

Green Audit


CERTIFICATE

This is to certify that *M. P. SHAH ARTS & SCIENCE COLLEGE, BUS STAND ROAD, SURENDRANAGAR* has successfully undergone a Green Audit Training during 28-05-2018 under the parameters of Pollution Control Board, Environment and the Botany Department of the college.

Date: 28th May 2018

Place: Surendranagar




DIRECTOR
GREEN & ENERGY AUDIT
Manbhavan Education Trust
Rajkot- Gujarat





Content

Introduction

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience.

Objectives

- To make aware of Environmental Consciousness
- To make sensitized for Environment issues
- To assess parameters affecting environment of the institution
- To guide for taking necessary initiatives on environment

Parameters

- **Infrastructure**
 - **Area of the campus:** 3669.10 SQMT
 - **Maps of buildings:** Attached herewith



➤ **Built up Area:**

GROUND FLOUR	FIRST FLOUR
1862 SQMT	1807.10 SQMT

➤ **Number of rooms with size and seating capacity:**

Room No.	Size SQMT	Seating Capacity
Common Room	14.62 x 7.32	50
Ladies room	3.65 x 7.32	20
Guard	1.66 x 2.44	05
Clerk	5.88 x 7.32	20
Principal	3.66 x 7.32	25

➤ **Number of classrooms with size and seating capacity size:**

Room No.	Size SQMT	Seating Capacity
R 21	5.20 x 7.32	30
R 22	5.20 x 7.32	30
R 23	11.7 x 7.32	90
R 24	5.65 x 8.57	90

R 25	5.65x8.57	90
R 26	14.62x7.32	120
R 12	5.20x7.32	90
R 37	11.0x7.45	90
R 34	8.75x8.60	60
R 35	8.75x8.60	60
R 41	11.0x7.45	90
R 42	8.75x7.45	90
R 43	8.75x7.45	90
R 44	8.75x7.45	90
R 45	17.72x7.47	120
R 47	11x7.45	90
R 48	11x7.45	90

➤ **Number of Laboratories with size and seating capacity size:**

Laboratory.	Size SQMT	Seating Capacity
Physical lab.	7.32x7.68	30
Chemistry Lab.1	8.68x14.62	40
Balance room	5.49x2.49	10
Chemistry Lab.2	14.62x7.32.	40

Chemistry Lab.3	14.62x7.32	40
Psychology Lab.	11x7.45	40
Physics Lab.1	14.72x7.47	40
Physics Lab.2	14.62x7.32	40
Biology Lab.1	14.72x7.47	40
Biology Lab.2	14.72x7.47	40

➤ **Library with size and seating capacity:**

Library	12.19x8.29	50
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➤ **Ladies room with size and seating capacity:**

L.R.	12.19x8.29	50
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- **Gardens & Trees**

- **Number of trees:** 250

Green Initiatives

- **Annual Power required (Electric bills) (KWH)** - 24443
- **Annual lighting power requirements (KWH) met by LED** - 10742
- **Number of LED Bulbs** - 175

- **Energy installation bills / maintenance bill –**

Procurement of Solar Panels is in Pipeline

- **Budget toward Green Initiatives** - Rs. 160000/
- **Expenditure on Green Initiatives**

Audited Commissioner of Higher Education

- **Green Practices** (Describe efforts towards green practices on the campus within a maximum of 500 words)

➤ **Public Transport** - The College is located in the center of Surendranagar District. Hence it is well connected by public transport buses viz., the state owned Road Transport Corporation (GSRTC), Indian Railways and private operators. Most of the students, teachers and non-teaching staff utilize public transport system to reach the college. Majority of students come from villages using public transportation means, mostly by bus and train. A few teachers who use their cars for commuting has successfully implemented carpooling as a part of adopting sustainability.

➤ **Pedestrian Friendly Roads** - There are pedestrian's roads around the campus which are used by the students.

- **Plastic free campus** - Plastic use is avoided as far as possible by the teachers and students. Lectures on disadvantages of plastic use are organized in the NSS Camps. Teachers and students are advised to use cloth bags instead of plastic bags
- **Paperless office** - To reduce the use of paper as a part of Green Campus campaign, all official communications including university circulars, college notice, etc. are conveyed through mail, text message or social media applications to students and teachers. The college offers admission and collects fees through online system. Staff members are encouraged to reuse the blank side of the used paper
- **Green landscaping with trees and plants** - The campus has a diversity of trees in the campus as well as in botanical garden recently established. Tree Plantation drive is organized every year within and around the campus under the leadership of NSS team. Go green initiatives are taken by NSS such as Eco club.

- **Waste Management System and Efforts (Description)**

- **Solid Waste**

Solid waste management is implemented in two ways in the college: (i) dry waste and (ii) wet waste. Our

college has taken significant initiatives towards waste management. Dry and wet waste are collected and disposed in efficient way. Dried leaves from the trees are collected and dumped in a pit which could be used as manure. Dustbins are placed in the campus to collect the waste which is then processed with the help of sweepers and helpers. While disposing the waste, environmental care is taken into consideration. College takes help from Municipal Corporation for the disposal of the garbage. The college also digs a pit with the help of NSS volunteers for the disposal of Solid waste. The students are encouraged to bring their lunch in tiffin boxes to eliminate the accumulation of food waste and plastic carry bags. The college also puts maximum efforts to minimize solid waste produced from the laboratories.

➤ **Source of waste per day**

- Dropping from Tree and Lawn - Not found
- Plastic Waste - Not found in the campus.
Students used dustbin
- From Laboratories - Students used dustbin

➤ **Liquid Waste** - The major source of liquid waste is from toilets and laboratories. All these waste materials are systematically drawn to drains.

➤ **Water Consumption per day**

- Drinking – 400 lt.
- Cleaning – 1000 lt.
- Gardening – 1500 lt.
- Laboratory purpose – 2000 lt.

➤ **E-Waste** - The e-waste (excluding unusable computers and other dead stock items) from various departments is collected in store room. They are disposed of in the scrap to the agencies involved in recycling of e-waste. The list of non-functional computers including the accessories and other non-functional instruments is prepared. Equipment from various departments need to be write off is prepared. After the approval from development committee of the college, this dump of written off items is further delivered to e-waste recycling agencies.

- **Budget towards Waste management** – Rs. 3000/2
- **Expenditure on Waste management** – Rs. 3000/ 2
- **Pollution Control**
 - **Air Pollution** – Not found in the Campus

- **Water Pollution** - Not found in the Campus
- **Soil Pollution** - Not found in the Campus
- **Sound Pollution** - Yes

Conclusion: -

- The College is located in the center of Surendranagar District. Hence it is well connected by public transport.
- Majority of students come from villages using public transportation means, mostly by bus and train.
- Use of less paper is initiated by IQAC.
- Online Admission process has reduced use of papers
- College correspondence using internet facility has reduced use of papers
- Plastics free Campus is maintained by staff & Students.
- Solid and liquid wastes are disposed through Municipal Corporation.
- Students of Physics are encouraged to prepare projects using e-waste.
- College building is constructed in a way to use natural light during sunlight.
- LED bulbs are to minimise consumption of electric power.
- Rain water harvesting is a good initiative of the college.

Suggestions:

- College may take initiative to reduce the use of papers used in the internal examination and assignments.
- To install solar panels to use alternative energy.
- Students can be aware to switch off light and fans when there is no user.
- College can increase number of dust bins.
- New dust bins are to be placed in the girls' toilets.
- Organize awareness program to use calibri fonts for typing to reduce number of papers.
- Use of Tablets provided by the government and internet facility for learning can be increased.
- Cleanliness is to be enhanced.
- Non-usable furniture may be sent to jail.