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No. VECL / GAC/ 3 /2021-22

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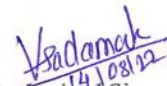
Certificate Green Audit

This is to certify that "Vasanti Engineer's And Consultant's Laboratory Services" has conducted Green audit " Shree Yashawant Shikshan Prasarak Mandal's Vasantidevi Patil Institute of Pharmacy, Kodoli "in academic year 2021-22. The green audit involves initiatives planning efforts activities implemented in college campus like environmental friendly, environmental promotional activities, water and waste water management, rain water harvesting, tree plantation, energy conservation, paper less technology and various environmental awareness activities. This Green audit is also aimed to assess impact of green initiatives for maintenance of the campus eco-friendly.

The college has submitted necessary data and credential of scrutiny. The activities and measures carried out by the college have been verified on the basis of previous recommendations and were found to be satisfactory. The efforts taken by the management, faculty and students towards environment are highly appreciated.


Green/Env Audit In charge
(S.S. Patil)

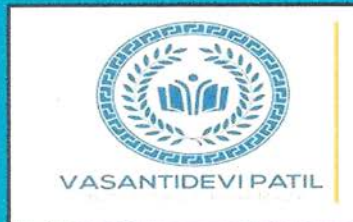



Authorized Sign
(V.S. Sadamate)
(CEO)/Auditor

Green Audit (2021-22)

GREEN AUDIT REPORT

(A.Y 2021-22)



Shree Yashwant Shikshan Prasarak Manal's
VASANTIDEVI PATIL INSTITUTE OF PHARMACY,
KODOLI



ISO9001:2015

Prepared by

**Vasanti Engineer's and Consultant's Laboratory
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1. ACKNOWLEDGEMENT

Vasanti Engineer's and Consultant's Laboratory Services Green Audit Team thanks the management " **Shree Yashawant Shikshan Prasarak Mandal's Vasantidevi Patil Institute of B-Pharmacy, Kodoli** " for assigning this important work of Green Audit .We appreciate the co-operation to our team for completion of study.

Our special thanks are due to:

Principal of the college - Dr. Arehalli Manjappa

IQAC Member- Dr. Atul A Deshmukh.

Environment Expert at the campus – Mr. Mahadev P.Mali

Green Audit coordinator – Mr. Umesh V.Patil.

Teaching & Supporting Staff of College- Mr. Gourav D. Kekare,Mr. Bharat R. Patil

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



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2. DISCLAIMER:

Vasanti Engineer's and Consultant's Laboratory Services green Audit Team has prepared this report for " **Shree Yashawant Shikshan prasarak Mandal's Vasantidevi Patil Institute of B-Pharmacy, Kodoli** "based on input data submitted by the representatives of College complemented with the best judgment capacity of the expert team.

It is further informed that the conclusions 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.

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Report by Auditor:

Vasanti S Sadamate

Supriya S Patil



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3. CONCEPT

The green audit process was began in the 1970s with an intention of identifying the activities carried out in a given institution or company. Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyse 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 organizations whose exercises can cause risk to the health of inhabitants and the environment. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. The audit also seeks to identify possible means and methods to save investments, enhance work quality, improve health and safety of their employees, reduce liabilities and reduce the rate of environmental pollution. A continuous process of such audit might result in maintaining the quality of these aspects within the premises of any organisation.

3.1 About Criteria 7 of NAAC

Universities are playing a key role in the development of human resources worldwide. Higher education institutes campus run various activities with the aim to percolate the knowledge along with practical dimension among the society. Likewise, different technological solutions related to the environment are also provided by the higher education institutes. Different types of evolutionary methods are used to assess the problem concerning the environment. It includes Environmental Impact Assessment (EIA), Social Impact Assessment (SIA), Carbon Footprint Mapping, Green audit, etc. National Assessment and Accreditation Council (NAAC) is a self-governing organization that rated the institutions according to the scores assigned at the time of accreditation of the institution. Green Audit has become a mandatory procedure for educational institutes under Criterion VII of NAAC. The intention of the green audits 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 action in any educational institution will inculcate the good habit of caring for natural resources in students. Many environmental activities like plantation and nurturing saplings and trees, Cleanliness drives, Bird watching camps, no vehicle day, Rainwater harvesting,



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etc. will make the students good citizens 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.



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4. INTRODUCTION

Vasantidevi Patil Institute of Pharmacy, Kodoli was established with the aim to impart quality pharmacy education and training to cater the needs of the pharmacy profession and society at large. The journey started in 2003 by introducing the first Pharmacy institute in the Kodoli under aegis of Shri Yashwant Shikshan Prasarak Mandal, Kodoli. The institute is approved by AICTE New Delhi, PCI New Delhi, and DTE Mumbai, recognized by Government of Maharashtra & affiliated to a MSBTE, Mumbai and Shivaji University, Kolhapur. The Institute is situated at the foot hills of Panhala, in the area of Kodoli, about 10 kilometres away from National Highway- 4 and 35 km away from major city, Kolhapur. The institute occupies the area of approximately 4 acres having its own 5470 sq.mts. Building with excellent infrastructure which in-houses facilities such as sophisticated laboratories, resourceful library with latest books, national & international journals and well-equipped classrooms with modern teaching aid. Vasantidevi Patil Institute of Pharmacy is a progressive edifying organization, dedicated to the pursuit of excellence. This institute has been dedicated to decree solutions to big challenges and to prepare the student for leadership in a multifaceted world.

- **Vision :**

- ✓ To become a premier, recognized institute by excelling in pharmacy education for creating the dynamic, competent, valued, socially responsible and knowledgeable Professionals, who shall contribute in the nation building process and enrich their lives.

- **Mission**

- ✓ To achieve Excellency in Pharmacy pedagogy and research, through student centric quality education, state-of-art research facility and holistic growth of students, to develop skilled pharmacy professional for strengthening the healthcare of the nation.



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4.1 GREEN AUDIT EXECUTIVE SUMMERY REPORT

1. BRIEF ABOUT COLLEGE:

- Courses offered by the College:

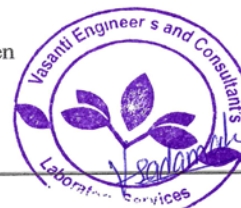
SR No	Courses UG/PG	About College
1	Name of the Institution:	" Shree Yashawant Shikshan prasarak Mandal's Vasantidevi Patil Institute of B-Pharmacy, Kodoli "
2	Courses UG	1
3	No of students	Male-224 Female-223
4	No of teachers	Male-27 Female-21
5	No of Non-teaching staffs	Male-27 Female-04
6	Total campus area	4 acres
7	Girls common room	1
8	Garbage collection bins	15
9	Labs	7
10	Class rooms	6

4.2. Role of Institute in Green Management

The part played by the college management in bringing the campus to a green one is adorable.

The following were the initiatives by the college authorities in green management:

1. The management developed separate teams for implementing green policy in the campus.
2. Regular evaluation system has been established with monitoring cells for green activities in the campus.
3. The management has allotted budget for implementing green policies in the campus.
4. The green monitoring cell evaluates developmental and functional activities and makes recommendations for improvement of the green aspects.
5. These recommendations are implemented without delay and fail.
6. Clubs that are related to green activities are encouraged to conduct programs in and around the campus.
7. The management is keen on the social commitments and tries to reach out to the general public through teachers and students.
8. The management is keen in conducting awareness programs based on its green



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policies.

9. The support and part played by management is vital in the green campus related activities.

4.3 ENVIRONMENTAL POLICY :

College teaching and Non-teaching staff of “Shree Yashawant Shikshan Prasarak Mandal Vasantidevi Patil Institute of B-Pharmacy, Kodoli” is committed for carrying out its activity for sustainable development. This we will achieve through the following:-

- ✓ To bring in use the ‘Rain Water Harvesting’ on the campus.
- ✓ To use of Solar water Heater, Energy saving equipment’s is installed like LED light, LED monitors for computers.
- ✓ To use the solid waste through vermin-compost on the campus and use it as a fertilizer.
- ✓ To protect and nurture the Flora and Fauna on the campus
- ✓ To maintain green campus.
- ✓ To reuse of plastics bottles and tins for plantation.



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5. OBJECTIVES AND SCOPE

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards.

GOALS OF GREEN AUDIT

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of environment.
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost
- To suggest the best protocols for adding to sustainable development

BENEFITS OF GREEN AUDIT

- Would help to prepare plan to project the environment.
- Recognize the cost saving methods through waste minimization and management.
- Point out the prevailing and fourth coming impacts on environment.
- Ensures conformity with the applicable laws.
- Empower the organizations to frame a better environmental performance.
- It portrays a good image of an institution which helps building better relationships with the group of interested parties. Promotes the alertness for environmental guidelines and duties.



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6. CONSTITUTION FOR GREEN AUDIT

In order to perform green audit, the methodology 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. The study covered the following areas to summarise the present status of environment management in the campus:

- ✓ Water conservation and management
- ✓ Waste Management
- ✓ Air Pollution Management
- ✓ Noise Pollution And Illumination Management
- ✓ Energy Use And Conservation
- ✓ Green Belt Area & Bio-Diversity

GOOD POINTS OBSERVED

1. College has to install 'Rain Water Harvesting' on the campus.
2. College has to install solar panels and Street lights, LED light, LED monitors
College has conducted
3. College has prepared Green Environmental policy and has taken efforts for sustainable development on the college campus. .
4. College has formed the team of faculty and student which works to maintain biodiversity on the campus and also participates in preventing pollution in society through various drives.
5. Environment Awareness trainings and workshop for faculty and students.
6. College has Vermin composting facility installed.
7. College has celebrated No Vehicle day on every fourth Saturday.
8. College cleaning activity twice in day.
9. Various tree plantation programs are being organized at college campus and surrounding villages through NSS unit.
10. College has conduct tree plantation programme twice in year.



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11. College faculty and students participated in different environmental awareness programme.

MAJOR RECOMMENDATIONS

- ✓ Display boards for switching off the taps to be put on at appropriate place.
- ✓ Display boards for switching off the switch boards to be put on at appropriate place.
- ✓ Automatic Leak detection systems for conservation of water.
- ✓ To provide incineration system for sanitary napkins.
- ✓ To provide dustbin facility for solid waste at appropriate place.
- ✓ To use maximum use of ICT and minimize use of paper it will help towards paperless office.
- ✓ Display boards for environmental awareness to be put on at appropriate place.
- ✓ To give waste water treatment process before use for agriculture.
- ✓ Display the name of plants.
- ✓ Display boards in the library and other places for awareness to maintain silence in the college.



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7. ANALYSIS OF GREEN PRACTICES

7.1 WATER CONSERVATION AND MANAGEMENT:

Water is a valuable natural resource for all living organisms. It is freely available depending on the climate and topographic features of a region. Although water is natural freely available but portable (drinkable) water is not available freely for human consumption. In our planet 70% area is covered by water but only 3% of it is fresh water. Around 1.1 billion people of the world face water crisis. Water pollution and wastage plays a vital role in water crisis. Water contaminations are taking place at an alarming rate. Drinking or using contaminated water leads to many diseases or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and disease. It is also important to conserve protect and manage the water resources availability and usage so that it is sustainably used. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. A water audit is an on-site survey and assessment to determine the water quality, use and hence improving the efficiency of its use.

- **USES AND MANAGEMENT**

- **SOURCE OF WATER:**

SR. NO.	PARAMETERS	RESPONSE
1	Source of water	River/Bore well
2	Water reserve /Storage tank	05
3	Capacity of tank	3000lit



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• WATER USERS IN CAMPUS :

SR No.	Person in different section	Strength (No. of person)
1	Staff	40
2	Non teaching Staff	31
3	Hostel Boarders	35
4	Visitors	15

The visitors of the College vary with respect to different activities conducted in the College campus. During admission and different competitive exam conducted in the college campus.

QUANTITY OF WATER USED IN DIFFERENT SECTIONS OF THE CAMPUS

Sl. No.	Sections	Water Use (Litter/day)
1	Academic building	53068
3	Canteen	5600
4	Urinals and Toilets	19008
6	Laboratories	1500
7	Garden	1000
8	Drinking	900
9	Hostel	17000
11	Leakage	3000



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WATER CONSUMPTION IN DIFFERENT ACTIVITY IN COLLEGE CAMPUS

Activity	Water used per activity (in Litter)	No. of times Activity performed in a day	Average water used Person/Day	No. of people using water	Total water consumption per Day (L)
Hand and face wash	4-6 L	4	16-24L	528	10560
Drinking Water	0.2-0.4L	6	1.2-2.4L	500	900
Toilet Flush	8-10L	4	32-40L	528	19008
Bath	30-40 L	1	30-40 L	40	1400
Cooking & Washing In canteen	150-250L	2	300-500L	14	5600
Cooking & Washing Hostel	350-450L	2	700-900L	12	9600
Cloth Washing	100-200L	1	100-200L	40	6000
Total					53068



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- **MAJOR OBSERVATIONS IN REGARD OF WATER USAGES AND CONSERVATION PLAN**

1. At present, no measures have been taken to treat waste water in the college premises.
2. Drip irrigation and sprinklers are used for watering the garden. The garden is also watered with water pipe, two times a day for 02 hours each time.
3. Rain water harvesting system is installed and collected water used for gardening and agricultural purpose.
4. Hazardous liquid waste disposed by authorised agency.

- **RECOMMENDATIONS**

College administration may consider theses on top priority:-

- ✓ To establish and implement the Water Conservation and Management Plan as per Environment Protection Act 1986
- ✓ The water Conservation Awareness Program to be conducted on World Water Day on 22nd March every year
- ✓ Display boards for switching off the taps to be put on at appropriate place
- ✓ Automatic Leak detection systems for conservation of water.
- ✓ 80 % of total quantum of ground water extracted shall be recharged to ground either by Artificial Recharge Structures within the college premises
- ✓ Special Internal Water Audit to be conducted quarterly.



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7.2 WASTE MANAGEMENT:

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, glass, dust etc. reuse and recycling. Furthermore, solid waste often includes wasted material resources that could 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.

- **DIFFERENT TYPES OF WASTE GENERATED IN THE COLLEGE AND THEIR DISPOSAL.**

Types of waste	Particulars	Disposal method
E-Waste	Computers, electrical and electronic parts	Authorized disposal agency
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc	Municipal
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes	Municipal
Chemical wastes	Laboratory waste	Neutralize with water
Glass waste	Broken glass wares from the labs	Municipal
Sanitary Napkin	Napkin	-
Bio medical waste	catheters, syringes, IV bottles, Blood sample, medicines, infectious waste, cotton, bandages	Authorized disposal agency



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- **MAJOR OBSERVATIONS IN REGARD OF WATER USAGES AND CONSERVATION PLAN :**

1. At present total solid waste collected in the campus is 11 Kg/day, Waste generation from tree droppings, canteen and lawn management is a major solid waste generated in the campus.
2. Vegetable waste and other leaf litters were used to feed in the vermin-compost pit and the resulting vermin-cast is used as manure in the garden.
3. Other solid waste directly disposal to municipal corporation.
4. Organized special camp, rally under NSS activity for solid waste management.
5. College spread the message of recycling waste in the community.

- **RECOMMENDATIONS:**

- ✓ Dustbins should be providing at classrooms and campus premises.
- ✓ Incineration provide for disposal sanitary napkins.



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7.3 AIR POLLUTION MANAGEMENT:

- **PERIODIC AWARENESS PROGRAMME FOR STAFF, STUDENTS AND SOCIETY**

Every day there are 50 Two wheelers and 16 four wheelers are coming in college premises but there is no system observed to check for PUC certificate, Vehicle Exhaust Gas Analysis and Vehicular movement noise and vibration pollution. The air pollution at the time of ignition off and on is more than it is in riding mode.

RECOMMENDATIONS

The college may consider these on top priority:-

- ✓ World environment day to be celebrated in college premises every year on 5th June and whole college students and staff shall get involved and take oath for environment conservation not only in college but also in every span of life.
- ✓ College shall monitor the Ambient Air Quality as per the guidelines of "Air (Prevention and Control of Pollution) Act 1981
- ✓ Exhausts gases shall be monitored analyzed and checked regularly.
- ✓ Use of bicycle in campus to be promoted.
- ✓ Vehicular exhausts shall be examined regularly in the college as per Central Motor Vehicle Act 1988
- ✓ Vehicular movement shall be restricted by putting boundary limit and beyond that limit bicycles usage shall be promoted to all students and staff.



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7.4 NOISE POLLUTION AND ILLUMINATION MANAGEMENT:

- MAJOR OBSERVATIONS IN REGARD OF NOISE POLLUTION AND ILLUMINATION MANAGEMENT**

1. SILENCE ZONES IN THE COLLEGE

Various display boards have been not placed in the library and other places for awareness to maintain silence in the college.

- NOISE STUDY:**

Noise level monitoring was carried out using Noise Level Meter. The noise level survey was carried out two locations, at outside as well as inside.

Noise Monitoring.

Location		Time (pm)	1	2	3	4	5	Noise Level Readings dB(A)
Outside		2.30	61.2	62.3	57.4	58.9	60.3	60.02
		3.30	51.2	50.4	67	48.3	55.7	54.52
Inside	Class	2.30	53.8	57.3	48	45.2	59.2	52.7
	Laboratory		54.3	57.8	58.9	57.9	59.7	57.72
	Library		53.8	57.3	48	45.2	59.2	52.7
	Class	3.30	58.6	52.3	52	50.3	49.2	52.48
	Laboratory		56.9	57.8	55.2	57.4	48.3	55.12
	Library		50.6	55.7	60.7	55.7	48.7	54.28
As per The Noise Pollution (Regulation & Control) Rules, 2000 (Rules 3(1 and 4(1))								
Area Code			Area Type		Limits in dB (A) weighted scale			
					Day (6am to 10pm)		Night (10pm to 6am)	
B			Commercial		65		55	

It is observed that noise level of the campus is within limit as per the noise pollution regulations and control rules 2000.



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• ILLUMINATION STUDY

The illumination study was carried out using Lux Meter. The illumination study was carried out at two locations, in Classroom and Laboratory.

Sr. No.	Location	Time (pm)	Lux Level Reading (Lux)					Average Lux
			1	2	3	4	5	
1.	Classroom	2.30-3.30	106	120	176	203	139	148.8
2.	Classroom	2.30-3.30	120	258	229	639	271	303.4
3.	Laboratory	2.30-3.30	369	187	96	347	320	263.8
4.	Laboratory	2.30-3.30	236	169	369	200	341	263
5.	Library	2.30-3.30	333	254	204	200	176	233.4

All results of Illumination Study (Classroom and Laboratory) found within limits as per MF Rules- Section-35, Schedule B.

RECOMMENDATIONS

The College administration may consider on top priority

- ✓ The College adopts no honking policy and prevents use of any honk and noise in campus. Certain areas like library, classrooms are declared as silence zone and noise pollution is kept to minimum on college campus.



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7.5 ENERGY USE AND CONSERVATION

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.

- **MAJOR OBSERVATIONS IN REGARD OF ENERGY USE AND CONSERVATION :**

Table shows the energy consumption pattern of the college for a month. The college has consumed an average of 6157 kW/hr electricity in a month the one year electricity bill amount was 120960/-

SR No	Electrical appliances	Number
1.	Tray Dryer	1
2.	BOD Incubator	1
3.	Stability Chamber	1
4.	Spray Dryer	1
5.	Incubator Shaker	1
6.	Tablet Punching Machine	1
7.	Dissolution Test Apparatus	1
8.	UV Spectrophotometer	1
9.	Polishno PAN	1
10.	Tablet Coating	1
11.	Tray Dryer	1



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7.6 GREEN BELT AREA & BIO-DIVERSITY:

The Green Belt Area is meant for conservation of nature and aesthetic value of the College premises. The Green Area in the College 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 is enacted, enforced and reviewed using various environmental awareness programmes.

- **MAJOR OBSERVATIONS IN REGARD OF GREEN BELT AREA & BIO-DIVERSITY**

Campus is located in the vicinity of approximately 200 types (species) flora and fauna. Various tree plantation programs are being organized during the month of July and October at College campus and surrounding villages through NSS unit. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes various types of indigenous species of ornamental and medicinal.

No. of trees planted in campus:

Sr. No.	Biological Name	QTY
1	Ocimum Sanctum	1
2	AnacyclusPyrethrum	1
3	Putranjiva Roxburgh	1
4	Vitex Negundo	1
5	Vetivera Zizanioidis	1
6	Sapindus Trifoliatus	1
7	Cissus Quadrangularis	1
8	Radermachera Xylocarpa	1
9	Tylophora Indica	1
10	Helicteres Isora	1



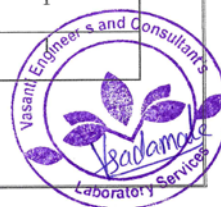
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11	Gardenia Gummiifera	1
12	Cassia Tora	1
13	Phyllanthus Niruri	1
14	Sesbania Sesban	1
15	Vernonia Cineria Linn	1
16	Nyctanthes Arbortistris	1
17	Baliospermum Montanum	1
18	Clitorea Ternatea	1
19	Aloe Vera	1
20	Ocimum Basilicum	1
21	Mimosa Pudica Linn	1
22	Erythrina Indica	1
23	Plumbago Zeylanica	1
24	Azadirachta Indica	1
25	Zizyphus Nummularia	1
26	Sygyzium Cumini	1
27	Pongamia Pinnata	1
28	Psidium Guajava	1
29	Butea Monosperma	1
30	Cryptolepis Buchananii	1
31	Bryophyllum Pinnatum	1
32	Cymbopogon Citratus	1
33	Cordia Dichotoma	1
34	Hibiscus Rosasinensis	1
35	Emblica Officinalis	1
36	Pterospermum Suberifolium	



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37	Piper Longum Linn	1
38	Clerodendrum Phlomidis	1
39	Spermadictylon Saugeolons	1
40	Flacourtia Indica	1
41	Symida Febrifega	1
42	Mangifera Indica	1
43	Abrus Precatorius	1
44	Tinospora Malabarica	1
45	Ficus Glomerata	1
46	Crataeva Nurvella	1
47	Moringa Oleifera	1
48	Cicca Acida	1
49	Premna Mucronata	1
50	Asparagus Recemosus	1
51	Plantago Ovata	1
52	Curcuma Longa	1
53	Lawsonia Inermis	1
54	Desmodium Gangeticum	1
55	Albizzia Leebek	1
56	Argyria Speciosa	1
57	Hemidesmus Indicus	1
58	Acacia Concinna	1
59	Annona Reticulata	1
60	Woodfordia Fructicosa	1
61	Jasminum Sambac	1
62	Randia Spinosa	



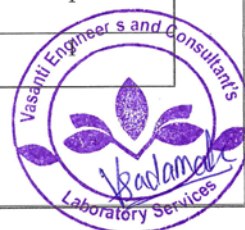
Green Audit (2021-22)

63	Cocculus Hirsutus	1
64	Datura Metel	1
65	Semecarpous Anacardium	1
66	Terminalia Arjuna	1
67	Acacia Catechu	1
68	Anthocephallus Indicus	1
69	Garcinia Indicum	1
70	Tagutus Erecta	1
71	Ceiba Pentandra	1
72	Artocarpous Integrifolia	1
73	Terminalia Belerica	1
74	Terminalia Chebula	1
75	Gmelina Arborea	1
76	Bauhinia Variegata	1
77	Bauhinia Recemosa	1
78	Coleus Aromaticus	1
79	Salmalia Malabarica	1
80	Boerhavia Diffusa	1
81	Celastrus Panniculatus	1
82	Melia Azedarach	1
83	Cassia Fistula	1
84	Mucuna Pruriens	1
85	Eclipta Alba	1
86	Manikara Zapota	1
87	Leucaena Leucocephala	1
88	Rauwolfia Serpentina	



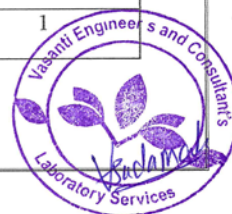
Green Audit (2021-22)

89	Oscimum Basilicum	1
90	Sida Rhombifolia	1
91	Areca Catechu	1
92	Cocos Nucifera	1
93	Prosopis Spicigera	1
94	Alstonia Scholaris	1
95	Alstonia Scholaris	1
96	Croton Tigilium	1
97	Madhuca Indica	1
98	Santalum Album	1
99	Sterculia Alata	1
100	Pandanus Tectorius	1
101	Citrus Reticulata	1
102	Citrus Reticulata	1
103	Rosa Centifolia	1
104	Adhatoda Vasica	1
105	Caesalpinia Crista	1
106	Callophyllum Inophyllum	1
107	Myristica Fragrans	1
108	Aegle Marmelos	1
109	Pterocarpous Marsupium	1
110	Embelia Ribes	1
111	Tecoma Undulata	1
112	Diospyros Malabarica	1
113	Trachyspermum Ammi	1
114	Annona Squamosa	



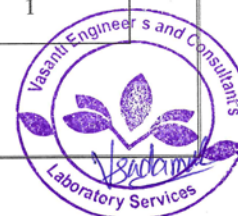
Green Audit (2021-22)

115	Ricinus Communis	1
116	Pterocarpous Santalinus	1
117	Holarrena Antidysenterica	1
118	Spondias Mangifera	1
119	Gymnema Sylvestre	1
120	Anacardium Occidentale	1
121	Michelia Champaca	1
122	Elettaria Cardamomum	1
123	Emblica Officinalis	1
124	Cinnamomum Zeylanicum	1
125	Abies Webbiana	1
126	Solanum Xanthocarpum	1
127	Caesalpinia Sappan	1
128	Thevetia Nerifolia	1
129	Feronia Elephantum	1
130	Caesalpinia Digyna	1
131	Eugenia Caryophyllus	1
132	Capparis Zeylanica	1
133	Mesua Ferrea	1
134	Ananas Comosus	1
135	Citrus Medica	1
136	Wrightia Tinctoria	1
137	Poyalthia Longifolia	1
138	Cocculus Hirsutus	1
139	Sida Cordifolia	1
140	Tamarindus Indica	1



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141	Solanum Indicum	1
142	Lanatana Camara	1
143	Abutilon Indicum	1
144	Dalbergia Sissoo	1
145	Adansonia Digitata	1
146	Ixora elongata	1
147	Carrisa Carandus	1
148	Oroxylum Indicum	1
149	Artemisia Vulgaris	1
150	Bambusa Vulgaris	1
151	Strychnus Nuxvomica	1
152	Tectona Grandis	1
153	Cassia Occidentalis	1
154	Eucalyptus Globulus	1
155	Ervatamia Coronaria	1
156	Murraya Koenigii	1
157	Euphorbia Antiquorum	1
158	Nerium Indicum	1
159	Catharanthus Roseus	1
160	Carica Papaya	1
161	Centella Aisatica	1
162	Leucas Cephalotes	1
163	Calotropis Procera	1
164	Jasminum Auriculatum	1
165	Piper Betel	1
166	Phoenix Sylvestris	1



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167	Prunus Amygdalus	1
168	Nelumbo Nucifera	1
169	Dioscorea Bulbifera	1
170	Zinziber Officinale	1
171	Oxalis Corniculata	1
172	Punica Granatum	1
173	Allium Sativum	1
174	Vigna Radiata	1
175	Teramnus Labialis	1
176	Solanum Nigrum	1
177	Saussurea Obvallata	1
178	Mentha Spicata	1
179	Hedychium Spicatum	1
180	Ficus Bengalensis	1
181	Jatropha Curcas	1
182	Ficus Religiosa	1
183	Saccharum Officinarum	1
184	Adiatum Caudatum	1
185	Pandanus Amaryllifolius	1
186	Opuntia Dillenai	1
187	Gossypium herbaceum	1
188	Sesamum Indicum	1
189	Lycopersicum Esculentum	1
190	Datura Innoxia	1
191	Biophytum Sensitivum	1
192	Thespesia Populnea	1



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193	Cajanus Indicus	1
194	Withania Somnifera	1
195	Solanum Surattense	1
196	Acorus Calamus	1
197	Saraca asoca	1
198	Chlorophytum Borivilianum	1
199	Buchanania Latifolia	1
200	Alangium Salvifolium	1
201	Cinnamomum Tamala	1
202	Dillenia Indica	1
203	Ficus Lacor	1
204	Psoralea Corylifolia	1
205	Aristolochia Indica	1
206	Elaeocarpus Ganitrus	1
207	Mimusops Elengi	1
208	Sida Spinosa	1
209	Ficus Carica	1
210	Desmostachya Bipinnata	1
211	Couroupita Guinensis	1
212	Prunus Avium	1
213	Manihot Esculenta	1
214	Aristolochia Ringens	1
215	Commiphora Mukul	1
216	Luffa Acutangula	1
217	Benincasa Hispida	1
218	Lagenaria Siceraria	1



Green Audit (2021-22)

219	Pueraria Tuberosa	1
220	Ipomea Digitata	1
221	Clerodendrum Phlomis	1
222	Clerodendrum Inerme	1
223	Moullava Spicata	1
224	Pistacia Vera	1
225	Salvadora Persica	1
226	Ficus Tsiela	1
227	Xanthoxylum Rhetsa	1
228	Coffea Arabica	1
229	Shorea Robusta	1
230	Mimusopus Hexandra	1
231	Salix Caprea	1
232	Callicarpa Macrophylla	1
233	Costus Igneus	1
234	Cinnamomum Camphora	1
235	Musa Sapientum	1
236	Plumaria Alba	1
237	Theobroma cacao	1
238	Moringa Concanenisi	1
239	Pistia Stratiotes	1



Green Audit (2021-22)

- **RECOMMENDATIONS**

The Management of College may consider on top priority that

- ✓ The Biodiversity is to be maintained while considering the plantation in future
- ✓ The selection of trees species to be based on environmental conservation and carbon sequestration value
- ✓ Artificial nests and water ponds are recommended to attract different birds in their migrating and breeding season
- ✓ Watering schedule to be planned according the season
- ✓ Drip irrigation is strongly recommended to conserve the water
- ✓ Reuse of the water shall be done instead of use of fresh water for gardening.
- ✓ Display the name of plants.

- **Animal Welfare**

More than 15 Squirrels are found in the campus, Approx. 5 dogs, 1 owl, 6 green bee-eater, 5 Black sparrow, 1 crow pheasants, 10 pigeon, 1 Crow pheasant and others including butterflies, insects, bees, earthworms, etc. are there in campus.



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8. ANNEXURE PHOTOGRAPHS OF ENVIRONMENT CONSCIOUSNESS



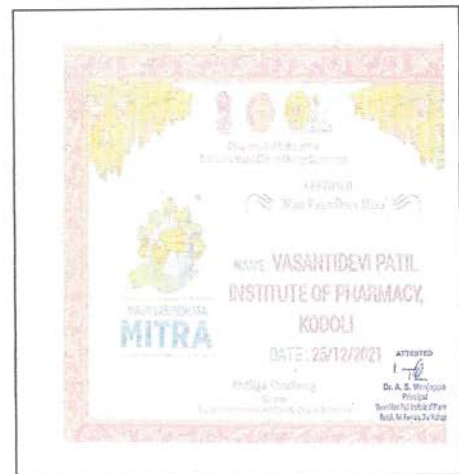
News in News paper



Vermin composting pit



Bird at Institute



Participation of Mazi Vasundhara Mitra

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Herbal plant Garden



Greenery At Campus



Green lawn at Campus

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9. CONCLUSION

1. The institute management and other authorities are keen to make the campus a green campus
2. College is making learning process by practical approach. This is fulfilled by setting different types of gardens, arboretum concept based garden and conservation of water and energy.
3. Staff and students are aware about the commitment of the institute towards the society.
4. Green audit at times makes the campus authority to understand the effect of implications towards greenness and conservation of water and energy.
5. The evaluation process proved that the authorities have applied implications suggested in the previous audit.
6. The campus community functions are oriented with an eco-friendly approach that enables the student community to develop a genuine approach on conservation of nature, and natural resources.
7. The results presented in the present report would be helpful for the authorities to make future action plans to develop more sophisticated ideas in bringing more values in future efforts towards conservation of biodiversity, water and energy.
8. As part of green audit of campus, we carried out the environmental monitoring of campus includes Illumination, Noise level, Ventilation and Indoor Air quality of the class room. It was observed that Illumination and Ventilation is adequate considering natural light present. Noise level in the campus well within the limit.
9. College authority forms a committee for the plantation program and environmental awareness; this committee continuously works throughout the year with the help of NSS students. College appointed NSS students for the awareness of tree plantation.



Green Audit (2021-22)

10. REFERENCES

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules: 1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987)
The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981)
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices
- Internal Records of the Campus

