

SANTOSH

Deemed to be University



7.1.6 Quality audits on environment and energy regularly

Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

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ISO 17020 Accredited by NABCB
Personnel Certification Body

PQMS Quality Services Pvt. Ltd.
SCO-21, 4th Floor, Feroze Gandhi Mkt,
Ludhiana-141001 (Punjab)
Ph:0161-4666970, 9667664604
Email-audit.pqms@gmail.com
www.qualityindia.in

PQMS/2023/3/22

Date: 15/03/2023

To Whom It May Concern

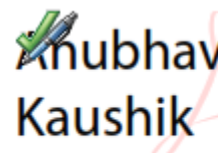
It is to certify that PQMS Quality Services Pvt. Ltd. SCO-21, 4th Floor, Feroze Gandhi Market, Ludhiana-141001 (Punjab) has conducted Green Audit for Santosh Deemed to be University in Feb 2023.

Santosh Deemed to be University has been undertaking satisfactory steps towards ensuring Green Campus & Sustainable Environment. The area of improvement has been identified which has been mentioned in detailed reports.

Audit Site: Santosh Deemed to be University.

Address: No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Tenure: 24- Feb 2023 to 07-Mar-2023


Digitally signed by
Anubhav Kaushik
Date: 2023.03.15
14:42:26 +05'30'
Prepared By


Digitally signed
by Maneet
Deewan
Date: 2023.03.15
14:41:57 +05'30'
Approved By

Green Audit Report

JANUARY 2022



Santosh Deemed to Be University

No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Conducted By:



Professional Quality Management Services

SCO-21, 4th Floor, Feroze Gandhi Market Rd, Ludhiana,
Punjab 141001.

Green Audit-Santosh Deemed to be University

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Green Audit-Santosh Deemed to be University

1. Acknowledgement

We acknowledge the cooperation and support of the management and staff of Santosh Deemed to be University, in particular, the support and disposition of the Dr. Sanjeev Tomar (Faculty, Santosh Deemed to Be University), Mr. Kannan (Admin) & Mr. Arasumani Malaiappan (Assistant Maintenance Manager) Teaching/Supporting Staff of institute has been invaluable to the success of this report. We hereby assure you that, all information obtained in the course of this Audit exercise, as well as those contained in this report, will be remain confidential as per NDA (Non-Disclosure Agreement) clause.

(Auditor)

2. Introduction

The green audit aims to analyse environmental practices within and outside the university campuses, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the green audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the green audit.

2.1 Why Green Auditing

Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in common areas. Now, it is necessary to check whether our processes are consuming more than required resources? Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institution towards an environment.

2.2 Goals of Green Audit

- Identification and documentation of green practices followed by university.
- Identify strength and weakness in green practices.
- Analyze and suggest solution for problems identified.
- Assess facility of different types of waste management.

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- Increase environmental awareness throughout campus
- Identify and assess environmental risk.
- Motivates staff for optimized sustainable use of available resources.
- The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

2.3 Objective of Green Audit

- To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
- To identify and analyze significant environmental issues.
- Setup goal, vision, and mission for green practices in campus.
- Establish and implement Environment Management in various departments.
- Continuous assessment for betterment in performance in green

2.4 Benefits of Green Audit to Educational Institutions

There are many advantages of green audit to an Educational Institute:

- It would help to protect the environment in and around the campus.
- Recognize the cost saving methods through waste minimization and energy conservation.
- Empower the organization to frame a better environmental performance.
- It portrays good image of institution through its clean and green campus.
- Finally, it will help to build positive impression for through green initiatives the upcoming NAAC visit.

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3. Objective & Scope

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resource in the campus.
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the College campus and its environment
- Enhancement of College profile
- Developing an environmental ethic and value systems in young people

4. Infrastructure

4.1 Details of Tree and Plant (Campus)

SN	Description	Qty
1	No. of trees	437
2	No. of type of trees	29

4.2 Details of Hospital Campus

SN	Description	Qty
1	No. of trees	2
2	No. of type of trees	2

4.3 Solar Panel Details

Roof Top Solar Panels found evident during the visit

SN	Location	No of Panels
1	Medical College	300

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4.4 Sewage Treatment Plant (STP)/ Effluent Treatment Plant (ETP)

1 No's of Sewage Treatment Plants are installed in the College campus. The total Sewage Treatment Plant(STP) Capacity is 80 KLD and Effluent Treatment Plant (ETP) at 20 KLD.

List of STP's

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SN	Description	Capacity in KLD
1	STP	80 KLD
2	ETP	20 KLD



4.5 RO Plant

RO plant is provided inside the campus to supply water to the entire campus.



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4.6 Rainwater Harvesting

The rainwater harvesting strengthens the water level of the campus through ground water recharging process



4.7 Awareness

Santosh Deemed to be university has placed Sign Boards and Instructions to save the water and use of Dustbin.



4.8 Waste Disposal & Waste Management

Waste disposal include the activities and actions required to manage waste from its inception to its final disposal. This includes the collection, transport, treatment and disposal of waste, together with monitoring and regulation of the waste management process.

Waste can be solid, liquid, or gas, each type has different methods of disposal and management. Waste management deals with all types of waste, including industrial, biological and household. In some cases, waste can pose a threat to human health. Waste is produced by human activity, for example, the extraction and processing of raw materials. Waste management is intended to reduce adverse effects of waste on human health, the environment or aesthetics.

Waste management practices are not uniform among countries (developed and developing nations) regions (urban and rural areas), and residential and industrial sectors can all take different approaches.

A large portion of waste management practices deal with municipal solid waste which is the bulk of the waste that is created by household, industrial, and commercial activity.

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E-waste generated in the campus is disposed in scientific and eco-friendly manner. The below certificate represents the 423.45 kilograms of E-waste disposed in an eco-friendly manner

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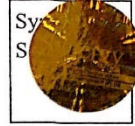
PAY VIA CHEQUE/NEFT
CASH NOT ACCEPTED



Synergy Waste Management Pvt. Ltd.

GZB-421

RENEWAL OF AGREEMENT



That the previous agreement executed on 01 Jun,2021, is renewed on 31 May,2022 and shall be valid only when endorsed through a SEAL of Synergy Waste Management (P) Ltd.

BETWEEN

M/s. Synergy Waste Management P. Ltd., having its Registered Office at 517-518, 5th Floor, D-Mall, Rohini West, New Delhi – 110085 and workplace at :

Subharti Dental College Campus, Subharti Puram , Nh-58, Delhi- Haridwar By Pass Road , Meerut , Uttar Pradesh

AND

Santosh Dental College & Hospital (GZB)

Address : No.1, Santosh Nagar, Pratap Vihar, Ghaziabad, Uttar Pradesh-201009

Represented By -

Dr. Akshay Bhargav ,Designation Dean, Dentist, Contact No : 0000000000 , Email ID : santosh@santoshuniversity.com. The terms & conditions of the existing agreement shall remain unchanged as mentioned in the initial agreement, except the service charges which shall be Rs. 8500.0 (Rupees Eight Thousand Five Hundred Only) per month for Medical College or Rs. NIL per bed per day having a declared bed strength of 150(One Hundred and Fifty Only) subject to the condition of weight limit of 300.00 kg / month beyond which excess weight shall be charged @ Rs.30 per kg. That the above rates are exclusive of GST the same shall be charged extra as per then prevailing rates if becomes applicable.

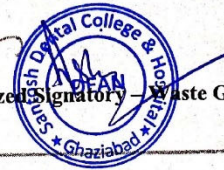
This agreement shall remain valid for a period of 1 Year / 0 Months / 0 Days i.e. 01-Jun-2022 to 31-May-2023.

That this agreement may be renewed further for the period and terms and conditions as agreed in between both of the parties hereto.

Authorized Signatory – Service Provider



Authorized Signatory – Waste Generator



CIN No. U74999DL2017PTC283340

+91-11-27933371
+91-11-27933381
+91-11-27933382

info@synergyworld.co.in
www.synergywastemgmt.com

Regd. Off: 517- 518, 5th Floor, D-Mall,
Sector - 10, Rohini, New Delhi - 110085

Scanned with OKEN Scanner

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4.9 Water Management

Water conservation is a key activity as water availability effects 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.

SOURCES OF WATER

- Open Well water
- Bore water



4.10 Water Saving Techniques Adopted by SMU

4.10.1 Identify & fixing Leaks

The hidden water leaks can cause loss of considerable water and energy without anyone being aware of it. A small leak can amount to large volumes of water loss. Leaks become larger with time, and they can lead to other equipment failure. Fix that leaky pipe, toilet, faucet, or roof top tank to save considerable amount of money and water. The establishment of a leak detection and repair program would be a most

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cost- effective way to save money and water in the workshop building. Following are some best practices to identify and fixing leaks.

The Management must be committed for providing the staff and resources needed to maintain plumbing fixtures and equipment on a regular basis and assuring prompt identification and repair of leaks.

- Repair staff is given the tools needed and is trained to make leak repair a priority activity.
- Staffs are taught to report leaks and other water-using equipment malfunctions promptly.
- Staffs are rewarded for success.
- Rooftop tank overflow or leakage water should flow to rainwater gutter system not to sewage system to allow detection of rooftop water loss.
- Records of the type, location, number, and repair of leaks are kept in a central location.

4.10.2 Water Meter

The metering of Main incoming line is essential to understand the water consumption pattern inside the college and hospital building. The accurate measurements enable management to understand maximum and minimum consumption area in the College building and improve water efficiency in the college and hospital building. Monitoring of the water usage allows management to know where and when water is being used and where the best opportunities for water savings exist. Thus, it is recommended to install water meters on each consumption area in the building.

Water Meter found evident

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4.10.3 Water Tank Overflow Alarm System

It is noticed that no alarm as well as level sensor was provided to overhead water tanks. The water alarm system should be installed at all overhead Tank, All PVC rooftop Tanks to avoid over spillage of water. This will help in reduction of wastage of water as well as electricity.

Water Tank Overflow Alarm Found Evident



4.10.4 Minimization of Water Leakage

Leakages were observed in Valves at Hospital and college building resulting in water loss. It is recommended to close out these leakages by replacing faulty valves to avoid wastage of water. It is also recommended to regularly check for leakages and fix them on urgent basis.

4.10.5 Regular Maintenance of Toilet System

Regular maintenance of the toilets should be carried out. Test for leaks and make necessary repairs promptly. Keep the toilet in working order by periodically inspecting and replacing flappers and other defective

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parts. Water efficient fixtures such as aerator and water efficient taps need to be used to reduce water consumption.

4.10.6 Follow 3 R Concept

“Water conservation is defined as any action that reduces the amount of water withdrawn from water supply sources, reduces consumptive use, reduces the loss or waste of water, improves the efficiency of water use, increases recycling and reuse of water, or prevents the pollution of water”.

Reduce

Reduction at Source

- Better operating controls such as arresting leakages
- Installation of water saving devices such as water tank alarm at all overhead tanks
- Change of device/ equipment such as replacement of water pumps and motor with energy efficient pumps and motors
- Process modification such as use of sprinklers for watering plants and garden

Recycle & Reuse

- Use of treated water in toilets flushing, gardening, fountains, firefighting equipment's
- Use of storm water as Cooling Tower make-up water after treatment.
- Using storm water & sanitary water as fire water after treatment.
- Reduction of Fresh Water usage supplemented through waste water treatment.
- Direct use of Rain Water Harvesting through storage tanks

Recharge

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- Installation of recharge wells / rain water harvesting pits for recharging ground water tables.
- Total recharging capacity (during rain time) to be estimated in 3mm/hr.
- Rain Water Harvesting and conservation.

4.10.7 Faucets best practice

Lavatory, bathing and hand wash facilities faucets average water use in the workshop buildings is approximately 28% of the total water received. In some of the faucet's water run around 9 liter per minute. Faucets flows can easily be reduced without affecting the comfort of the water user by using appropriate flow regulator technology for these fixtures. This will result in impressive savings of around 50 percent of faucets water use. Flow regulators, especially the aerators are inexpensive and are easy to install and maintain. This is why they are often considered as the low hanging fruits of water saving programs.

Recommendation: Use sensor-based faucets to save water up to 60%



4.10.8 Dual Flush Toilets

A dual-flush toilet is a variation of the flush toilet that uses two buttons or handles to flush different levels of water. A significant way to save water in buildings is to replace single-flush toilets with dual flush toilets.

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The standard dual- flush toilets use six liters of water on full and three liters on a half-flush.

Replacing old toilets will result to a reduction of 35 percent of toilet water. More cost- effective results can be achieved by replacing only the toilet trim system.



4.10.9 Urinals

Low water use urinals: In some of the standard systems, water is applied automatically through a continuous drip-feeding system or by automated flushing at a set frequency, 24x7, regardless of whether the urinal has been used. Water consumption varies with the system model at an average of 4 liters per flush. Water-efficient urinals use 2.8 liters per flush and in recent times smart flush systems using 0.8 liters per flush have also been launched.

Waterless urinals: There are various technologies available for waterless urinals. In oil barrier technology, the urinals operate using an oil wall between the urine and the atmosphere, preventing odor from escaping. In another technology, the barrier has been replaced by a seal with a collapsible silicone tube that closes after the fluid has passed through it, to prevent gases from flowing into room. A third system uses biological

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blocks which include microbial spores and surfactants which can be placed into any urinal, thus eliminating water use. By breaking down the urine into components, buildup of sludge and crystals which causes blockages are prevented. Bidets and urinals water use accounts for 3 percent of office buildings water use. These standards shown in the table offer a good water-saving opportunity for water saving in office buildings.

Positive Observation: Automatic Sensor found installed

4.9 Electronic Consumption & Management

Month	KWH Consumption	KVAH Consumption
Jan-22	37640	38201
Feb 22	33072	34012
Mar 22	40304	40895
Apr 22	58402	58999
May 22	49364	49900
June 22	59647	60342
July 22	62587	62992
Aug 22	57891	58202
Sep 22	56976	57505
Oct 22	46304	46884
Nov 22	39381	39700
Dec 22	38472	38882

4.10 Sound Pollution Monitoring

The human ear is constantly being assailed by man-made sounds from all sides, and there remain few places in populous areas where relative quiet prevails.

There are two basic properties of sound, (1) loudness and (2) frequency.

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Loudness is the strength of sensation of sound perceived by the individual. It is measured in terms of Decibels. Just audible sound is about 10 dB, a whisper about 20 dB, library place 30 dB, normal conversation about 35- 60 dB, heavy street traffic 60-75 dB, boiler factories 120 dB, jet planes during take-off is about 150 dB, rocket engine about 180 dB. The loudest sound a person can stand without much discomfort is about 80 db. Sounds beyond 80 dB can be regarded as pollutant as it harms hearing system. The WHO has fixed 45 dB as the safe noise level for a city to avoid sleep disturbances. For international standards a noise level up to 65 dB is considered tolerable. Frequency is defined as the number of vibrations per second. It is denoted in Hertz (Hz).Sound pollution is another important parameter that is taken into account for green auditing of the College Campus. Different sites were chosen for the monitoring purpose.

Dental College

SN	Sound Location	Sound Level(DB)
1.	Basement Library	50
2.	Basement Library UG Section	48
3.	Basement Library PG Section	51
4.	Digital Library	49
5.	LAB Oral Pathology	51
6.	Basement IHC	58
7.	Basement Seminar Room	65
8.	Basement Department Library	56
9.	Ground Floor Billing Area	64
10.	Ground Floor X-Ray Room	48
11.	Ground Floor Department of OMDR	49

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12.	Ground Floor Post Graduate Clinic	59
13.	Ground Floor Post Graduate Seminar Room	66
14.	Ground Floor Facility Room	61
15.	Ground Floor Dean Dental	68
16.	Ground Floor Pantry	67
17.	Ground Floor HR Room	54
18.	1st Floor Lecture Theatre-3	50
19.	1st Floor OPG Room	57
20.	1st Floor Clinical PG Section Room	68
21.	1st Floor Pediatric dentistry Room	62
22.	1st Floor HOD Room (Pediatric & Preventive Dentistry)	60
23.	1st Floor Oral Pathology	56
24.	2nd Floor HOD Room (Department of Conservative dentistry)	58
25.	Department of Oral Medicine	60
26.	Conservative & Operative Dentistry	53
27.	3rd Floor HOD Room (Department of Prosthodontics)	54
28.	Seminar Room	61
29.	Library	48
30.	UG Clinic (Prosthodontics)	51
31.	Casting Laboratory	54
32.	Post Graduate Clinic	56
33.	PG Lab	51
34.	Plaster Laboratory	54

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35.	Mechanical Lab	59
36.	Ceramic Lab	50
37.	Implant Prosthodontic Clinic Facility Room	53

Santosh Hospital

Sr. No	Location	Area	Sound
1	Ground Floor	Causality	54
2		Triage	53
3		Reception	58
4		Waiting Lounge	49
5		X-ray room	48
6		CT scan	45
7		Ultrasound	45
8	1st Floor	General medicine OPD	57
9		General surgery OPD	46
10		Pediatric OPD	59
11		Gynecology OPD	51
12		Orthopedic OPD	53
13	2nd Floor	Dental OPD	49
14		ENT OPD	48
15		Pathology Lab	45
16		Microbiology Lab	44
17		Blood Bank	49
18		Ophthalmology OPD	50
19	Psychiatry OPD	52	
20		General Ward	61

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21	5th Floor	Gynecology OT	43
22		Labor Room	50
23	6th Floor	Private Ward	48
24	7th Floor	Accommodation	59
25	8th Floor	ICU	42
26		Operation Theatre	44

Medical College

Sr. No	Location	Area	Sound
1	Basement	Community Medicine	55
2		Library	57
3		Examination Hall	49
4	Ground Floor	Boys Common Room	54
5		Girls Common Room	56
6		Anatomy Museum	48
7		Histology lab	50
8		Anatomy Dissection hall-1	49
9		Anatomy Dissection hall-2	48
10		Tutor Room	47
11		Anatomy Assistant Professor Room	50
12		HOD Room Anatomy	48
13		Demonstration room 1& 2	50
14		LT-1	51
15		LT-2	49
16		LT-3	50
17			Bio Chemistry UG & PG Lab

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18	First Floor	Central Research Lab	49
19		Departmental Library cum Journal Room	50
20		Biochemistry Lab	57
21		Demonstration room	59
22		Professor and HOD Room (Biochem)	52
23		Department of Physiology	53
24		Department Library cum Seminar Room	50
25		Mammalian Lab	53
26		Hematology Lab	49
27		Demonstration room	53
28		Clinical Physiology	54
29		2nd Floor	Associate professor and HOD room (pathology)
30	Tutor room		54
31	Associate professor (3 room)		49
32	Clinical pathology lab		47
33	Research lab		51
34	Department library cum seminar room		44
35	Demonstration room (forensic medicine)		48
36	Museum (forensic medicine)		47
		Forensic Department Lab	
37	3rd Floor	Clinical pharmacology lab	50
38		Computer assisted lab	53
39		Non-teaching staff room	56
40		Research lab	55
41		Departmental library cum seminar room	48
42		Tutor room	57
43		Associate professor Room	52

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44	HOD room	53
45	Tutor room (microbiology)	57

Sr. No	Location	Area	Sound
46		HOD room	52
47		Assistant professor room	54
48		Microbiology lab	49
49		Professor room	53
50		PG Research Lab	46
51		Demonstration room	49
52		Pharma Vigilance	48
53		Museum	44
54		Library room	44
55		Seminar room	57
56		Staff room	59
57	4th Floor	Administrative offices	60
58		Account department	61
59		Exam Cell/LT 4	51
60		IQAC	55

4.11 Biodiversity Status

To conserve this biodiversity, our first need is to learn about the existing diversity of the place. Unless we know whom to conserve, we will not be able to plan proper conservation initiatives. Also, it is important to have an understanding of the biodiversity of an area so that the local people can be aware of the richness of bio-

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diversity of the place they are living in and their responsibility to maintain that richness.

In today's world, among the popular conservation measures which are taken to spread wildlife and environmental awareness, butterfly gardens can be placed in a significant position. To create butterfly garden, we need to know which associate plants and other fauna are present in the surrounding. This study allows us to understand the faunal and floral diversity of the surrounding areas of the college premises and their inter-relationship

Objective

The main objective of this study is to get a baseline data of bio-diversity of the area which will include:

- Documentation of the floral diversity of the area, its trees, herbs, shrubs and climbers.
- Documentation of the major faunal groups like mammals, reptiles, amphibians, birds and butterflies.
- Documentation of the specific interdependence of floral and faunal life.

Method of Study

A brief methodology for the floral and faunal survey is given below.

- Sampling was done mostly in a random manner.
- The total area was surveyed by walking at the daytime.
- Surveys were conducted for the maximum possible hours in the daytime.
- Tree species were documented through physical verification on foot.
- For faunal species, we emphasized mainly on the direct sighting. Also call of various birds and amphibians and nesting of some faunal species were considered as direct evidences.

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- Observing mammals depend critically on the size of the species and its natural history. Diurnal species are common and highly visible. Nocturnal species, however, are rare and difficult to detect. Small mammals like the field rats were found near their burrows, particularly during their entry or exit times in or out from their burrows respectively. In some cases, dung deposits and footprints were also observed that served as a potential clue for the presence and absence of the concerned species. These secondary evidences were all noted with time and space co-ordinates.
- Birds are often brightly colored, highly vocal at certain times of the year and relatively easy to see. Sampling was done on the basis of direct sighting, call determination and from the nests of some bird species.
- Reptiles were found mostly by looking in potential shelter sites like the under surface of rocks, logs, tree hollow sand leaf litter and also among and under neath the hedges. Sometimes some species, particularly the garden lizards were also observed in open spaces (on twigs and branches and even on brick constructions) while they were basking under direct and bright sunlight.
- Amphibians act as potential ecological indicators. However, most of them are highly secretive in their habits and may spend the greater part of their lives underground or otherwise inaccessible to biologists. These animals do venture out but typically only at night. They were searched near pond, road beside wetland and in other possible areas. Diurnal search operations are also successful.
- Active invertebrates like the insects require more active search. For larger winged insects like butterflies, random samplings were carried and point sampling was also done.

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- The easiest way to observe many of the invertebrates is simply looking for them in the suitable habitat or micro-habitat. Searching was carried out under stones, logs, bark, in crevices in the walls and rocks and also in leaf litter, dung etc. Slugs and snails are more conspicuous during wet weather and especially at night when they were found using a torch.

Faunal Species

The list of Fauna indicates that the college campus is significantly rich in faunal diversity. We have seen a significant number of bird nests at many places. We have not been able to document other insect groups during this survey. The yearlong survey will add some more fauna in the checklist for sure after the seasonal survey.

Checklist of Faunal Group

SN	Birds Name	Number
1	Birds	15
2	Reptiles	3
3	Amphibians	2
4	Butterflies	22

Checklist of Birds

No.	Common Name	Scientific Name	Family
1	Common HawkCuckoo	Hierococcyx varlus	Cuculidae
2	Common Hoopoe	Upupa epops	Upupidae
3	Common Iora	Aegithirna tipsia	Aegithinidae
4	Common Kingfisher	Alcedo atthis	Alcedinidae

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5	Common Myna	Acridotheres tristis	Sturnidea
6	Common Pigeon	Colnmba livia	Columbidae
7	Common Sandpiper	Actitis hypoleucos	Scolopacidae
8	Common Tailorbird	Orthotomus sutortus	Cisticolidae
9	Coppersmith Barbet	Megalaima haemacephala	Ramphastidae
10	House Crow	Corvus splendens	Corvidae
11	House Sparrow	Passer domesticus	Passeridae
12	Indian Cormorant	Phalacrocorax fuscicollis	Phalacrocoraci dae
13	Pale-billed Elowerpecker	Dicoeum erythrorynchos	Dicaeidae
14	Taiga flycatcher	Ficedula albicilla	Muscicapidae
15	Yellow-footed Green Pigeon	Treron phoen icoptera	Columbibae

Checklist of Reptiles

No.	Common Name	Scientific Name	Family
1	Rat Snake	Zamenis longissimus	Colubridae

Checklist of Amphibians

No.	Common Name	Scientific Name	Family
1	Indian Toad	Duttaphrynus melanostictus	Bufonidae

Green Audit-Santosh Deemed to be University

2	Frog	Enphldctis cyanophlyctis	Dicroglossidae
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Checklist of Butterflies

No.	Common Name	Scientific Name	Family
1	Blue Mormon	Papilio polymnestor	Papilionidae
2	Common Jay	Graphium doson	Papilionidae
3	Common Mime	Papilo clytia	Papilionidae
4	Common Mormon	Papilo polytes	Papilionidae
5	Common Rose	Pachliopta aristolochiae	Papilionidae
6	Lime Butterfly	Papitto demolis	Papilionidae
7	Tailed Jay	Graphium agamemnon	Papilionidae
8	Small Grass Yellow	Furema brigitta	Pieridae
9	Common Grass Yellow	Eurema hecabe	Pieridae
10	Common Gull	Cepora nerissa	Pieridae
11	Indian Jezebel	Delias eucharis	Pieridae
12	Indian Wanderer	Pareronia hippia	Pieridae
13	Lemon Emmigrant	Catopsila Pomona	Pieridae
14	Mottled Eemigrant	Catopsilia pyranthe	Pieridae
15	Psyche	Leptosia nina	Pieridae
16	Common Cerulean	Jamides celeno	Lycaenidae
17	Common Lineblue	Prosotosnora	Lycaenidae
18	Tailless Lineblue	Prosotas dubiosa	Lycaenidae

Green Audit-Santosh Deemed to be University

19	Common Pierrot	Castalius rosimon	Lycaenidae
20	Common Quaker	Neopithecops zalmora	Lycaenidae
21	Dark Grass Blue	Zizeeria karsandra	Lycaenidae
22	Forget-me-not	Catochrysops strabo	Lycaenidae

Checklist of Trees

No.	Common Name	Scientific Name	Family
1	Ficus	Ficus Sp.	Moraceae
2	Amla	Emblca officinalis	Euphorbiaceae
3	Guava	Psidiim guajava	Myrtaceae
4	Rosemallows	Hibiscaceae	Hibiscus
5	Champaca	Magnolia champaca	Magnoliaceae
6	Cycas	Cycas	Cycadaceae
7	Crepe Jasmine	Tabernaemontana Divaricata	Apocynaceae
8	Pomegranate	Punica granatum	Punicaceae
9	Ashoka Tree	Saraca asoka	Fabeceae
10	Kadam	Anthocephalus chinensis	Rubiaceae
11	Indian Almond	Terminalia catappa	Combretaceae
12	Lichi	Litchi chinensis	Sapindaceae
13	Vilayati Babul	Pithecolobium dulce	Mimosaceae
14	Drumstick Tree	Divaricata	Appofucuba
15	Neem Tree	Azadirachta indica	Meliaceae

5 Suggestions & Recommendations

Following is some of the key recommendations for improving campus environment:

- An environmental policy document has to be prepared with all the recommendations and current practice carried by Santosh Deemed to be University.
- A frequent visit should be conducted to ensure that the generated waste is measured, monitored and recorded regularly and information should be made available to administration.
- The solid waste should be reused or recycled at maximum possible places.
- Develop Green Policy & Objectives.
- Prepare a comparison of previous year audits. So that you can trace your progress towards continual improvements.
- Procedures and SOP need to be developed for best practices.



ISO 17020 Accredited by NABCB
Personnel Certification Body

PQMS Quality Services Pvt. Ltd.
SCO-21, 4th Floor, Feroze Gandhi Mkt,
Ludhiana-141001 (Punjab)
Ph:0161-4666970, 9667664604
Email-audit.pqms@gmail.com
www.qualityindia.in

PQMS/2023/1/12/32

Date: 27/01/2023

To Whom It May Concern

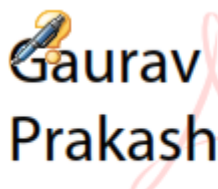
It is to certify that PQMS Quality Services Pvt. Ltd. SCO-21, 4th Floor, Feroze Gandhi Market, Ludhiana-141001 (Punjab) has conducted Energy Audit for Santosh Deemed to be University in January 2023.

Santosh Deemed to be University has been undertaking satisfactory steps towards best practice of Energy Management System. The area of improvement has been identified which has been mentioned in detailed Energy audit report.

Audit Site: Santosh Deemed to be University.

Address: No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Tenure: - 18th Jan 2023 to 25th Jan 2023.

 Digitally signed
by Gaurav
Prakash
Date: 2023.01.27
14:46:17 +05'30'
Prepared By

 Digitally signed
by Maneet
Deewan
Date: 2023.01.27
15:32:47 +05'30'
Approved By

Energy Audit Report

January 2023



Santosh Deemed to Be University

No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Conducted By:



Professional Quality Management Services

SCO-21, 4th Floor, Feroze Gandhi Market Rd, Ludhiana,
Punjab 141001.

Energy Audit-Santosh Deemed to be University

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1. Acknowledgement

We acknowledge the cooperation and support of the management and staff of Santosh Deemed to be University, in particular, the support and disposition of the Dr. Sanjeev Tomar (Faculty, Santosh Deemed to Be University), Mr. Kannan (Admin) & Mr. Arasumani Malaiappan (Assistant Maintenance Manager) Teaching/Supporting Staff of institute has been invaluable to the success of this report. We hereby assure you that, all information obtained in the course of this Audit exercise, as well as those contained in this report, will be remain confidential as per NDA (Non-Disclosure Agreement) clause.

2. Introduction

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2016–17 onwards that all Higher Educational Institutions should submit an annual Energy Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures. In view of the NAAC circular regarding energy auditing, the Institute Management decided to conduct an external Energy Evaluation by a competent Environment Auditor along with a Environment Audit Assessment Team headed by Dr. Sanjeev Tomar, Mr. Kannan and Mr. Arasumani Malaiappan.

3. Context

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2016–17 onwards that all Higher Educational Institutions should submit an annual Energy Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

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4. Energy Audit: Types and Methodology

Energy Audit is the key to a systematic approach for decision-making in the area of energy management. It attempts to balance the total energy inputs with its use, and serves to identify all the energy streams in a facility. It quantifies energy usage

Energy Audit-Santosh Deemed to be University

according to its discrete functions. Industrial energy audit is an effective tool in defining and pursuing comprehensive energy management program.

As per the Energy Conservation Act, 2001, Energy Audit is defined as "the verification, monitoring and analysis of use of energy including submission of technical report containing recommendations for improving energy efficiency with cost benefit analysis and an action plan to reduce energy consumption.

5. Objective & Scope

The broad aims/benefits of the eco-auditing system would be

- Assessing present pattern of energy consumption in different cost centers of operations.
- Relating energy inputs and production output.
- Identifying potential areas of thermal and electrical energy economy.
- Highlighting wastage in major areas.
- Fixing of energy saving potential targets for individual cost centers.
- Implementation of measures of energy conservation and realization of savings.

6. Overview of Organization

In 1995, the Santosh Medical/Dental Colleges and Hospitals came up as one of the top institutions in India to study medicine and dentistry in Ghaziabad. The university has been offering an MBBS course since 1995 with a total intake of around 50 students per year. 2005 onwards, the course was recognized by the Ministry of Health and Family Welfare of the Government of India and the capacity of accepting a particular number of admissions was increased to 100. 20 years after its inception, the institute is considered as the best medical university, India. In the same manner, Santosh Dental College started in 1995 with an aim of imparting a higher-level education in dentistry. The institution offers a foundation course in

Energy Audit-Santosh Deemed to be University

BDS since 1995 by accepting about 40 students annually. But the number of admissions went up higher to 100 per year after 2005. It is now one of the best universities for higher education. The degree offers to develop an understanding of the physical and biological process of oral healthcare. The college runs an MBBS course and undergraduate level and there are post graduate medical courses like MD, MS and M.Sc. and doctoral (PhD) courses. These courses are well-recognized by the Medical Council of India to offer degrees in 17 disciplines. In 2007, the Deemed University Status was conferred on the medical and dental college by the Ministry of HRD of the Government of India on the recommendation of University Grants Commission. Santosh Medical College and Hospital is among the best educational institutions and aims to achieve excellence in medicine practice with prime focus on serving the humanity. Established in 1995, Santosh Medical & Dental College and Hospital provides top class education in the field of medicine and dentistry. The educational institution rose to prominence stand amongst the best medical institute in India.

Following facility available at Santosh Deemed to be University as detailed:

6.1 Administrative Block

The administrative block of Santosh Deemed to be University is located on the 4th floor and houses the offices of the Chancellor, the Vice-Chancellor, the Dean (Medical), Dean (Academics), the Registrar, the Controller of Examination, Finance Controller, Quality Assurance & enhancement cell.

6.2 Central Library

The central library is located on the first and the second floor of the University and is spread over an area of 4000 sq. m. The library is open between 8 a.m. to 9 p.m. It has a huge collection of books, journals, and reference materials. It also offers facilities for photocopying and internet connectivity. There is also a separate room

Energy Audit-Santosh Deemed to be University

for self-reading used by the students, the interns, and the residents of the University.

6.3 Lecture Theaters

Santosh Deemed to be University houses an adequate number of lecture theatres, which are comfortably spaced and equipped with student-lockers, audio-visual (AV) aids, projection microscopes, computers, and internet facilities, required for seamless learning. Most of the lecture theatres are supported by demonstration rooms, seminar rooms, and departmental library.

6.4 Laboratory

All laboratories in the Santosh Deemed to be University are equipped with microscopes, artificial lights, electrical points, washing facilities and preparation rooms. The University also have laboratories that are dedicated to some of the departments, such as Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Microbiology and Forensic Medicine. Apart from the general laboratory facilities, they are also furnished with some special equipment, such as MRI and CT machine, wherever required. The laboratories also have museums with specimens and models related to the different departments along with catalogues for easy referencing.

6.5 Auditorium

Santosh Deemed to be University houses one excellent auditoriums – Maharaja Hall, with a sitting capacity of more than 300 people each. The auditorium hosts various socio-cultural and academic events throughout the year.

6.6 Pharmaco Vigilance Center

The Government of India has identified Santosh Deemed to be University as the regional center for Pharmaco Vigilance Programs, located in the Pharmacology Department at Santosh Medical College.

Energy Audit-Santosh Deemed to be University

6.7 Hostel

Santosh Deemed to be University provides separate hostel accommodations for boys and girls, assuring a high level of security for its residents. Hostel rooms are clean, spacious, and comfortable. The residents are provided with basic amenities such as internet connectivity, recreation rooms, common rooms, and an in-house mess. Students availing hostel facilities are free to interact with the in-house faculty members to create a congenial atmosphere. There is a common dining room with separate areas embarked for boys, girls, staff, and other residents.

6.8 Residential Quarters

There are 179 residential quarters allotted to the teaching and non-teaching staff of Santosh Deemed to be University, 58 quarters are allocated to the teaching faculty and 121 quarters are allocated to the non-teaching staff.

6.9 Canteen

There are two canteens providing food to the students, hospital staffs and visitors. There is also a separate canteen cum mess, which provides meals to the students availing the hostel facilities.

6.10 Medical Facilities

In-house medical facilities are available for the students, faculty, staffs and other members of Santosh Deemed to be University.

6.11 Sports & Recreation

The University conduct several numbers of recreational and sporting activities to keep the students healthy and fit throughout the years. Sports and recreational services include playground for outdoor games, facilities and amenities for indoor games and a gymnasium.

7. Scope of Improvement

- Energy Policy to be adopted by the College Campus.
- Stack height of DG set should be as per DG Rules

Energy Audit-Santosh Deemed to be University

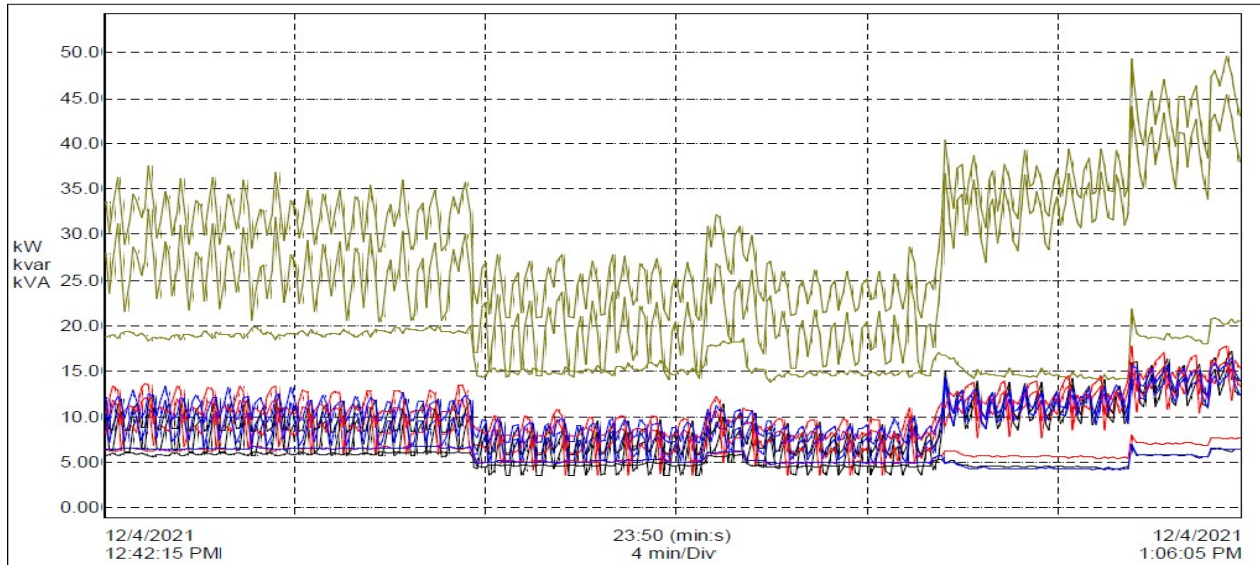
- Display of Energy Saving Awareness posters should be there in the prominent areas of campus.

8. Instruments Used in Energy Audit

Master List Of EA Instruments					
Sr. no.	Instruments	Model	Instrument Number	OEM	Image of Instruments
1	Power Analyzer	ALM 30 ALM 35	00302929	KRYKARD INDIA	
2	Flow Meter	PT878	PT 7 6186 E	GE USA	
3	Thermal Imager	881 – 2	02214667	TESTO GERMANY	
4	Infrared Thermometer	62 Mini	14841880	FLUKE USA	
5	Digital Thermo Hygrometer	288 ATH	2027386	HTC CHINA	
6	Digital Anemometer	AM 4201	AE.09961	LUTRON CHINA	
7	Digital Lux Meter	LX 101	AE.09143	LUTRON CHINA	
8	Digital Multimeter	801 AUTO	201061078	MECO INDIA	
9	Digital Clampmeter	DT 3150	YC-209634	MECO INDIA	
10	Digital TDS Meter	CD 610	S358236	HANNA ITALY	

Energy Audit-Santosh Deemed to be University

Name	Date	Time	AVG	MIN	MAX	Units	Duration	Units
N1 (var)	12/4/2021	12:42:15 PM	5.182	4.232	6.764	kvar	23:55	(min:s)
N2 (var)	12/4/2021	12:42:15 PM	5.846	4.683	7.993	kvar	23:55	(min:s)
N3 (var)	12/4/2021	12:42:15 PM	5.517	4.138	6.982	kvar	23:55	(min:s)
NT (var)	12/4/2021	12:42:15 PM	16.79	13.81	21.79	kvar	23:55	(min:s)
P1 (W)	12/4/2021	12:42:15 PM	7.922	3.495	15.98	kW	23:55	(min:s)
P2 (W)	12/4/2021	12:42:15 PM	8.925	3.580	16.09	kW	23:55	(min:s)
P3 (W)	12/4/2021	12:42:15 PM	8.823	4.803	15.18	kW	23:55	(min:s)
PT (W)	12/4/2021	12:42:15 PM	25.67	14.05	45.40	kW	23:55	(min:s)



9. Sound Decibel Monitoring

9.1 Dental College

S No.	Location	Sound Level (db)
1.	Basement Library	50
2.	Basement Library UG Section	48
3.	Basement Library PG Section	51
4.	Digital Library	49
5.	LAB Oral Pathology	51
6.	Basement IHC	58
7.	Basement Seminar Room	65
8.	Basement Department Library	56
9.	Ground Floor Billing Area	64

Energy Audit-Santosh Deemed to be University

10.	Ground Floor X-Ray Room	48
11.	Ground Floor Department of OMDR	49
12.	Ground Floor Post Graduate Clinic	59
13.	Ground Floor Post Graduate Seminar Room	66
14.	Ground Floor Facility Room	61
15.	Ground Floor Dean Office	68
16.	Ground Floor Pantry	67
17.	Ground Floor HR Room	54
18.	1st Floor Lecture Theatre-3	50
19.	1st Floor OPG Room	57
20.	1st Floor Clinical PG Section Room	68
21.	1st Floor Paediatric Dentistry Room	62
22.	1st Floor HOD Room (Paediatric& Preventive	60
23.	1st Floor Oral Pathology	56
24.	2nd Floor HOD Room (Conservative Dentistry)	58
25.	Department of Oral Pathology	60
26.	Conservative & Operative Dentistry	53
27.	3rd Floor HOD Room (Department of Prosthodontics)	54
28.	Seminar Room	61
29.	Library	48
30.	UG Clinic (Prosthodontics)	51
31.	Casting Laboratory	54
32.	Post Graduate Clinic	56
33.	PG Lab	51
34.	Plaster Laboratory	54
35.	Mechanical Lab	59
36.	Ceramic Lab	50
37.	Implant Prosthodontic Clinic Facility Room	53

Energy Audit-Santosh Deemed to be University

9.2 Santosh Hospital

Sr. No	Location	Area	Sound Level (db)
1	Ground Floor	Casualty	50
2		Triage	48
3		Reception	51
4		Waiting Lounge	49
5		X-ray room	51
6		CT scan	58
7		Ultrasound	65
8	1st Floor	General medicine OPD	56
9		General surgery OPD	64
10		Pediatric OPD	48
11		Gynecology OPD	49
12		Orthopedic OPD	59
13	2nd Floor	Dental OPD	66
14		ENT OPD	61
15		Pathology Lab	68
16		Microbiology Lab	67
17		Blood Bank	54
18		Ophthalmology OPD	50
19		Psychiatry OPD	57
20	5th Floor	General Ward	68
21		Gynecology OT	62
22		Labor Room	60
23	6th Floor	Private Ward	56
24	7th Floor	Accommodation	58
25	8th Floor	ICU	60
26		Operation Theatre	53

Energy Audit-Santosh Deemed to be University

9.3 Medical College

Sr. No	Location	Area	Sound Level (db)
1	Basement	Kitchen	50
2		Students Mess	48
3		Examination Hall	51
4	Ground Floor	Boys Common Room	49
5		Girls Common Room	51
6		Anatomy Museum	58
7		Histology lab	65
8		Anatomy Dissection hall-1	56
9		Anatomy Dissection hall-2	64
10		Tutor Room	48
11		Anatomy Assistant Professor Room	49
12		HOD Room Anatomy	59
13		Demonstration room	66
14		LT-1	61
15		LT-2	68
16		LT-3	67
17	First Floor	Santosh Central Library	54
18		Research Lab	50
19		Departmental Library cum Journal Room	57
20		Biochemistry Lab	68
21		Demonstration room	62
22		Professor and HOD Room (Biochemistry)	60

Energy Audit-Santosh Deemed to be University

23		Department of Physiology	56
24		Department Library cum Seminar Room	58
25		Mammalian Lab	60
26		Hematology Lab	53
27		Demonstration room	50
28		Clinical Physiology	48
29		2nd Floor	Associate professor and HOD room (pathology)
30	Tutor room		49
31	Associate professor (3 room)		51
32	Clinical pathology lab		58
33	Research lab		65
34	Department library cum seminar room		56
35	Demonstration room (forensic medicine)		64
36	Museum (forensic medicine)		48
37	3rd Floor	Clinical pharmacology lab	49
38		Computer assisted lab	59
39		Non-teaching staff room	66
40		Research lab	61
41		Departmental library cum seminar room	68
42		Tutor room	67
43		Associate professor Room	50
44		HOD room	48
45		Tutor room (microbiology)	51
46		HOD room	49
47		Assistant professor room	51

Energy Audit-Santosh Deemed to be University

48		Microbiology lab	58
49		Professor room	65
50		Empty room (3)	56
51		Demonstration room	64
52		Research lab	48
53		Museum	49
54		Library room	59
55		Seminar room	66
56		Staff room	61
57		4th Floor	Administrative offices
58	Account department		67
59	Central Research Facility		54
60	IQAC		50

10. Illumination System

10.1 Luminary Details

The building maintenance cell had already changed all the old high energy consuming light with the energy efficient LED lights. We have measured lux area wise for the sample basis.

10.2 Area wise lux level

Dental College

S No.	Location	Lux Level	
		Max.	Min.
1.	Basement Library	126	138
2.	Basement Library UG Section	131	140
3.	Basement Library PG Section	160	171

Energy Audit-Santosh Deemed to be University

4.	Digital Library	152	170
5.	LAB Oral Pathology	158	174
6.	Basement IHC	161	170
7.	Basement Seminar Room	164	174
8.	Basement Department Library	144	150
9.	Ground Floor Billing Area	141	144
10.	Ground Floor X-Ray Room	145	154
11.	Ground Floor Department of OMDR	151	160
12.	Ground Floor Post Graduate Clinic	170	181
13.	Ground Floor Post Graduate Seminar Room	127	138
14.	Ground Floor Facility Room	122	130
15.	Ground Floor Dean Office	134	143
16.	Ground Floor Pantry	160	167
17.	Ground Floor HR Room	159	172
18.	1st Floor Lecture Theatre-3	160	170
19.	1st Floor OPG Room	164	170
20.	1st Floor Clinical PG Section Room	170	180
21.	1st Floor Pediatric Dentistry Room	164	172
22.	1st Floor HOD Room (Pediatric Dentistry)	150	162
23.	1st Floor Oral Pathology	171	183
24.	2nd Floor HOD Room (Conservative Dentistry)	166	171
25.	Department of Oral Pathology	155	160
26.	Conservative & Operative Dentistry	143	168
27.	3rd Floor HOD Room (Department of Prosthodontics)	150	165
28.	Seminar Room	149	160
29.	Library	146	158
30.	UG Clinic (Prosthodontics)	120	125
31.	Casting Laboratory	152	160
32.	Post Graduate Clinic	128	144
33.	PG Lab	121	129
34.	Plaster Laboratory	161	174

Energy Audit-Santosh Deemed to be University

35.	Mechanical Lab	17 0	180
36.	Ceramic Lab	16 4	174
37.	Implant Prosthodontics Clinic Facility Room	15 0	163

Santosh Hospital

S No	Location	Area	Lux	
			Min.	Max.
1	Ground Floor	Casualty	124	142
2		Triage	123	138
3		Reception	135	147
4		Waiting Lounge	139	145
5		X-ray room	121	140
6		CT scan	127	138
7		Ultrasound	124	136
8	1st Floor	General medicine OPD	139	145
9		General surgery OPD	142	150
10		Pediatric OPD	145	154
11		Gynecology OPD	142	153
12		Orthopedic OPD	148	160
13	2nd Floor	Dental OPD	147	162
14		ENT OPD	142	168
15		Pathology Lab	142	152
16		Microbiology Lab	137	151
17		Blood Bank	134	159
18		Ophthalmology OPD	139	150
19	Psychiatry OPD	140	157	
20	5th Floor	General Ward	137	154
21		Gynecology OT	134	157
22		Labor Room	142	167
23	6th Floor	Private Ward	143	168

Energy Audit-Santosh Deemed to be University

24	7th Floor	Accommodation	138	150
25	8th Floor	ICU	129	151
26		Operation Theatre	130	155

Medical College

SNo	Location	Area	Lux	
			Min.	Max.
1	Basement	Kitchen	128	140
2		Students Mess	130	145
3		Examination Hall	131	147
4	Ground Floor	Boys Common Room	138	148
5		Girls Common Room	135	147
6		Anatomy Museum	129	138
7		Histology lab	125	140
8		Anatomy Dissection hall-1	147	164
9		Anatomy Dissection hall-2	146	167
10		Tutor Room	137	150
11		Anatomy Assistant Professor Room	144	158
12		HOD Room Anatomy	146	164
13		Demonstration room	144	163
14		LT-1	153	169
15		LT-2	158	172
16		LT-3	152	170
17		Ground Floor	Santosh Central Library	155
18	Research Lab		154	171
19	Departmental Library cum Journal Room		158	178
20	Biochemistry Lab		149	173

Energy Audit-Santosh Deemed to be University

21	First Floor	Demonstration room	150	180
22		Professor and HOD Room (Biochemistry)	147	164
23		Department of Physiology	144	165
24		Department Library cum Seminar Room	146	160
25		Mammalian Lab	144	158
26		Hematology Lab	141	152
27		Demonstration room	149	161
28		Clinical Physiology	149	174
29	2nd Floor	Associate professor and HOD room (pathology)	142	158
30		Tutor room	145	155
31		Associate professor (3 room)	150	171
32		Clinical pathology lab	138	147
33		Research lab	135	146
34		Department library cum seminar room	158	164
35		Demonstration room (forensic medicine)	141	149
36		Museum (forensic medicine)	137	144
37	3rd Floor	Clinical pharmacology lab	144	149
38		Computer assisted lab	150	154
39		Non-teaching staff room	148	160
40		Research lab	142	152
41		Departmental library cum seminar room	148	162
42		Tutor room	151	170
43		Associate professor Room	143	172
44		HOD room	146	157

Energy Audit-Santosh Deemed to be University

45		Tutor room (microbiology)	142	153	
46		HOD room	142	159	
47		Assistant professor room	143	157	
48		Microbiology lab	137	145	
49		Professor room	142	150	
50		Empty room (3)	151	156	
51		Demonstration room	153	160	
52		Research lab	147	152	
53		Museum	134	147	
54		Library room	141	153	
55		Seminar room	142	154	
56		Staff room	147	158	
57		4th Floor	Administrative offices	138	149
58			Account department	139	153
59			Central Research Facility	142	151
60	IQAC		136	147	

11. DG Sets

SN	Description	Capacity	Location
1	DG NO 1	320	College
2	DG No 2	320	College
3	DG No 3	300	Hospital
4	DG No 4	300	Hospital
5	DG No 5	1000	Hospital

Energy Audit-Santosh Deemed to be University

12. Air Conditioning

The building is having the Ceiling fans, AC, AHU and FCU for air circulation and Air coolers to get Comfort and also having window and split ACs for air conditioning

List of Fan:

SN.	Type	Location	Qty.
1	Ceiling Fan (60 W)	SANTOSH MEDICAL & DENTAL COLLEGE	300
2	Ceiling Fan (28 W)	HOSPITAL	300
Total			600

Ceiling fan replacement by energy-efficient ceiling fans		
Average power consumption of the ceiling fan at present	Watt	60
Average power consumption of energy-efficient star rated (BLDC) fans	Watt	28
Equivalent Power saving per fan	Watt	32
Numbers of fans to be replaced	Nos.	580
Working Hours Per annum	Hr.	6000
Overall electric Power Cost	Rs./KWH	9
Annual Energy Saving	KWH	115200
Monetary saving	Rs./Year	1036800
Investment	Rs.	1800000
Payback	Month	20.83

13. Area of Improvement

Energy Management has become crucial to the competitors of the facility. Rising fuel costs coupled with increased global competition is forcing industries/buildings and other facilities to slash energy costs. It was aimed at obtaining a detailed idea about the various end use energy consumption activities and identifying, enumerating and evaluating the possible energy savings opportunities. However, Energy conservation is a continuous process and there is always scope for further improvements. With this objective the

Energy Audit-Santosh Deemed to be University

Energy Audit team with the active involvement of office we have identified the following Energy Conservation Opportunities (ECO's). Implementation of the ECO's can further help improve the energy consumption.

List of Energy saving / conservation recommendations

- PF improvement by installing APFC panel
- Replace the ceiling fan with BLDC fan
- It is recommended to install occupancy sensor in office cabins and toilets to save energy
- It is recommended to install the day light sensor on the outdoor lights for automation and control of the lights and this will also help us reduce the unwanted running hours of the lights.

14. Auditor Credentials

Certificate 32331810 / 4538792345
CQI / IRCA 30498



Gaurav Prakash



has been awarded a Certificate of Achievement for

ISO 50001:2018 - Lead Auditor Course

Energy Management System

by passing the written examination and continuous assessment

Held at

Delhi, India

Completed on

18 Sep 2020

This course meets the formal training requirements for Individuals seeking certification under the IRCA Auditor Certification Scheme and for this purpose is valid for five years from the date of completion



Course Number 2000 - PT

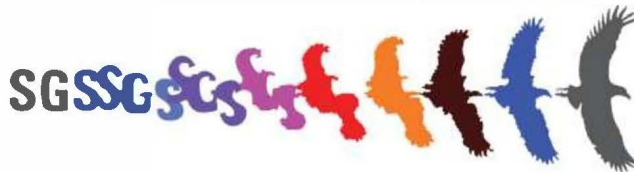
254 Certificated by the International Register of Certificated Auditors (IRCA)

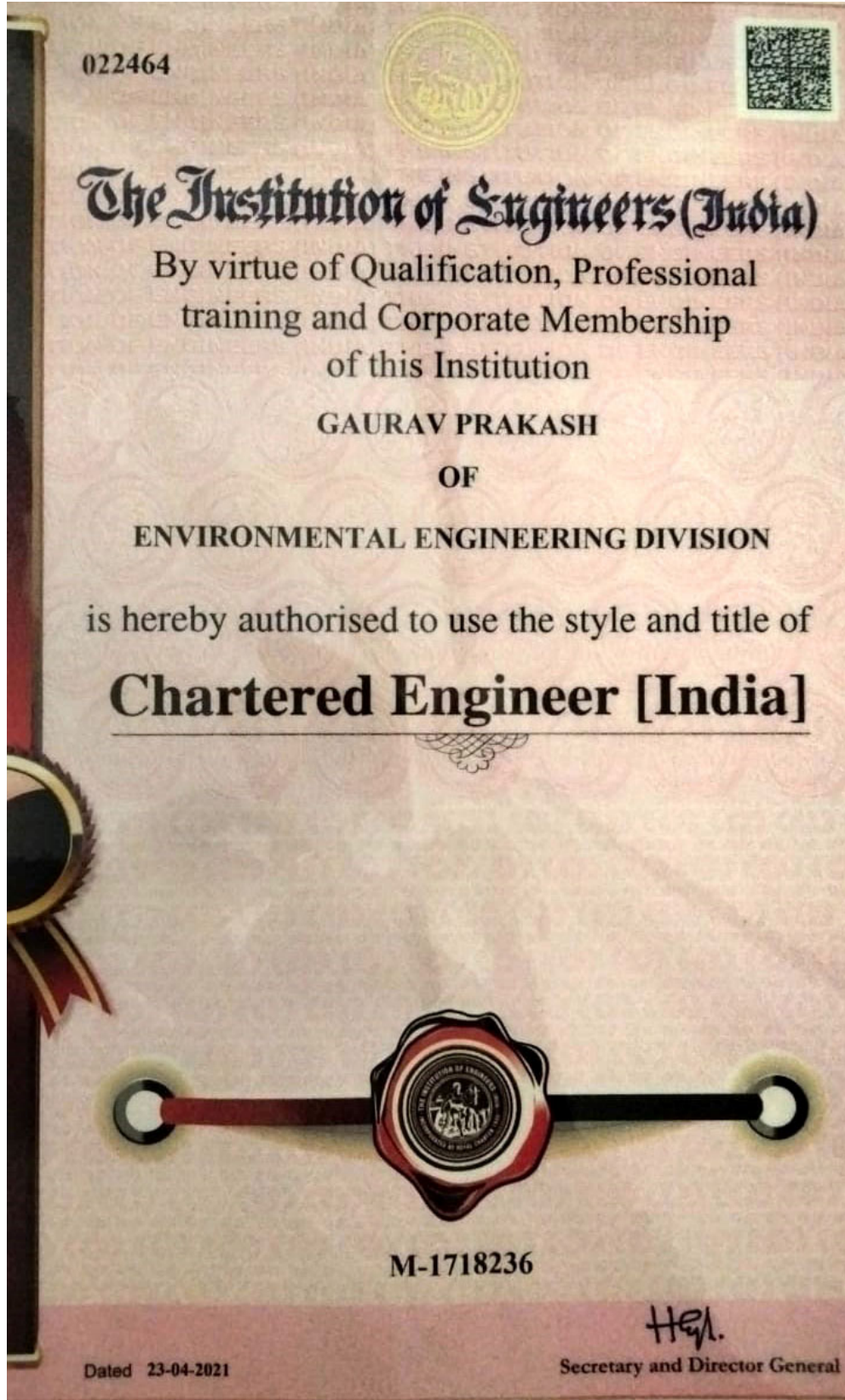


Heather Crick
UK Business Manager

Amanda Mangan
Global Training Manager

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PQMS Quality Services Pvt. Ltd.
SCO-21, 4th Floor, Feroze Gandhi Mkt,
Ludhiana-141001 (Punjab)
Ph:0161-4666970, 9667664604
Email-audit.pqms@gmail.com
www.qualityindia.in

PQMS/2023/1/12/22

Date: 12/01/2023

To Whom It May Concern

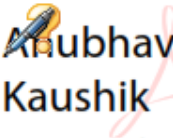
It is to certify that PQMS Quality Services Pvt. Ltd. SCO-21, 4th Floor, Feroze Gandhi Market, Ludhiana-141001 (Punjab) has conducted Environment Audit for Santosh Deemed to be University in January 2023.

Santosh Deemed to be University has been undertaking satisfactory steps towards ensuring Green Campus & Sustainable Environment. The area of improvement has been identified which has been mentioned in detailed reports.

Audit Site: Santosh Deemed to be University.

Address: No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Tenure: - 3rd Jan 2023 to 10th Jan 2023


Digitally signed by
Anubhav Kaushik
Date: 2023.01.12
12:39:30 +05'30'
Prepared By


Digitally signed
by Maneet
Deewan
Date: 2023.01.12
12:39:08 +05'30'
Approved By

Environment Audit Report

January 2023



Santosh Deemed to Be University

No.1, Santosh Nagar, Ghaziabad, NCR Delhi-201009

Audit Conducted By:



Professional Quality Management Services

SCO-21, 4th Floor, Feroze Gandhi Market Rd, Ludhiana,
Punjab 141001.

Environment Audit-Santosh Deemed to be University

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Environment Audit-Santosh Deemed to be University

1. Acknowledgement

We acknowledge the cooperation and support of the management and staff of Santosh Deemed to be University, in particular, the support and disposition of the Dr. Sanjeev Tomar (Faculty, Santosh Deemed to Be University), Mr. Kannan (Admin) & Mr. Arasumani Malaiappan (Assistant Maintenance Manager) Teaching/Supporting Staff of institute has been invaluable to the success of this report. We hereby assure you that, all information obtained in the course of this Audit exercise, as well as those contained in this report, will be remain confidential as per NDA (Non-Disclosure Agreement) clause.

2. Introduction

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2016–17 onwards that all Higher Educational Institutions should submit an annual Environment Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures. In view of the NAAC circular regarding Environment Auditing, the Institute Management decided to conduct an external Environment Evaluation by a competent Environment Auditor along with a Environment Audit Assessment Team headed by Dr. Sanjeev Tomar, Mr. Kannan and Mr. Arusumani Maliappan.

A Nation's growth starts from its educational institutions, where the ecology is thought as a prime factor of development associated with environment. Educational institutions now a days are becoming more sensitive to environmental factors and more concepts are being introduced to make them eco-friendly. To preserve the environment within the campus, various viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the energy savings, recycle of waste, water reduction, water harvesting etc. The activities pursued by colleges can also create a variety of adverse environmental impacts.

Environmental auditing is a process whereby an organization's environmental performance is tested against its environmental policies and objectives. An Environment audit is defined as an official examination of the effects a college has on the environment. As a part of such practice, an internal environmental audit is conducted to evaluate the actual scenario at the campus. Environment audit can be a useful tool for a college to determine how and where they are using the most

Environment Audit-Santosh Deemed to be University

energy or water or resources. the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. Environment auditing and the implementation of mitigation measures is a win-win situation for all the college, the learners and the planet. It can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Environment impact on campus.

Environment audit aims to analyses environmental practices within and outside the university campuses, which will have an impact on the eco-friendly atmosphere. Environment audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the environment audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the environment audit.

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.

Environmental Management Systems (EMS) is very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the world have started adopting compatible environmental management systems either voluntarily or for promoting standards by external certification. International environmental standards do not suit the existing Indian educational

Environment Audit-Santosh Deemed to be University

system. Hence EHS Alliance has developed a compatible system by developing locally-applicable techniques.

3. Context

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Environment Audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the Institute Management. The concept, structure, objectives, methodology, tools of analysis, objectives of the audit are mentioned below.

4. Concept

The term 'Environmental audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations/Institutions believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environment Audit, many leading companies/institutions follow the basic philosophy and approach summarized by

Environment Audit-Santosh Deemed to be University

the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

5. Objective & Scope

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resource in the campus.
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the College campus and its environment
- Enhancement of College profile
- Developing an environmental ethic and value systems in young people

6. Overview of Organization

In 1995, the Santosh Medical/Dental Colleges and Hospitals came up as one of the top institutions in India to study medicine and dentistry in Ghaziabad. The university has been offering an MBBS course since 1995 with a total intake of around 50 students per year. 2005 onwards, the course was recognized by the Ministry of Health and Family Welfare of the Government of India and the capacity of accepting a particular number of admissions was increased to 100. 20 years after its inception, the institute is considered as the best medical university, India. In the same manner, Santosh Dental College started in 1995 with an aim of imparting a higher-level education in dentistry. The institution offers a foundation course in BDS since 1995 by accepting about 40 students annually. But the number of

Environment Audit-Santosh Deemed to be University

admissions went up higher to 100 per year after 2005. It is now one of the best universities for higher education. The degree offers to develop an understanding of the physical and biological process of oral healthcare. The college runs an MBBS course and undergraduate level and there are post graduate medical courses like MD, MS and M.Sc. and doctoral (PhD) courses. These courses are well-recognized by the Medical Council of India to offer degrees in 17 disciplines. In 2007, the Deemed University Status was conferred on the medical and dental college by the Ministry of HRD of the Government of India on the recommendation of University Grants Commission. Santosh Medical College and Hospital is among the best educational institutions and aims to achieve excellence in medicine practice with prime focus on serving the humanity. Established in 1995, Santosh Medical & Dental College and Hospital provides top class education in the field of medicine and dentistry. The educational institution rose to prominence stand amongst the best medical institute in India.

Following facility available at Santosh Deemed to be University as detailed:

6.1 Administrative Block

The administrative block of Santosh Deemed to be University is located on the 4th floor and houses the offices of the Chancellor, the Vice-Chancellor, the Dean (Medical), Dean (Academics), the Registrar, the Controller of Examination, Finance Controller, Quality Assurance & enhancement cell.

6.2 Central Library

The central library is located on the first and the second floor of the University and is spread over an area of 4000 sq. m. The library is open between 8 a.m. to 9 p.m. It has a huge collection of books, journals, and reference materials. It also offers facilities for photocopying and internet connectivity. There is also a separate room for self-reading used by the students, the interns, and the residents of the University.

Environment Audit-Santosh Deemed to be University

6.3 Lecture Theaters

Santosh Deemed to be University houses an adequate number of lecture theatres, which are comfortably spaced and equipped with student-lockers, audio-visual (AV) aids, projection microscopes, computers, and internet facilities, required for seamless learning. Most of the lecture theatres are supported by demonstration rooms, seminar rooms, and departmental library.

6.4 Laboratory

All laboratories in the Santosh Deemed to be University are equipped with microscopes, artificial lights, electrical points, washing facilities and preparation rooms. The University also have laboratories that are dedicated to some of the departments, such as Anatomy, Physiology, Biochemistry, Pharmacology, Pathology, Microbiology and Forensic Medicine. Apart from the general laboratory facilities, they are also furnished with some special equipment, such as MRI and CT machine, wherever required. The laboratories also have museums with specimens and models related to the different departments along with catalogues for easy referencing.

6.5 Auditorium

Santosh Deemed to be University houses two excellent auditoriums – Maharaja Hall and Manas Auditorium, both with a sitting capacity of more than 500 people each. The auditorium hosts various socio-cultural and academic events throughout the year.

6.6 Pharmaco Vigilance Center

The Government of India has identified Santosh Deemed to be University as the regional center for Pharmaco Vigilance Programs, located in the Pharmacology Department at Santosh Medical College.

6.7 Hostel

Santosh Deemed to be University provides separate hostel accommodations for boys and girls, assuring a high level of security for its residents. Hostel rooms are

Environment Audit-Santosh Deemed to be University

clean, spacious, and comfortable. The residents are provided with basic amenities such as internet connectivity, recreation rooms, common rooms, and an in-house mess. Students availing hostel facilities are free to interact with the in-house faculty members to create a congenial atmosphere. There is a common dining room with separate areas embarked for boys, girls, staff, and other residents.

6.8 Residential Quarters

There are 179 residential quarters allotted to the teaching and non-teaching staff of Santosh Deemed to be University, 58 quarters are allocated to the teaching faculty and 121 quarters are allocated to the non-teaching staff.

6.9 Canteen

There are two canteens providing food to the students, hospital staffs and visitors. There is also a separate canteen cum mess, which provides meals to the students availing the hostel facilities.

6.10 Medical Facilities

In-house medical facilities are available for the students, faculty, staffs and other members of Santosh Deemed to be University.

6.11 Sports & Recreation

The University conduct several numbers of recreational and sporting activities to keep the students healthy and fit throughout the years. Sports and recreational services include playground for outdoor games, facilities and amenities for indoor games and a gymnasium.

7. Audit Participants

Name	Position	Dept
Dr. Sanjeev Tomar	Faculty	OMFS
Mr. Kannan	Admin	Transport Manager
Mr. Arusumani Aiyaapan	Maintenance Manager	Maintenance Dept

Environment Audit-Santosh Deemed to be University

Anubhav Kaushik

Lead Auditor

EMS

8. Scope of Improvement

- Environment Policy to be adopted by the College Campus.
- Stack height of DG set should be as per DG Rules
- Display of environment awareness posters should be there in the prominent areas of campus.
- Water meters should be installed and maintain the inventory of water resources.
- The water from the rainwater harvesting pit can be used for the purpose of gardening.
- An internal inspection system should be developed for various equipment available in the campus.
- Dry and wet waste management plans should be prepared for the campus.
- Environmental drills for response against spillages and leakage of chemicals in the campus.
- The monthly inventory of e-waste is required to be maintained in formats on regular basis.

9. Environment Audit Questionnaire

The areas of eco/environmental auditing to be followed/practiced by participating institutions:

- 9.1 Waste Minimization and Recycling
- 9.2 Greening
- 9.3 Energy Conservation
- 9.4 Water Conservation
- 9.5 Clean Air
- 9.6 Animal Welfare

Environment Audit-Santosh Deemed to be University

9.7 Environmental Legislative

9.8 General Practices

Does any Environmental Audit conduct earlier?

Yes, this is fourth round for Environment Audit. We keep monitoring the environmental eminence initiative, taken by college for environment protection.

What is the total permanent population of the Institute?

	Male	Female	Total
Students	174	188	362
Teachers	16	15	31
Non-Teaching Staff	21	7	28
Sub Total	211	210	421
Approximate Number of Visitors (Per day)			15
What is the total number of working days of your campus in a year?			277

Where is campus located?

Santosh is a medical institute located in Ghaziabad, Uttar Pradesh, India. It was granted deemed university status under section 3 of UGC Act 1956 on 13 June 2007. It is parent university of Santosh Medical and Dental College.

Which of the following is available in your campus?

Item	Availability (Yes/No)
Garden Area	Yes
Playground	Yes

Environment Audit-Santosh Deemed to be University

Kitchen	Yes
Toilets	Yes
Garbage or Waste Storage Yard	Yes
Laboratory	Yes
Canteen	Yes
Hostel Facility	Yes
Guest House	Yes

Which of the following are nearby your campus?

Item	Description
Municipal Dump Yard	No
Garbage Heap	No
Public Convenience	Yes
Sewer Line	Yes
Stagnant Water	No
Open Drainage	Yes, Maintained
Industries	No
Bus/Railway Station	Nearby Campus
Market/ Shopping Complex	Yes, within 500 mtr
Effluent Treatment Plant	Available

I) Waste Minimization & recycling

Environment Audit-Santosh Deemed to be University

1.	<p>Does your institute generate any waste? If so, what are they?</p>	<p>Yes, Solid waste, Canteen waste, paper waste, plastic waste, toiletry waste, Horticulture Waste, etc.</p>			
2.	<p>What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)</p>	Bio Degradable	Non-Biodegradable	Hazardous	others
		40kg	10kg	1kg	<6kg
3.	<p>How is the waste generated in the institute managed? By</p> <p>1 Composting</p> <p>2 Recycling</p> <p>3 Reusing</p> <p>4 Others (specify)</p>	<p>Reuse of one side printed Paper for internal communication. Sewage water is discharged to public Sewer. Domestic Waste is given to Municipal Corporation. Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste. Horticulture waste is also given to Municipal Corporation.</p>			
4.	<p>Do you use recycled paper in institute?</p>	<p>Yes, in academic evaluation works</p>			
5.	<p>Do you use reused paper in institute?</p>	<p>Yes</p>			
6.	<p>How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.</p>	<p>Yes, they carried out some activities like Recycling campaigns, e waste management, Anti-plastic campaigns, and sustainable goal awareness programs and swatch Bharat abhiyan adopted by campus, NSS Group taking cleanliness initiative in the city and spread awareness in locality.</p>			

Environment Audit-Santosh Deemed to be University

7.	Can you achieve zero garbage in your institute? If yes, how?	Yes, as per new waste management rules all kind of waste is managed in an adequate manner without any deviation. A specialized third party is engaged for the same.
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II) Green Campus Data

1.	Is there a garden in your institute?	Yes, about Approx. 60% areas are developed as Gardens.	
2.	Do students spend time in the garden?	2-4 Hours in Winter	
3.	Total number of plants in campus	Plant Type	Number of Plants
		Trees	477
		Ornamental	270
4.	Suggest plants for your campus. (Trees, vegetables, herbs, etc.)	Ashoka, Ficus Religeosa, Boganvella, Bottle palm, Tunn, Jackfruit and many more as per geographical regime.	
5.	Do you use reused paper in institute?	Yes	
6.	Is the university campus have any Horticulture Department ?	Yes	
7.	Number of Staff working in Horticulture Department	Gardeners, Eng. Dept. look water pipe line maintenance and Estate officer looking maintenance	
8.	Number of Tree Plantation Drives organized by college per annum.(If Any)	Yes, Two Tree Plantation Drives are Organized Annually. 35 trees and 140 shrubs planted in this financial year.	
9.	Number of Trees Planted in Last Financial Year.	45	

Environment Audit-Santosh Deemed to be University

10.	Survival Rate	97%
11	Plant Distribution Program for Students and Community	Yes, Saplings are distributed to Students and visitors at various Occasions. Besides this landscape of some area in city are developed by Institute.
12.	Plant Ownership Program	Various trees are planted and owned by faculty, staff, visitors and as well as by the students. The name plates are also displayed near the plants.
13.		

III) Energy

1.	List ten ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	Electricity saves by use of CFL/LED bulbs for illumination, LPG saves by use of Pressure cookers for cooking food.
2.	Is there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some	Yes, energy saving methods like switching off the electrical gadgets, when not in use. Use of Natural Lights and Natural Ventilation are promoted. Messages are displayed at various locations to Aware the Peoples about Energy Savings. Renewable source of energy through solar plant is under planning to install at Santosh Deemed to be University.
3.	How many CFL/LED bulbs has your institute Installed?	100 % of Total Conventional bulbs are Replaced by LED Lights.

Environment Audit-Santosh Deemed to be University

4.	Are any alternative energy sources employed / installed in your institute? (Photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.) Specify.	In Progress.
5.	Do you run “switch off” drills at institute?	Yes
6.	Are your computers and other equipment’s put On power-saving mode?	Yes
7.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how Many hours?	Yes, all machinery is working only when required. Printer/ fax are switched on during the usages only.

IV) Water Conservation

1.	List four uses of water in your institute	Basic use of water in campus: 1. Drinking – 660 KL/month 2. Gardening – 1100 KL/Month 3. Kitchen and Toilets –650 KL/month 4. Others – 180KL/month
2.	How Does your institute store water? Are there any water saving techniques followed in your institute?	06 Nos of Overhead and Underground Water Tanks installed for storage of water. To avoid overflow of water-controlled valves are provided in water supply system. Close supervision for water supply system.

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3.	If there is water wastage, specify why and How can the wastage be prevented / stopped?	There is no water wastage methodology used.
4.	Locate the point of entry of water and point of exit of waste water in your institute. Entry- Exit-	Entry- Water comes from Authority Water Supply at campus Exit- From Water Drainage System to Authority STP
5.	Write down four ways that could reduce the amount of water used in your institute	<p>Basic Four ways:</p> <ol style="list-style-type: none"> 1. Dripping of water from taps is closely monitored. 2. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage 3. Water Conservation awareness for new Students 4. Reuse of waste water
6.	Record water use from the institute water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many litres of water have been used.	Water Meters are available for calculation of usage of total quantity only.
7.	Does your institute harvest rain water?	Yes.
8.	Is there any water recycling System.?	Yes

Environment Audit-Santosh Deemed to be University

V) Clean Air

1.	Are the Rooms in Campus being Well Ventilated?	Yes
2.	Window Floor ratio of the Rooms	3:1
3.	What is the ownership of the vehicles used by your institute?	We use Institute-owned vehicles only.
4.	Provide details of institute-owned motorized vehicles? Your institute.	Buses-0 Cars-8 Vans-1 Others-11 Total-19
5.	Specify the type of fuel used by your school's vehicles:	95% CNG, 5 % Diesel/Petrol
6.	Air Quality Monitoring Program (If Any)	No monitoring system in place
7.	Students suffer from respiratory ailments? (If Any)	No.
8.	Details of Genset	Silent DG set available for power backup

VI) Animal Welfare.

1.	List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)	Birds and Squirrels are commonly found in campus. A variety of birds species and other flora and fauna are available but these are not harmful to humans so institute doing their bit for its conservation.
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Environment Audit-Santosh Deemed to be University

2.	How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	NA
3.	Does your institute have a Biodiversity Program or a KARUNA CLUB?	NA

VII) Environmental Legislative Compliance.

1.	Are you aware of any environmental Laws? Pertaining to different aspects of environmental management?	Yes
2.	Does your institute have any rules to protect the environment? List possible rules you could include.	Yes (Plantation, Restrictions of vehicles, garbage disposal, etc.)
3.	Does Environmental Ambient Air Quality Monitoring conduct by the Institute?	No
4.	Does stack monitoring of DG sets conducted by the Institute?	Yes, Conducted.
5.	Is any warning notice, letter issued by state government bodies?	No
6.	Does any Hazardous waste generate by the Institute? If yes explain its category and disposal method	Yes (Disposal of hazardous waste by dilution method)
7.	Does any Biomedical waste generate by the Institute? If yes explain its category and disposal method	Yes, disposal by an authorized vendor.

Environment Audit-Santosh Deemed to be University

VIII) General.

1.	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
2.	Does your institute have any rules to protect the environment? List possible rules you could include.	Yes
3.	Does housekeeping schedule on your campus?	Yes, the Swachh Bharat movement
4.	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes, periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by the institute
5.	Do Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	Yes
6.	Does Institute participate in National and Local Environmental Protection Movement?	Yes, Swatch Campus Abhiyaan by students at Campus.
7.	Does Institute have any Recognition/certification for the environment's Friendliness?	Yes
8.	Does Institute use renewable energy?	Yes
9.	Does Institution conduct a Environmental audit of its campus?	Yes, this is the third environmental audit done by the institution

Environment Audit-Santosh Deemed to be University

10.	Has the institution been audited/accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	Yes, By NAAC.
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10. Best Practices for Environment

A	Renewable Energy Yes, renewable energy is used by Santosh Deemed to be University.	The solar system is available in Santosh Deemed to be University and up-gradation work is in progress.
B	Biodiversity Conservation Flora and fauna conservation	It is in the schedule plan of Campus Environment committee
C	Tree Plantation Drives Two Drives Annually, as well as Every Guest, is honored by Tree Plantation at Campus.	Yes
D	Ground Water Recharge 04 units of Rain Water Harvesting System.	Yes
E	Pollution Reduction Personal Vehicles users used the carpool.	Reduction in Air Pollution through vehicular Emission.
F	E-Waste Management	Handover Authorized recycler
G	Solid Waste Management Lifting of garbage from Santosh Deemed to be University campus on an alternate day for landfill.	Yes
H	Adoption of Village School CSR	Yes
I	Water Conservation	Yes
J	Corporate Resource Center (CRC)	Santosh Deemed to be University Corporate Resource Center (CRC) is dedicated to nurturing future leaders

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K	Mitigation measures for Air pollution at construction stage and operation stage by developing adequate green belt.	Yes
L	Mitigation measures for noise pollution by isolation of noise generation activities	Yes
M	Disaster management plan	Yes
N	Fire protection system	Yes
O	Environment/Green committee(To be Answered by Dr. Tomar)	For regulating eco-friendly initiatives at campus premises.

11. Conclusion

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The Santosh Deemed to be University has Environmental Committee for sustainable use of resources. The audit has identified several observations for making the campus premise more environmentally friendly. The recommendations are also mentioned with observations for college campus team to initiate actions. The audit team opines that the overall site is maintained well from environmental perspective. There is no major observations but few things are important to initiate urgently are water balance cycle and periodic inspection of buildings and initiation of composting at campus.

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12. Annexure-Environment Consciousness Activity



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