

Energy Auditor Certificate

Reg No.: EA-28916



Certificate No.: 9780/19

National Productivity Council

(National Certifying Agency)

PROVISIONAL CERTIFICATE

This is to certify that Mr./Mrs./Ms. **AASHISH BAFNA**
son / daughter of Mr. **ASHOK BAFNA**.....has passed the National certification Examination for Energy Auditors held in September 2018, conducted on behalf of the Bureau of Energy Efficiency, Ministry of Power, Government of India. He / She is qualified as **Certified Energy Manager** as well as **Certified Energy Auditor**.

He/She shall be entitled to practice as Energy Auditor under the Energy Conservation Act 2001, subject to the fulfillment of qualifications for Accredited Energy Auditor and issuance of certificate of Accreditation by the Bureau of Energy Efficiency under the said Act.

This certificate is valid till the Bureau of Energy Efficiency issues an official certificate.

Place : Chennai, India

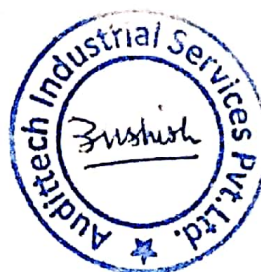
Date : 22nd April, 2019

Controller of Examination

ACKNOWLEDGEMENT

We express our sincere gratitude to **Higher Education Institute Govt. Eklavya College Dondi Lohara** for giving us the opportunity to be a part of their mission towards Energy Conservation.

We are thankful to all officers and employees of **HEI Govt. Eklavya College Dondi Lohara** with whom we interacted during the field study for their whole hearted support in undertaking measurements and eagerness to assess the system/equipment efficiencies and saving potential. The willingness of these key personnel to participate in this program and acknowledge the call for energy efficiency is more than half the issues received.



Signature:

Date: DEC 2021

Mr. Aashish Bafna, Director

Place: Raipur

Certified Energy Auditor

(EA-28916)

GREEN AUDIT REPORT



GOVT. EKLAVYA COLLEGE, DONDI LOHARA, DIST.- BALOD (C.G.)

SESSION 2020-21



GECDL GREEN AUDIT

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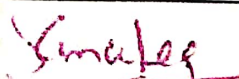
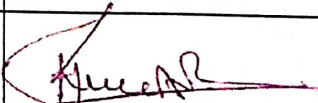
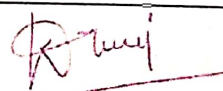
INTRODUCTION

Green audit is a process of systematic identification, quantification, recording, reporting & analysis of component of environmental diversity of institute. It aims to analyze environmental practices within and outside of the concerned place, which will have an impact on the ecofriendly atmosphere. "Green Auditing" is an umbrella term, also known by another name "Environmental Auditing". There is a provision of green audit in college campus. A committee has been formed to monitor the proper conservation and plantation of the plants in the campus. As per the suggestion made by IQAC, Botany department is given the responsibility to do green audit with cooperation of the environmental experts of the state. A report on green audit has been prepared by department of botany Government Eklavya college Dondi lohara Dist. Balod, C.G.. This college was established in 2008. Total area of the college main campus is 1.63 acres, of which 30 percent is covered by herbs, shrubs and trees. The plants have been systematically identified by the green audit Committee. There are more than 38 plant species audited. The green audit report has been discussed with environmental experts. Extra efforts have been taken by the college to create environmental Consciousness amongst students. One major step in this regard is the extensive plantation program organized by NSS, UG student of botany and Teaching staff. Plantation is encouraged by principal and faculties of all departments to increase greenery and reduce carbon emission effects. Renovation of the garden at the entrance was done with financial support from Jan Bhagidari Samiti. Extension programs also organized to create environment awareness and conservation of biodiversity amongst the student and public.

ACKNOWLEDGEMENT

The green audit conducted by the Govt. Eklavya College Dondi lohara Distt. Balod(C.G.) is an internal audit that aims towards looking after a Clean & Green Environment. Though nascent, the initiative is taken up to foster the concept of environmental sustainability. Sincere thanks to all for providing us necessary amenities and co-operation during the audit that helped in making the audit, a success.

THE AUDIT TEAM

Mr. Surendra Kumar Mahla Assistant Prof. Botany	Coordinator	
Mr. Hemshankar Sahu Assistant Prof. Botany	Member	
Ms. Kajal Tiwari Assistant Prof. Microbiology	Member	

EXECUTIVE SUMMARY

In accordance with the Green Campus Evaluation Plan, as suggested by the Internal Quality Assessment Cell (IQAC) of the college, Govt. Eklavya College Dondilohara Distt. Balod (C.G.) for conducting a green audit of the college for session 2020-2021. After the field work and other formalities, the report was finally sent for approval to the authority (principal and IQAC). The purpose of the audit was to make sure that the practices followed in the campus are healthy and environment friendly. The specific objectives of the audit were to evaluate the degree to which the Departments are in compliance with the applicable regulations, policies, and standards and to ensure that the development of the college aims at sustainable development and green campus.

The methodology used included physical inspection of the campus and review of the relevant documentation.

STATEMENT OF ASSURANCE

This audit has been conducted for the first time in the college. The audit procedure tried to meet the terms of International Standards of Internal Auditing.

In our view, sufficient and appropriate audit procedures were completed, and evidence gathered to support the precision of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations as they existed at the time of the audit.

SUMMARY OF FINDINGS

The main findings of the audit show that, in general, all the departments and students are aware about the need for environmental protection at a general level. It was also observed that several best practices such as maintaining garden, planting trees in the campus, vermicompost (proposed) to ensure a proper waste management technique, etc. are followed in the campus. However, on detailed review, it was observed that, as the college is implementing Green Campus Policy for the first time, many of the practices followed in the institution are still in nascent stage and needs further nurture. In addition, certain processes could benefit from further review in order to improve their efficiency, fairness, and consistency

OBJECTIVE AND SCOPE

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The „Green Audit“ aims to analyze environmental practices within the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the environment awareness work conducted within the organization environment. Later, it is implemented as a measure to enhance a healthy environment to Institute. 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 present Audit is conducted in view of assessing all necessary environmental components of Govt. Eklavya College Dondi lohara Distt. Balod, C.G.

GREEN EFFORTS

Development of medicinal plants Garden

Plantation of trees and plants in premises

Identification of plants species already existed in premises

Development of medicinal plants Garden

There are many medicinal plants are planted in college botanical garden. The plants have medicinal value, but student don't have knowledge how to use and they can't identify the particular plants, so therefore faculty members of botany departments help them to identify with scientific name and give information about medicinal uses of the plants.

Plantation of trees and plants in premises

To create green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students, principal and all departments faculty members. In this session medicinal plant with rare and exotic beautiful trees was planted in botanical garden and other parts of college campus. To keep the greeneries in the campus, we regularly maintain the garden which are looked after by paid staff under the guidance of garden committee members. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this college.

Identification of plants species already existed in premises

There are so many plant species a present at college campus. The faculty member of the botany department audited and identified of various plant species with the help of flora chart.

List of the Audited Plants

S.No.	Common Name	Botanical Name	Family	Numbers
1.	Ashoka tree	<i>Polyalthia longifolia</i>	Annonaceae	5
2	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceae	2
3.	Nerium	<i>Nerium oleander</i>	Apocynacea	2
4.	Ber	<i>Ziziphus jujube</i>	Rhamnaceae	2
5.	Neem	<i>Azadirachta indica</i>	Meliaceae	1
6.	Amrud	<i>Psidium guajava</i>	Myrataceae	1
7.	Aak	<i>Calotropis procera</i>	Apocynaceae	3
8.	Nibu	<i>Citrus limon</i>	Rutaceae	1
9.	Aam	<i>Mangifera indica</i>	Anacardacea	1
10.	Pipal	<i>Ficus religiosa</i>	Moraceae	1
11.	Rose	<i>Rosa chinesis</i>	Rosaceae	2
12.	Gudhal	<i>Hibiscus rosa sinensis</i>	Malvaceae	1
13.	Snakeplant	<i>Sansevieria trifasciata</i>	Asparagaceae	2
14.	Neelgiri	<i>Eucalyptus</i>	Myratacea	1
15.	Floss-silktree	<i>Cieba speciosa</i>	Malvaceae	1
16.	Ironwood cassia	<i>Senna siamea</i>	Leguminosae	1
17.	Elephant trunk	<i>Agave attenuata</i>	Asparagaceae	2
18.	Fire sticks	<i>Euphorbia tirucalli</i>	Euphorbiaceae	1
19.	Periwinkle	<i>Catharanthus roseus</i>	Apocynacea	1
20.	Prickly cycad	<i>Encephalartos attensteini</i>	Zamiaceae	1
21.	Senegal date palm	<i>Phoenix reclinata</i>	Arecaceae	1
22.	Palash	<i>Butea monosperma</i>	Fabaceae	2
23.	Babool	<i>Vachellia nilotica</i>	Fabaceae	2
24.	Karanj	<i>Millettia pinnata</i>	Fabaceae	1
25.	Moses-in-the-Cradle	<i>Tradescantia spathacea</i>	Commelinacea	5
26.	African milktree	<i>Euphorbia trigona</i>	Euphorbiacea	1
27.	Caladium	<i>Caladium bicolor</i>	Araceae	1
28.	Crown of thorns	<i>Euphorbia milli</i>	Euphorbiacea	1
29.	Spearmint	<i>Mentha spicata</i>	Lamiacea	1
30.	Prickly pear Cactus	<i>Optunia ficus indica</i>	Cactaceae	2

MEDICINAL PLANTS GARDEN IN GECDL CAMPUS

S.No.	Common Name	Botanical Name	Family	Number
1.	Giloy	Tinospora cardifolia	Menispermaceae	2
2.	Chitrak	Plumbago zeylanica	Plumbaginaceae	1
3.	Hathjod	Cissus quadrangularis	Vitaceae	3
4.	Ghee kwar	Aloe vera	Liliaceae	5
5.	Sada Suhagan	Catharanthus roseus	Apocynaceae	2
6.	Pattharchatta	Kalanchoe pirmata	Crassuaceae	5
7.	Mint	Mentha pipertia	Lamiaceae	1
8.	Tulsi	Ocimum tenuiflorum	Lamiaceae	3
9.	Fudhar	Calotropis gigantea	Apocynacea	2
10.	Lemmon grass	Cymbopogan citratus	Poaceae	1
11.	Vidhara	Argyeya speciosa	Convolvulacea	1
12.	Adusa	Justicia adhatoda	Acanthacea	1
13.	Nirgundi	Vitex negundo	Lamiacea	1
14.	Euphorbia Leucodendron	Euphorbia alluaudii	Euphorbiaceae	1
15.	Parijat	Nyctanthus arbortristis	Oleaceae	1
16.	Lal chandan	Pterocarpus Santalinus	Fabaceae	1
17.	Ashwagandha	Withania Somnifera	Solanaceae	1
18.	Bramhi	Centella asiatica	Umbelliferae	1
19.	Sarpagandha	Rauvolfia serpentina	Apocynaceae	1
20.	Kachnar	Bauhinia variegata	Leguminosae	1
21.	Paras pippal	Thepesia populena	Malvaceae	1
22.	Amla	Emblica officinalis	Euphorbiaceae	1
23.	Kali mirch	Piper nigrum	Piperaceae	1
24.	Shatawar	Asparagus racemosus	Liliaceae	1
25.	Tej patti	Cinnamomum tamala	Lauraceae	1
26.	Dalchini	Cinnamomum verum	Lauraceae	1
27.	Karounda	Carissa carandas	Apocynaceae	1
28.	Lemmon	Citrus limon	Rutaceae	1
29.	Bhelva	Semecarpus anacardium	Anacardiacea	1
30.	Gulbakawali	Hedychium coronarum	Zingiberaceae	1



Common Name – Harsingar
Botanical Name - Nyctanthes arbortritis



Common Name – Gulbakavali
Botanical Name - Hedychium coronarium



Common Name – Dalchini
Botanical Name - Cinnamomum verum



Common Name – Vidhara
Botanical Name - Argyreia speciosa