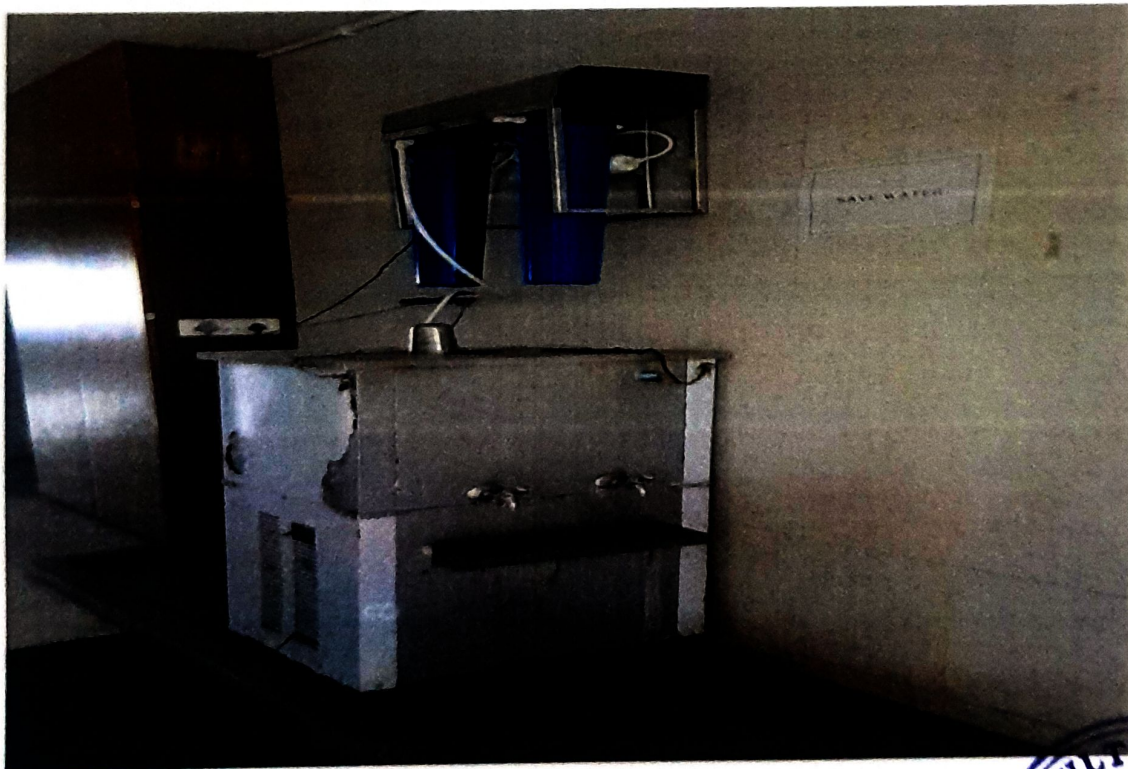


TREE PLANTATION





VERMI COMPOSTING FOR SOLID WASTES



RO PLANT FOR DRINKING WATER





SEGREGATION OF E WASTE IN THE CAMPUS



STUDENT & STAFF INVOLVEMENT IN TREE PLANTATION

