Green Audit 2019 - 21

AUDIT REPORT

Studied for

Trimurti Pawan Pratishthan's

Khasdar Shri. Govindrao Adik Law College

Behind Octroi Naka, Newasa Road, Taluka Shrirampur, Dist. Ahmadnagar - 413709

Analysed by

Greenvio Solutions

24 July 2021

Background reference image Nic Y C Gua on unsplash

Disclaimer

Green Audit Team has prepared this report for **Trimurti Pawan Pratishthan's Khasdar Shri. Govindrao Adik Law College, Behind Octroi Naka, Newasa Road, Taluka Shrirampur Dist Ahmadnagar - 413709** based on input data submitted by the College analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National Standards, the report has thereby been generated based on comparative analysis of the existing facilities and the benchmarks. The suggestions derived as a result of the inspection and research as per inputs which would further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

The audit is a thorough study based on the inventory and on-site investigation of data collected over a period of time and should not be used for any legal action. This is the property of Greenvio Solutions and should not be copied.

The Report is prepared by the Team of Greenvio Solutions under their brand – Sustainable Academe as Consultancy firm along with Ar. Nahida Shaikh as an Accredited Green Building Professional.

Greenvio Solutions

Developing Healthy and Sustainable Environments

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our brand for conducting Audits

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Acknowledgement

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Our special thanks are due to **Hon. Sahebrao Haribhau Ghadge Patil Sir,** Founder; **Adv. Sou. Sumati Ghadge Patil Madam,** President; **Adv. Snehal Chavhan Patil Madam,** Vice President and Managing Director; **Mr. Manish Ghadge Patil Sir,** Secretary of Trimurti Pawan Prathishthan and everyone from the Management.

Our heartfelt thanks to **Dr. Anuradha Uttamrao Gore Madam;** Senior College Co-ordinator and especially to **Mrs. Rajbhoj Sanghamitra Shambhudeo Madam,** Principal Khasdar Shri. Govindrao Adik Law College for the valuable inputs.

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Sustainable Academe

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1. Introduction

1.1 About Trimurti Pawan Pratishthan

A parent Trust which is fully constituted with a prime intention to carry out various educational, cultural, social and industrial developments. The trustee has introduced these activities to develop the standard of education, cultural and social status of the rural areas adjacent to Shrirampur, Newasa, Rahuri, Shevgao, Telkudgaon, Ghogargaon, Newasa Phata (Head Office), Dhamangaon railway in Vidarbha and other areas.

1.2 Vision and Mission Statement of College

Our Vision - "TAMSO MA JYOTIRGAMAYA"

Our Mission - To elaborate all the students teachers alumni and parents in quality improvement and sustainability process; to develop standard quality of teaching and learning methods of highest standard and to achieve accreditation for all the programmes different legal authorities.

1.3 Institutions in the premises

The Premises is situated in the prime location of Ahmednagar with close proximity recreational and amenities such Hospital, Fire-fighting extinguishers and much more. During the entire day schedule with smooth transition of internal student traffic management which is highly commendable.

The Building houses only the Law College - Khasdar Shri. Govindrao Adik Law College. It was established in the year 1998 with motto of college being "ADHYAPANAM BRAHMA YADNYHA" Strategically located in the heart of the city, the college is fully equipped with state-of-art facilities and well qualified teachers. The college is affiliated to Savitribai Phule Pune University

The aim of the college is to continuously enhance the teaching methods in order to provide students with an opportunity for their all-round development. It also strives for excellence in academics and makes an effort to induce passion for learning along with the inspiration for decisive thinking and assessment, thereby helping them to

become the best professionals in their chosen careers.

The institution offers the following courses:

- LL.B. (Three Years Law Course) Semester Pattern
- B.A.LL.B. (Five Years Law Course)

The College aims at training young women and men to be competent, committed and compassionate, and lead in all walks of life.

1.4 Assessment of the College

The following are details of the NAAC accreditation for Clara's College of Commerce

- Cycle – First cycle
- Grade - C Grade
- CGPA – 1.99
- Year of application -2019

The college is ISO Certified.

2. Institution overview

2.1 Populace analysis for Academic year 2019-20

2.1.1 Students data

The student data (shared by the College) shows there are total of **234** students occupying the premises out of which Boys form the majority of **190** in numbers.

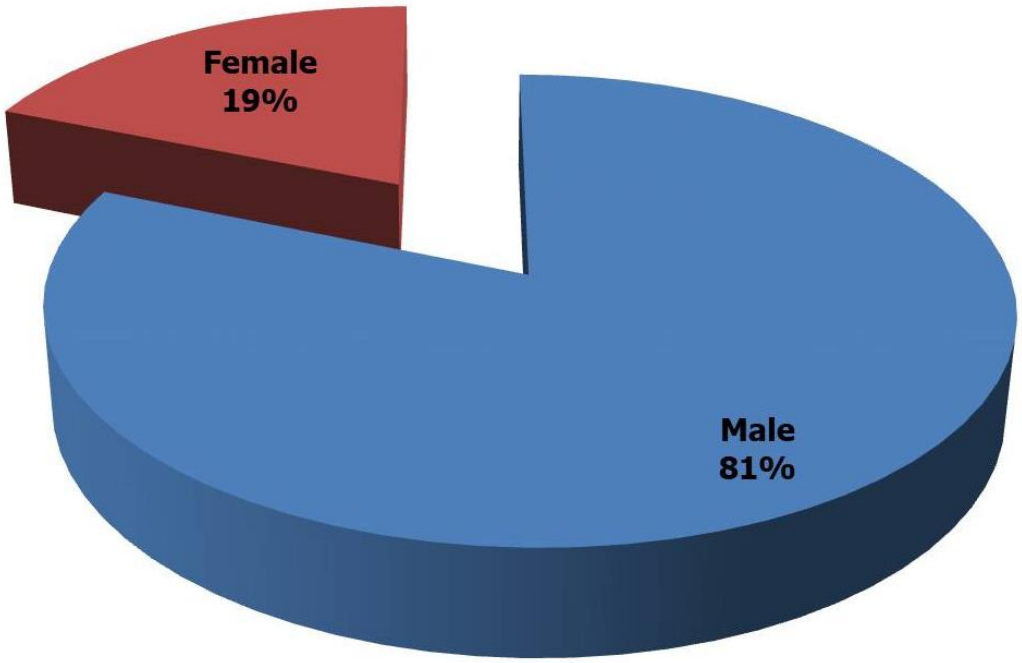

Figure 1: Summary of the students in Academic year 2019-20

The above graph shows **boys occupied 81%** as compared to **girls 19%**

2.1.2 Staff data for 2019-20

Type	Male	Female	Total
Teaching Staff	9	9	**18**
Non-Teaching Staff	2	2	**4**
Administrative Staff	2	2	**4**
Total	**13**	**13**	**26**

Table 1: Staff data of the Institution

The staff data shows the premise has a total of **26** staff members.

2.2 Populace analysis for Academic year 2020-21

2.2.1 Students data

The student data (shared by the College) shows there are total of **265** students occupying the premises out of which Boys form the majority of **207** in numbers.

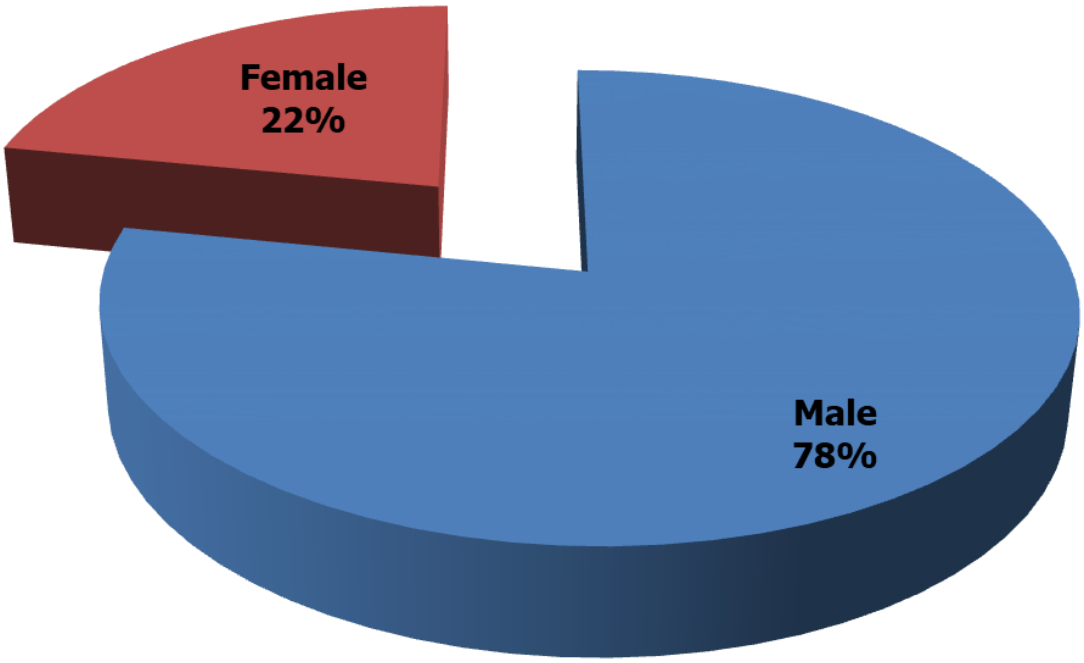

Figure 2: Summary of the students in Academic year 2020-21

The above graph shows **boys occupied 78%** as compared to **girls 22%**

2.2.2 Staff data for 2020-21

Type	Male	Female	Total
Teaching Staff	7	12	**19**
Non-Teaching Staff	0	4	**4**
Administrative Staff	2	2	**4**
Total	9	14	**27**

Table 2: Staff data of the Institution

The staff data shows the premise has a total of **27** staff members.

2.3 Site analysis

The following listed are some of the positive site elements which are beneficial to the college in terms of tangible and intangible benefits.

- **Location -** The Khasdar Shri. Govindrao Adik Law College is located behind Octroi Naka, Newasa Road, Taluka Shrirampur Dist Ahmadnagar – 413709 and falls under the Shrirampur Nagarpalika of Ahmednagar district Municipal Corporation.
- **Neighbourhood context -** The premise is surrounding by Residential areas on the North the immediate surroundings of the site. On the North-West there is Hundekari Motors Pvt. Ltd. a commercial establishment and it lies behind Octroi Naka on North-East side these are two major landmarks.
- **Natural physical features –** The premise includes a rich biodiversity and huge number of plants in the adjacent open space.
- **Manmade features –** The premise is situated in an urban area amidst residential societies with close proximity to all necessary amenities. The materials used for construction are RCC and the landscaping includes natural trees as well as potted plants.
- **Circulation –** There is a smooth transition of pedestrian traffic inside the premises due to the large entrance gate and the huge open space where vehicles of students and staff is parked.
- **Climate –** Ahmednagar is 661m above sea level. The climate in Ahmednagar is referred to as a local steppe climate. During the year there is little rainfall. The Köppen-Geiger climate classification is BSh. In Ahmednagar, the average annual temperature is 25.3 °C | 77.6 °F. The rainfall here is around 785 mm | 30.9 inch per year.

(Source: https://en.climate-data.org/asia/india/maharashtra/ahmadnagar-2808/)

2.4 Total Institute Area & College Building Spread Area

The total site area is 2 acres and total built-up area is 90,000 sq. ft. for approx. 288 footfalls.

2.5 Institute Infrastructure

2.5.1 Establishment

The building was established in 1999 and renovated in May 2019. The Building is a Reinforced Cement Concrete (RCC) framework building. Overall the Infrastructure of the Building is good.

2.5.2 Spatial Organisation

The overall ambience of the College is warm and inviting. The classrooms and other spaces have ample natural ventilation in the form of clear glass windows with fresh air ventilation. The architecture of the building is quite well designed. The color palette not just helps the building to stand out but also provides an Institutional arena. It balances with the local architecture and the brown sloping roof merges with the natural landscapes of huge coconut trees all around.

There are 2 Buildings in the Campus with Building A being of two floors and Building B being 4 floors. There is a separate provision for Guest House. There are no false ceilings in the campus. The floors are mostly typical and floor to floor height is 10 ft of a classroom. There are no lifts in the premise. There are provisions for CCTV in addition to amenities such as gymkhana, library. There are 6 meters in the Campus. Two are connected to Solar Panels hence no bills are generated. One is connected to the Guest House. The other meters are connected to the Building A and Building B.

2.5.3 Fire Safety

When the building was constructed Fire fighting norms and permission from Chief Fire Officer was not in practice. However, the Institution has taken care for adequate fire safety measures to be adopted. Each floor has an open staircase without any barriers for fire safety measures. These staircases are free of any kind of storage or combustible material.

The windows in each classroom are at a low height with fresh air and natural light thereby adding to ample ventilation throughout the day. There is a fire extinguisher in the passage on each floors. There is also provision of fire bucket in premises. As per the interview with the staff it was found that the college is soon going to adopt additional fire safety practices such as fire hydrant and others. The current facilities are quite well maintained. There are total of 11 fire extinguishers which are not expired.

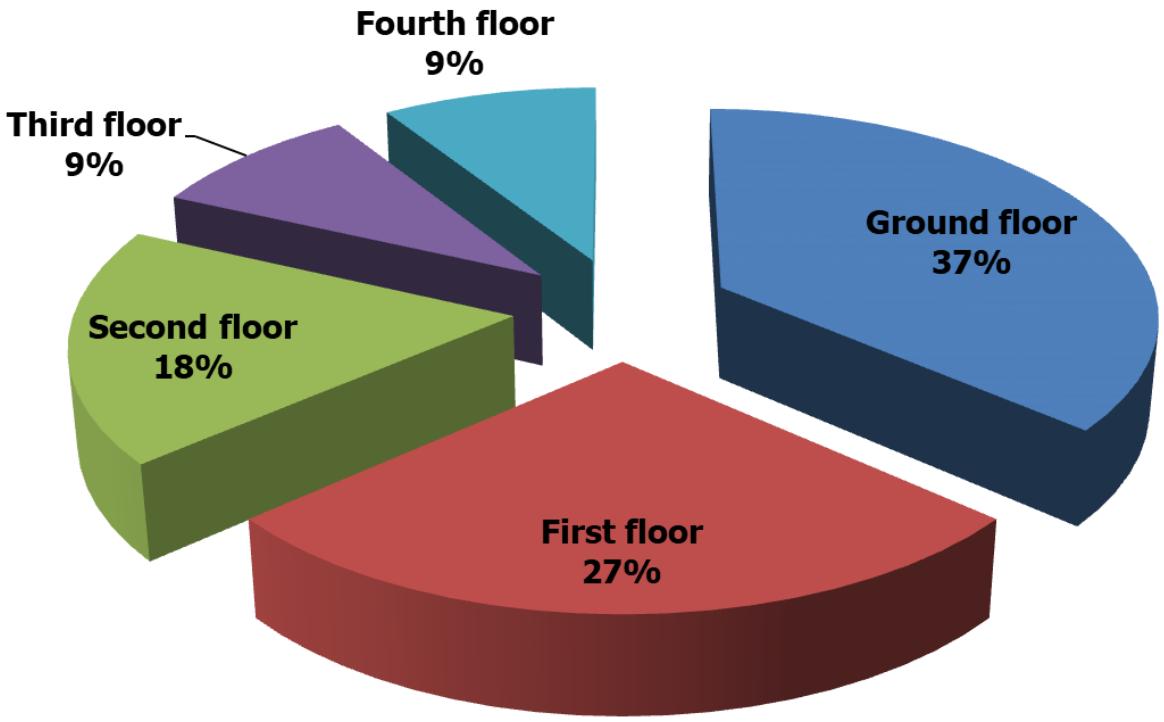

Figure 3: Summary of the fire-extinguishers in premises

The above summary shows Ground floor has maximum fire extinguishers being 4 in numbers.

2.5.4 Operation and Maintenance of the premises

The interview session with the staff regarding the operation and working hours is summarised in the table. The Institutions are open Monday to Friday for full day and Saturday is a half day. Sunday is an off for all.

S. No.	Section	Spaces	Time	Hours / day	Days in a year
1	Degree College	Student areas and Teaching faculty	8:30 a.m. to 5 p.m.	8.5	210
2	General areas	Admin areas and library, Passage, staircase, toilet, Trust office, Outdoor Compound lights, Outdoor - Pumps	8:30 a.m. to 5 p.m.	8.5	210

Table 3: Schedule of the timings of the premises

3. Green Audit

3.1 About the Green Audit

It is a systematic study of the aspects which make the Institution a sustainable and healthy premise for its inhabitants.

3.2 Analysis for the Green Audit

The procedure included detailed verification for the following:

Energy Audit

- Analysis of the lights, fans, A, equipment
- Renewable energy
- Scope for reducing the current energy bills if any
- Improvement in the thermal comfort of the campus

Water Audit

- Analysis of the current water consumption of campus
- Scope to include Rain water harvesting and Waste water treatment in campus

Waste Audit

- Current waste produced, its segregation and usage
- Strategies to be adopted for waste management and awareness

Environmental Audit

- Analysis of the current landscape + hardscape of campus
- Analysis of the flora and fauna of campus
- Strategies adopted at present to enhance vegetation
- Measures that can be adopted for ecological improvement of campus

3.3 Strategy adopted for conducting Green Audit

The strategies included data collection from admin department, actual inventory, investigation to check the operation and maintenance, analysis of the data collected and preparation of the Report.

3.4 Timeline of the activities for Green Audit

- 24 May 2021 – Discussion with the College
- 10 June 2021 – Initiation by the College to conduct Audit
- 26 June 2021 – Data collection completed and submitted
- 10 July 2021 – Submission of draft Report
- 24 July 2021 – Submission of Final Report

Ecological (Environment) Audit

Background reference image Yugal Shrivastava on pexels

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4. Ecological (Environmental) Audit

Environment is an essential part for human survival. We co-exist with the environment and it cannot be termed as a separate entity. The Ecological audit helps to understand the flora, fauna that exists and steps that can be taken to improve the same. To denote if there are problems related to sound in and around the surrounding. In terms of the carbon footprint it helps in keeping a tab on the eco-friendly habits incorporated by the inhabitants of the premise. Health today is the topmost priority, a general understanding of the initiatives undertaken along with sufficient hygiene practices adopted. Universal design is applicable to all built and unbuilt spaces. The premise needs to have facilities for students who are specially abled alike.

As part of our study we could state that the Institution has developed eco-friendly practices and sustainable solutions which are well reflected in the rich biodiversity of the Premises. The college has huge open space admeasuring approximately 345 sq.m of area which includes basketball court and open space used by staff and students.

4.1 Flora and Fauna Audit

4.1.1 Flora analysis

The landscape area in form of the open space adjacent to the ground is 2,490.11 sq. m. It has a variety of plantations as follows:

S. No.	Name	Nos.
1	Mango	3
2	Neem	4
3	Coconut	9
4	Chafa	4
5	Pam Tree	4
Total		**24**

Table 4: List of the Trees in the Campus

The above summary shows there are 24 Trees in the campus. The Mango tree is near the entrance whereas all other trees are on Play Ground and near entrance gate. Except *Chafa* tree all others are planted by students and staff during specific events.

S. No.	Name	Nos.
1	Rose	12
2	Arica	180
3	Lily	125
4	Hibiscus	4
5	Mogara	6
6	Kanher	2
7	Flowering Plant	35
8	Showy Plant	25
Total		**389**

Table 5: List of the Shrubs in the Campus

The above summary shows there are 389 shrubs in the campus. All of these are present in Play Ground and near entrance gate. Except *Kanher* shrub all others are planted by students and staff during specific events.

4.1.2 Green practices

We observed the following points during the Site investigation:

- The Institution does uses fertilisers thereby making efforts to maintain and increase ecology. The ample vegetation provides shade thereby benefiting the users.
- However the College can use organic fertiliser and also increase the use of locally adaptive plants in the premises.

4.1.3 Eco-friendly initiatives undertaken

The Institution has undertaken the following initiatives:

- Special NSS Camps
- Swachata Abhiyan
- Tree Plantation
- Nature Awareness and similar initiatives on occasion of 5 June

4.2 Noise Audit

4.2.1 Macro level

On a macro level there are settlements all around the campus thereby the College falls under Silent zone. However as per the data shared by College the maximum disturbance is caused due to Bus stand and railway station which is less than 20 mins by car followed by the amenities such as markets which are second major reason for sound disturbance. Overall, it the noise levels of the surrounding being medium has a certain impact on the premises.

4.2.2 Micro level

The college is surrounding by Residential areas on the all sides on micro level as the huge open space covered with greens helps in keeping noise levels low and students, staff do not have any disturbance in academics majorly. However there is provision for staff parking which causes some noise and so does the generators present in the campus but this is rare as it only causes noise when it is in use.

4.3 Carbon Footprint Audit

4.3.1 Eco-friendly Commuting Practices

The premise is close to Shrirampur Bus Stand by 25 mins by walking distance of 2.1 km and nearest railway station Belapur (Shrirampur) by 20 mins by walking distance of 1.6 km. This acts as a major benefit in reducing air pollution and land development impacts from personal automobile use as most of College Student and Staff use public transportation facility to commute.

Based on data collection and discussion with staff the following points were noted:

- **Ease of commuting -** The college provides two buses for students and staff to commute from nearby places.
- **Parent's commute -** There are 2 Parent-teacher meetings held in a year.
- **Visitors vehicles –** Approximately 100 visitors with vehicles visit the campus daily, but visitors vehicles are not parked in the campus.
- **Energy sources –** 10 litres of fuel is used on a daily basis for Generators and 3 Gas Cylinders are used in Canteen for which on an average Rs. 100/- is spent daily for transporting for vegetables and other materials for canteen.

- **Parking details** – The students commute from Rahuri, Rahata, Puntamba, Newasa, Nagar, Shirdi, Loni, Kolhar, Belapur, Padhegaon, Taklibhan, Kopargaon, Shrirampur , Deolali Pravara, the details of vehicles are summarised in tabular format below.

Total Number of vehicles used by stakeholders of College (per day) excluding parking provisions				
S. No.	**Vehicles**	**Nos.**	**Average distance travelled**	**Approximate quantity of fuel**
1	Cycle	44	10Km	NA
2	Bike	100	25Km	1lit.
3	Cars	4	50Km	4lit.
4	Bus	2	30Km	4lit
5	Common (public) transportation	52	35Km	4-5lit.

Table 6: Vehicles usage by stakeholder of campus

4.3.2 Heat Island Reduction

The Institution has adopted the following practices which are yielding positive results in terms of Urban Heat Island Effect which refers to increase in temperature of the surrounding because of ineffective strategies.

Exposed roof areas – The Building A terrace is covered with solar panels; the Building B and Canteen, Guest House terrace area is painted in white which reflects the heat, thereby maintaining the Internal temperature in control.

Exposed non-roof hardscape areas - There is a pathway on all sides of the premises. There are huge open spaces with lush greens these help in maintaining the micro climate of the surrounding to a major extent.

4.3.3 No Outdoor Light Pollution

The college compound lights are not upward looking there not causing light pollution.

4.4 Health & Hygiene Audit

4.4.1 Smoke Exposure

As per the Site visit the following analysis has a positive impact on premises.

- Canteen uses Gas cylinders for cooking, there is no utilisation of fire wood. Thus there is no smoke from burning of fire wood and any health issues related to the same.
- The garbage in campus is not burnt and handed over to local municipality truck on a daily basis in morning
- The Institution is a tobacco and smoke free campus which helps in adapting to a Healthy Institution
- There is a huge open space in campus which is allowed for social gathering among students. It is also used for sports, outdoor games, annual days, cultural functions. The open space is used for physical activities by the students. It is also given to outsiders.
- There is parking provision inside the campus hence there is no dust or air pollution.

4.4.2 Hygiene

- For overall hygiene of the students and staff there are facilities such as Washroom, napkin disposal, waterless urinals, hand wash, sanitary vending machine, drinking water facility.
- There are 2 sanitary pad machines in the campus. The toilets areas were checked during the site investigation and it was found that the hygiene of toilet areas is we maintained.
- The entire campus is cleaned on a daily basis
- There is a designated Hygiene specialist and Maintenance staff who keep a regular check about the operation and maintenance of the toilet areas and the equipments, lights and all facilities on each floor
- Water management initiative with appropriate hygiene. The areas of water tanks in site on ground floor is clean and no mosquito breeding spots were found.
- There are pest controls program practiced with appropriate sanitation facilities.

4.5 Universal Campus

As per World Report on Disability, 2011 there are 180 million approx. Persons with Disabilities that makes it 15% of total population of India.

The college has provisions for resting places (seating areas) in the campus outdoors, thereby making it user friendly for the specially abled students. The design of the premises is appropriate for access with passages and corridors being wide. The single loaded corridors are safe from fire safety as there are staircases and fire extinguishers provided on every floor. There is a ramp and universal toilet in campus.

4.6 Recommendations for a Sustainable Habitat

a) Promote the use of Eco-friendly vehicles

There can be provision for cycle and battery operated vehicles/ low emission vehicles such as electrically driven vehicles parking in open space along with battery charge points, this would inspire students to change mode of transportation and adopt sustainable practices.

b) Low VOC Paints and Adhesives

Whenever the College undergoes repairs or renovations there should be use of materials with low emissions so as to reduce the adverse health impacts on workmen and the students occupying the space thereafter.

c) Grass pavers in the setback areas

The college can have grass pavers for in replacement to existing paving for further heat island reduction on exposed non-roof areas

d) Scientific names/ Name plates

There can be names plates for each plant and tree in premises with regular and scientific name to increase awareness.

e) Resting places

There should be increased provision for resting places in premises in outdoor and indoor.

Site investigation and data collection

Trimurti Pawan Pratishthan

Khas .Govindrao Adik Law College Shrirampur

Photograph of Event / Programme

SWACHATA ABHIYAN

Trimurti Pawan Pratishthan

Khas .Govindrao Adik Law College Shrirampur

Photograph of Event / Programme SPECIAL NSS CAMP

Trimurti Pawan Pratishthan

Khas .Govindrao Adik Law College Shrirampur

Photograph of Event / Programme BLOOD DONATION

Trimurti Pawan Pratishthan

Khas .Govindrao Adik Law College Shrirampur

Photograph of Event / Programme TREE PLANTATION

Waste Audit

Background reference image Polina Tankilevitch on pexels

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5. Waste Audit

Waste is an inevitable part of our lives. Over the years as the awareness about waste management techniques has given a rise to rethink how the waste can be avoided form being sent to the landfills. The audit provides an approximation of the types of waste generated, location of waste collections, disposal techniques used, waste segregation methodologies adopted, waste management strategies that are and implemented in addition to the newer ways the can be adopted aiming to make the premise clean and sustainable. Here sustainable refers to a broader aspect to analyse whether the current techniques are having positive or negative effect on the stakeholders of the premises.

5.1 Waste produced

5.1.1 Types and disposal of waste in Premise

The types of waste collected in the campus are as follows:

S. No.	Type of waste	Source and quantity	Current disposal method	Can be treated?	Methodology
1	Solid waste	Toilets and others – Biodegradable waste of 2kg per week	Raddi	Yes	TREATED - Small biogas plant can be proposed in open space
2	Liquid waste	Toilets, wash basin, urinals, taps approx. 500 litres per week	Drain	Yes	TREATED - Waste water treatment plant so that treated water can be reused for gardening
3	Dry waste	Open space & plantations, papers - Biodegradable waste of 5-6 kg per week	Dumped in the existing pit	Yes	TREATED - Vermicomposting
4	Organic waste and Other waste	Biodegradable waste of 15-18 kg per week	Handed over to Municipality	Yes	TREATED - Vermicomposting
5	Medical Waste	Biodegradable waste of 1-2 kg per week	Handed over to Municipality	Yes	TREATED - Vermicomposting
6	E-Waste	Biodegradable waste of 500 gm per week	Handed over to Vendor	Yes	RECYCLED - Can be given to e-waste companies

Table 7: Summary of the types of waste produced in the premises

5.1.2 Bins summary

There are 42 Portable plastic dustbins of 7 litres each which are small in size and 4 large plastic and cement dustbin of 60 litres in the outdoor of the premise in garden area.

The indoor –outdoor analysis of dustbins is presented below.

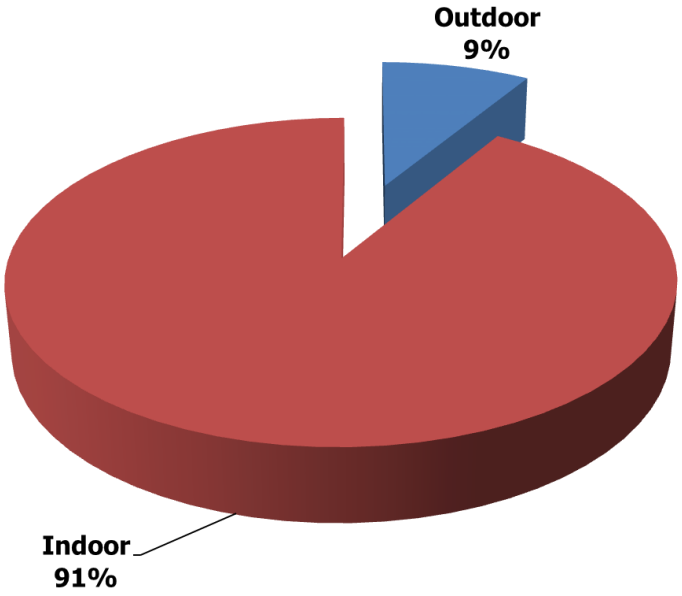

Figure 4: Analysis of dustbins in the premise

The above analysis shows the among the dustbins **91% are in the Indoor spaces** (On all floors, classrooms) and **9% in the outdoor spaces** (setbacks, pathways, open space, along the plantations area).

The floor-wise bifurcation is presented below.

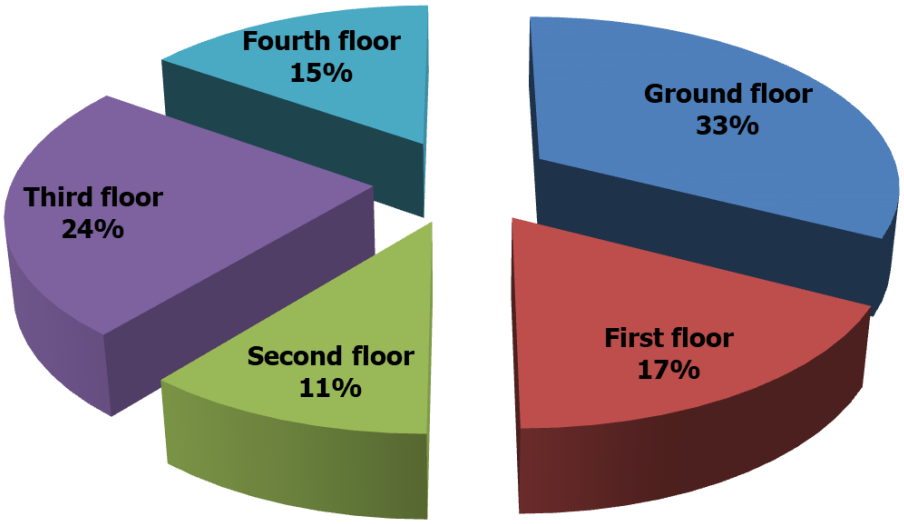

Figure 5: Floor wise analysis of the dustbins

The above analysis shows the following.

- **Ground floor occupies the maximum number of 15 dustbins** collecting approx. 12.5 kg of waste daily at 33%.
- **Third floor has 11 dustbins** collects approx. 4.5 kg of waste daily at 24%
- **First floor has 8 dustbins** collects approx. 6 kg of waste daily at 17%
- **Fourth floor has 7 dustbins** collects approx. 1.5 kg of waste daily at 15%
- **Second floor has 5 dustbins** collects approx. 4.5 kg of waste daily at 11%

5.2 Waste handling

Quantification wise as per Interview and survey it was found that dry waste and organic waste collected is approximately 25 kg per week.

The waste produced on campus is segregated. It is collected on a regular basis as the campus and ground is cleaned daily. The waste is collated in large bins (at present in the open space) and then handed over to the local municipality van every morning. There is a dumping pit in the garden which should not be there.

5.3 Waste management

The Waste disposal takes place on a daily basis (For bio-degradable and non-biodegradable waste). The campus is cleaned on a daily basis. There are no bifurcations and collection is done manually. Most of it is handed over to municipality. Though there are waste management practices undertakes such as composting (College is preparing a new compost pit); recycling by putting in the existing pit.

Ample measures are taken to maintain hygiene. No smell problem or health related issues due to the waste are there. There are adequate numbers of bins present in all parts of building. The waste does not pollute the ground or surface water. There is no problem of air pollution from waste as informed.

The wastes from toilets are discharged to main drains through underground covered channels thus avoiding any incident. There is provision for Sanitary Napkin Disposal Machine in the premise.

The college practices waste wealth programmes and similar programmes though NSS Campaigns. There are signages in College mentioning awareness about cleanliness.

5.4 Recommendations for a Sustainable Habitat

a) Zero Organic Waste compost

The college can undertake a zero organic waste protocol. The following practices can be adopted as part of the same.

- The existing dumping pit can be converted into compost pit.
- The food waste generated by the students and staffs are taken by them to their own home so that, minimum waste is generated inside the premises.
- The organic waste generated in the canteen is used as feed for a biogas plant and the biogas is used as fuel in college canteen.
- Vegetable waste and other leaf litters can be used to feed in the vermi-compost pit and the resulting vermin-cast is used as manure in the garden.
- Waste water treatment plant can be set up for the liquid waste so that treated water can be reused for gardening.

As part of the above there will be a requirement for a Biogas plant, vermin-compost pit, awareness signages.

b) Organic Compost

As we have suggested in the Ecological Audit the provision for sustainable practices such as Kitchen garden and Terrace Garden there can be an organic compost pit in the open space in premises.

c) Twin Dual Litter Dustbin Bins

There should be more number of dual litter dustbins at various locations in areas such as Canteen, open spaces. This would inculcate the awareness of waste segregation among students.


USE ME


USE ME

Water Audit

Background reference image Vlad Chetan on pexels

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6. Water Audit

Water is one of the basic needs. Pure drinking water is a resource which needs to be preserved efficiently. Water audit helps to identify the sources of water consumption, the water requirement by the campus met by these sources. The points and effective usage of without any wastage. Understanding the techniques which are best suited to the site to increase water conservation in terms of awareness and practice.

6.1 Water availability and consumption

6.1.1 Primary supply

The main source of water is through the Local Municipal supply of Shrirampur Nagarpalika which is purified before supply. The total water consumption through the tanks on site is as follows, there is provision of Water Cooler (RO) for drinking water which consumes 575W for approximately 8.5 hours daily it is connected to Aquauard present in the campus (4 in nos.) providing 150 litres of drinking water with actual capacity being 200 litres.

S. No.	Type of tank	Nos.	Location	Capacity in litres
1	Underground Tank	2	Near the entrance	4,000
2	Underground Tank	1	Near the canteen	1,000
3	Overhead tank	14	Terrace	8,000
4	Additional storage for water supply in canteen	2	Inside Kitchen	1,000
Total				**14,000**

Table 8: Tanks in the premise

6.1.2 Secondary supply

a) **Well** as underground water facility is available in the open space. The water is pumped using submersible pump of 2 HP for about 2 hours a day. Usually, in summer season it is used for more hours, in rainy season and winter season it is used comparatively for lesser duration depending on the quantity of water availability and requirement. The hygiene of this area is well maintained and there are no leakages. There is an automatic ground water recharge and daily water is pumped for toilets and general usage.

b) **Rain Water Harvesting –** The college collects rain water from terrace and stores it in a 500 litres water tank which is used for watering the plants.

6.2 Water requirement

The main areas of water requirement and type of usage is as follows

- **Drinking water –** General water required for drinking purpose
- **Toilet blocks** – General usage by occupants in toilets, urinals, bathrooms, wash basins using approx. 300 litres of water daily.
- **Garden and surrounding open space** – Cleaning, watering the plants requires approximately more than 100-150 litres of water on a daily basis in winter season and about 2-3 times a day in summer season.
- **Canteen** – Approximately 100 people can be occupied at one time in the Canteen. There are 8 water taps which are connected to water tank. It requires on an average 100 litres of daily water consumption. The waste water is drained to the plants after recycling.

6.3 Areas of water usage

The following is a summary of the general water usage spaces - toilets, urinals, shower, flush tanks and wash basins/ taps in the premise.

S. No.	Floor	Lavatories				Taps				Flush tank (Single type)			
		Girls	Boys	Staff	Total	Girls	Boys	Staff	Total	Girls	Boys	Staff	Total
1	Ground	6	5	8	19	10	6	13	29	5	4	7	16
2	First	1			1	1			1				
3	Second		9	2	11		18	4	22	1	5	2	8
4	Third		1		1		3		3		1		1
5	Fourth			4	4			8	8			4	4
Grand total		**7**	**15**	**14**	**36**	**11**	**27**	**25**	**63**	**6**	**10**	**13**	**29**

Table 9: Summary of the water consumption in the premises

Based on the inventory done and data shared by the staff it was found that the premise has a total of 36 lavatories (including urinals), 63 taps and 29 flush tanks.

6.4 Water bill

As part of the Inventory verification and data collection, the water bill was collected. Following is the analysis of the water bill.

There is a direct use of 14,000 litres of water on a daily basis through the local

Municipal connection. The bill is generated for duration of 1 year. The charges include sewerage charges as part of the water charges and the cost was Rs. 6,000 for 2 taps connected to Municipal connected.

6.5 Site investigation about water management.

- There is no water leakage in the entire premise, the pipes are well maintained with adequate hygiene.
- The premise has an efficient water management in terms of operations and maintenance. The toilets were kept very tidy and are cleaned once every day.
- The college has rainwater harvesting system in the form of water stored in tanks which is very useful and the water is used for gardening.
- There are sufficient numbers of taps in the premise.
- The waste water from Canteen is reused in garden.
- Signages are included in with information about avoiding water wastage.

6.6 Recommendations for a Sustainable Habitat

Below mentioned are few suggestions for better water management practices in the premise.

- Toilet – Replace the existing single flush cisterns with dual flush, if possible to include waterless urinals or e-toilets
- At least 1 toilet should be made for specially abled as per universal design norms.
- The waste water from toilets should be collected and a waste water treatment plant can be installed in the open space wherein this water can be treated and reused for gardening and toilet flushing.
- Additional safety and a concrete support can be provided for the Water tank above toilet.

Site investigation and data collection

Energy Audit

Background reference image Janko Ferlic on pexels

Greenvio Solutions

7. Energy Audit

7.1 Sources of Energy consumption

The premise uses following sources of energy consumption.

7.1.1 Primary sources

1. **Electrical (Metered) –** Light, Fans, AC, Equipments, Pumps consuming approximately 35,000 kWh of units from 6 meters, out of this 10kW or 10,000 watts is provided by Solar Panels which result is zero costing for two meters and the balance energy is consumed through the 4 meters in the premise. These cost approximately more than Rs. 2,50,000/- per month.
2. **Electricity (Solar) –** There are Solar Panels in campus, they generate up to 10 kW of energy and it is connected to two meters. The energy is utilised in premise.
3. **Fuel oil (Diesel generator) –** During examination as a backup approximate 24 litres of diesel for Rs. 2,000/- per month.
4. **LPG –** There are 3 Gas cylinders used in the premise costing Rs. 820/- per cylinder per month.

7.1.2 Secondary sources

1. **UPS –** There are 7 UPS in the campus as a backup.
2. **RO –** This is one of the major consumers of electricity consumption, it provides up to 150 litres of drinking water supply on a daily basis.

7.2 Site investigation analysis

The Site investigation observations and interviews with the Maintenance staff, Electrical department in charge are summarised below:

- Generators are used as a backup for the annual or large functions held in open ground occasionally. There are 7 UPS/ Diesel Generator in the campus.
- The switch-off drills are not practised at present.
- The computers are shut-off after use and also put on power saving mode.
- There are display boards encouraging to save energy.

7.3 Actual Electrical Consumption as per Bills

The admin department had shared the bills for Meter which is connected to all floors and is main source of energy supply. The supplier is Maharashtra State Electricity Distribution Limited. The type of supply is 90/ **LT – Low Tension (Res 1-Phase).** The analysis of actual electrical energy consumption for meters is summarised below.

Month	Meter 1 No. 076062357 48	Meter 2 No. 055-X1012006	Meter 3 No. 06600029797	Meter 4 No. 09000055604	Meter 5 No. 06503321713	Meter 6 No. 5396697094
		Connected to Solar Panel from September 2019		Connected to Solar Panel from September 2019		
	Energy consumed in kW					
July, 2018	564		60			
August, 2018	584		55			
September, 2018	770	770	39			
October, 2018	574	574	32	90		
November, 2018	521	521	43	0	320	
December, 2018	460	480	51	0	435	
January, 2019	448	448	21	0	507	
February, 2019	624	624	44	0	521	
March, 2019	572	592	59	0	574	
April, 2019	627	627	70	30	863	
May, 2019	756	756	160	0	972	
June, 2019	658	658	130	0	1166	
July, 2019	658		17	0	475	
August, 2019			71	0	503	
September, 2019			49	30	668	49

October, 2019			87	0	637	87
November, 2019			47	0	331	47
December, 2019			17	0	450	17
January, 2020			81	0	408	81
February, 2020			93	0	800	93
March, 2020			66	0	616	66
April, 2020			80	37	98	80
May, 2020			80	37	56	80
June, 2020			99	0	863	90
July, 2020			33	37	275	33
August, 2020			33	0	305	33
September, 2020				0	268	57
October, 2020				0	295	47
November, 2020				0	330	161
December, 2020				0	372	126
January, 2021				0	476	134
February, 2021				0	750	114
March, 2021				0	610	94

Table 10: Summary of the Bills data

The solar panels were installed in September 2019. Post which the cost of electricity has reduced by Rs. 1,65,000/- per month.

7.4 Calculated Electrical Consumption as per inventory

The electricity bills provide actual consumption data. The following is the calculated consumption. It is done to understand the percentage of energy usage in the premises by various applications. It is based on the inventory collected and interviews with the staff. The additional data such as wattage is taken from market research. In terms of electrical consumption, the main sources are lights, fans, ac, equipment. In this the key energy is consumed by Motors used for AC which are considered in equipment analysis. The inventory and data collection for sources of energy consumed in the premise in summarised in the following sections.

Note: The following analysis is combined for entire premise as meters are connected.

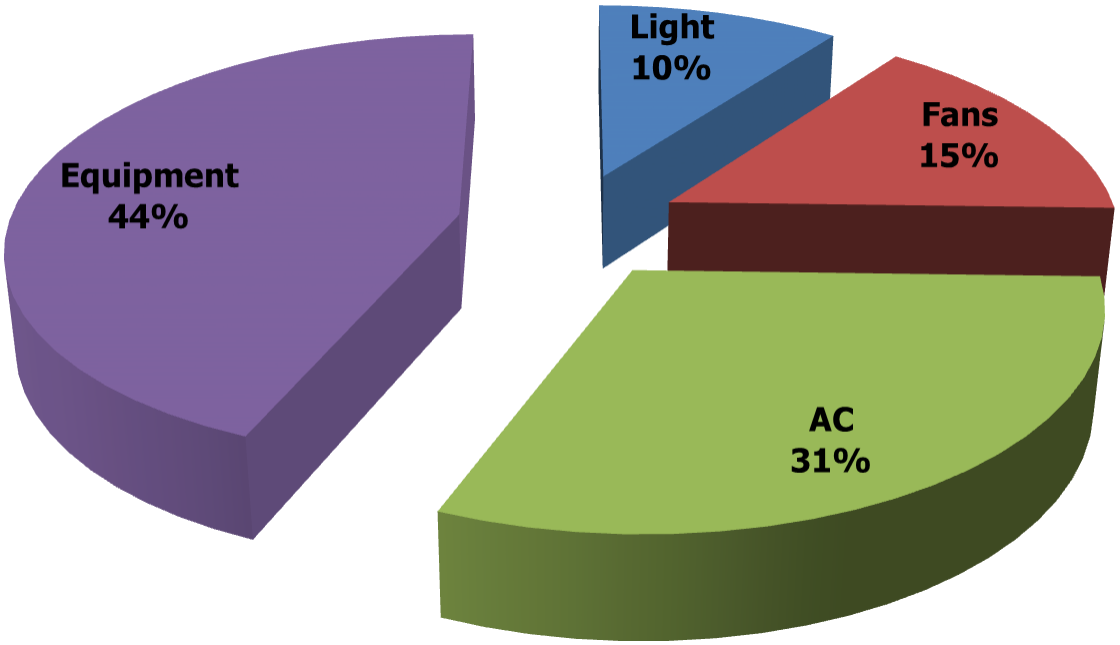


Figure 6: Summary of the Calculated Electrical Consumption as per inventory

The above graph shows that Equipment consumes 44% followed by AC at 31% while Fans consume 15% and Lights consume 12% of the total calculated electrical energy.

7.5 Lights

7.5.1 Types of lights

There are a total of **294 lights all of these are LED** in the campus.

S. No.	Type of Light	Wattage	Total
1	Type 1	20 W	198
2	Type 2	35 W	38
3	Type 3	100 W	12
4	Type 4	10 W	1
5	Type 5	18 W	45

Table 11: Brief summary of the types of lights in the premise

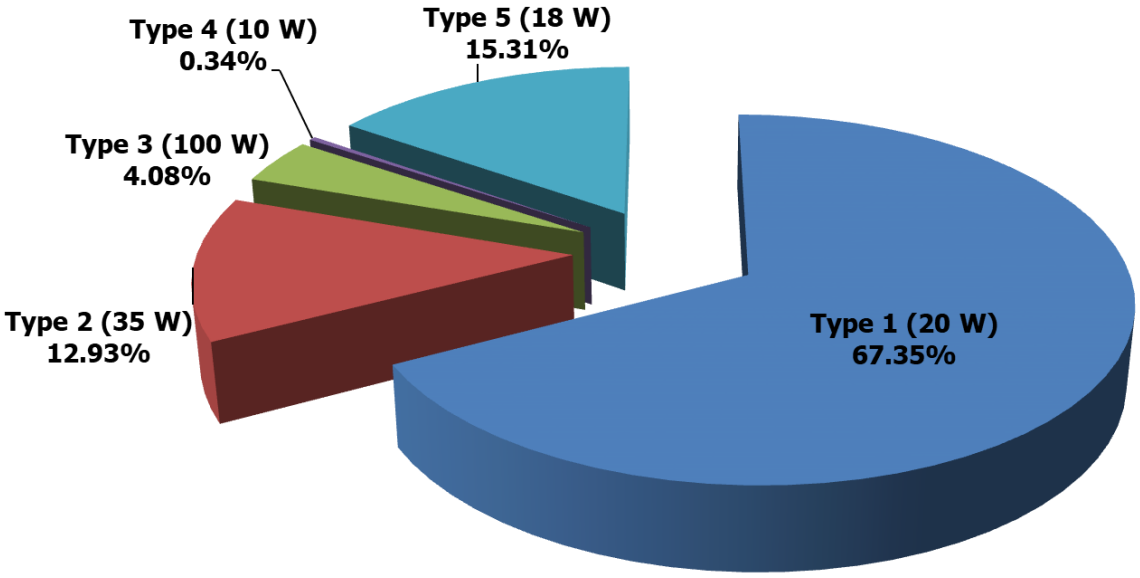


Figure 7: Types of Lights in the campus

The above analysis shows that **Type 1 (20W) consumes the maximum energy at 67.35% at 3,974 kWh** whereas the least energy is consumed by **Type 4 (10W) of only 0.34% at 17 kWh.**

7.5.2 Floor wise energy consumption

The total light consumption amounts to **4,862 kWh**, the floor wise consumption in kWh of all lights is as follows:

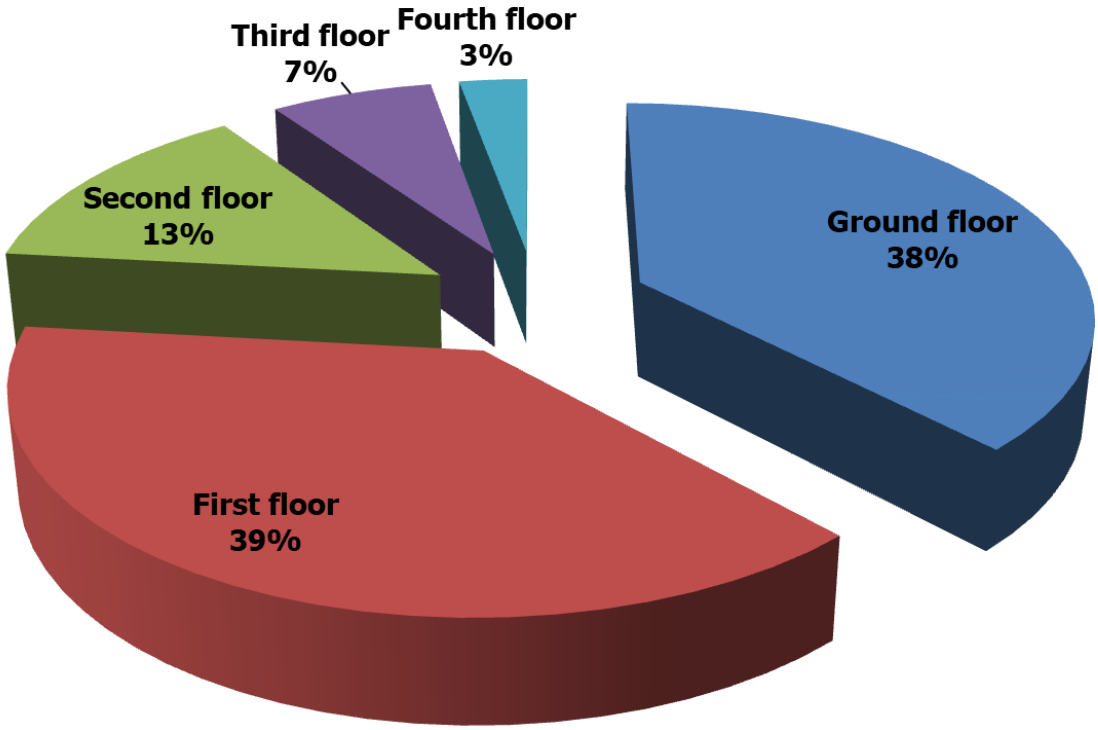


Figure 8: Floor wise energy consumption of lights

The **First floor consumes 1,884 kWh at 39%** which has *maximum 38W type of lights* followed by the **Ground floor consuming 1,846 kWh at 38%** owing to the *more number of 20W lights*. The **second floor consumes 664 kWh at 13%** followed by **Third floor consuming 330 kWh at 7%** and the **Fourth consumes the least energy of 139 kWh at 0.49%.**

7.5.3 Requirement of NAAC

7.5.3.1 Alternative Energy Initiative

Percentage of power requirement met by renewable energy sources – There are solar panels available in premise at present, these provide a total of 10 kW of energy and are connected to two meters of the six meters in premise, thereby the energy produced is utilised within the premise.

7.5.3.2 Percentage of lighting power requirement met through LED bulbs

Percentage of lighting power requirement met through LED bulbs

The entire campus has LED lights in form of bulbs and Tubelights.

Hence the 100% of the lighting requirement is met through LED.

7.5.4 Site investigation observations

Some of the points noticed are as follows:

1. All of the lights are led
2. All lights are in working conditions
3. Daily monitoring and check is done by the maintenance staff.
4. There was no fuse defect observed.

7.6 Fans

7.6.1 Types of fans

There are a total of **147 fans** in the campus. The following table shows the various types of fans per floor in the premises.

S. No.	Type	Nos.
1	Ceiling fan	142
2	Wall mounted fan	5
Total		147

Table 12: Summary of the types of fans in premise

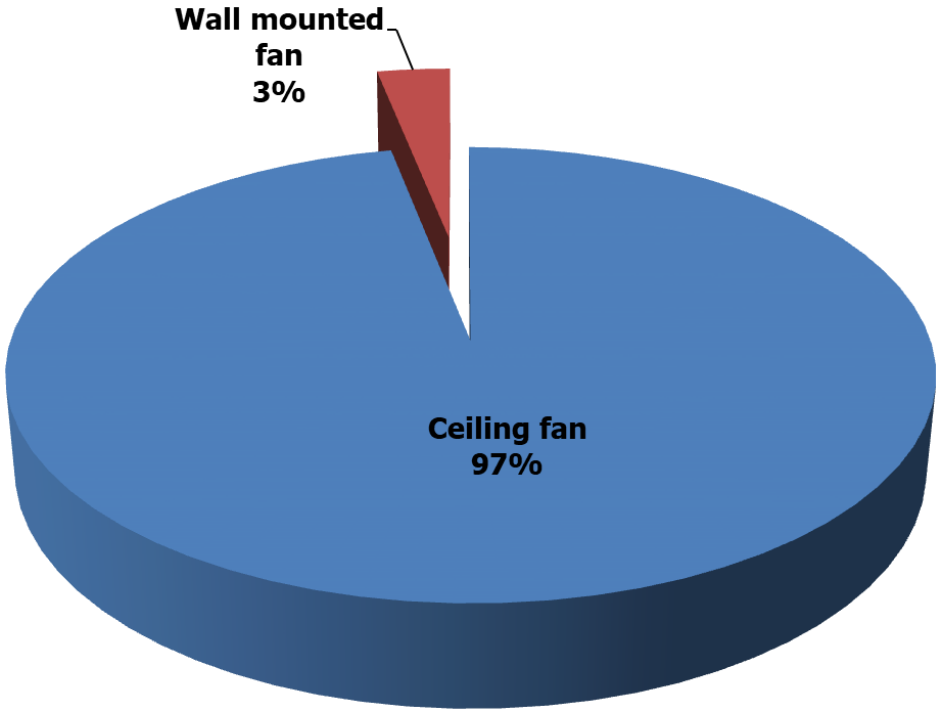


Figure 9: Types of Fans in the premise

The analysis of the types of fans in premises shows **Ceiling fans consume 7,028 kWh at 97%** and **Wall mounted fans consume 226 kWh at 3%**

7.6.2 Floor wise consumption analysis

The energy consumption of fans is **7,254** kWh of energy, the following graph shows the floor wise consumption.

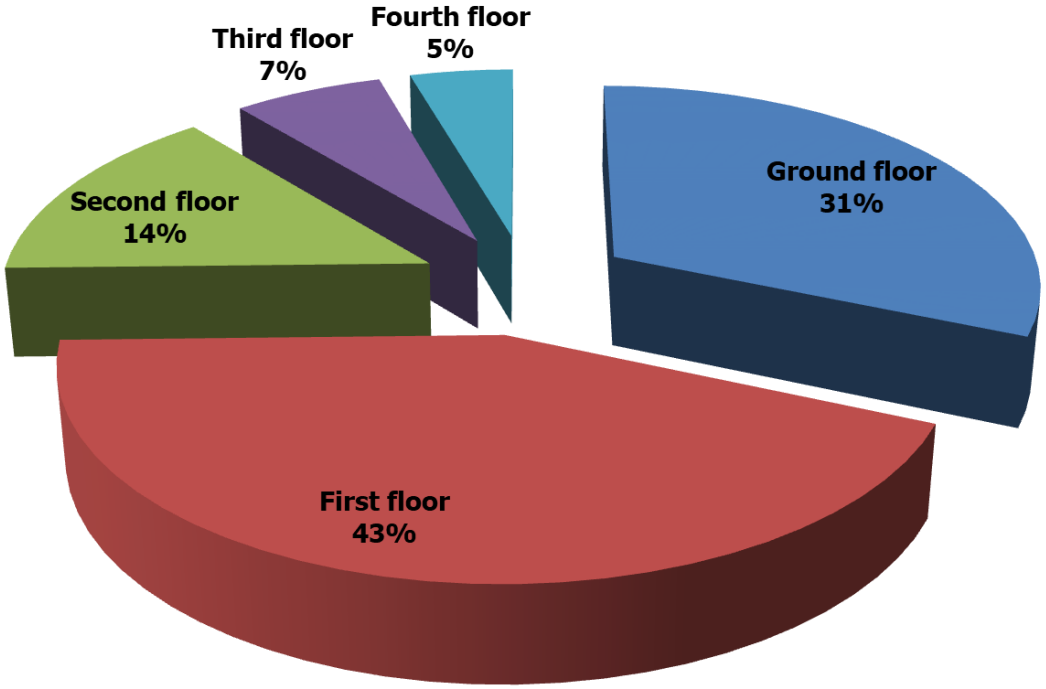


Figure 10: Energy consumed by fans

The above analysis shows the **First floor consumes the highest amount of energy of 3,137 kWh at 43%** followed by **Ground floor consuming 2,278 kWh at 31%;** the **Second floor consumes 1,040 kWh of energy at 14%** while the **Third floor consumes 473 kWh at 7%;** the **Fourth floor consumes 326 kWh at 5%** which is the least.

7.6.3 Site investigation observations

Some of the points noticed are as follows:

1. All fans are in working conditions
2. Daily monitoring and check is done by the maintenance staff and admin staff in an excellent manner.

7.7 AC

7.7.1 Types of AC

There are total of **14 Air conditioners** of 1.5 ton each in the premise. The summary of each is given in table below.

Room Name	Type of AC	Nos.	Make
Board Room	SPLIT	4	Voltas
			Voltas
			Voltas
			Voltas
IQAC Room	WINDOW AC	1	-
Principal Office	SPLIT	2	Voltas
			Voltas
Guest House	SPLIT	2	Voltas
			Voltas
Guest House	WINDOW AC	3	-
			-
			-
Computer Lab	WINDOW AC	2	-
			-

Table 13: Types of AC in the premise

7.7.2 AC Type – wise consumption analysis

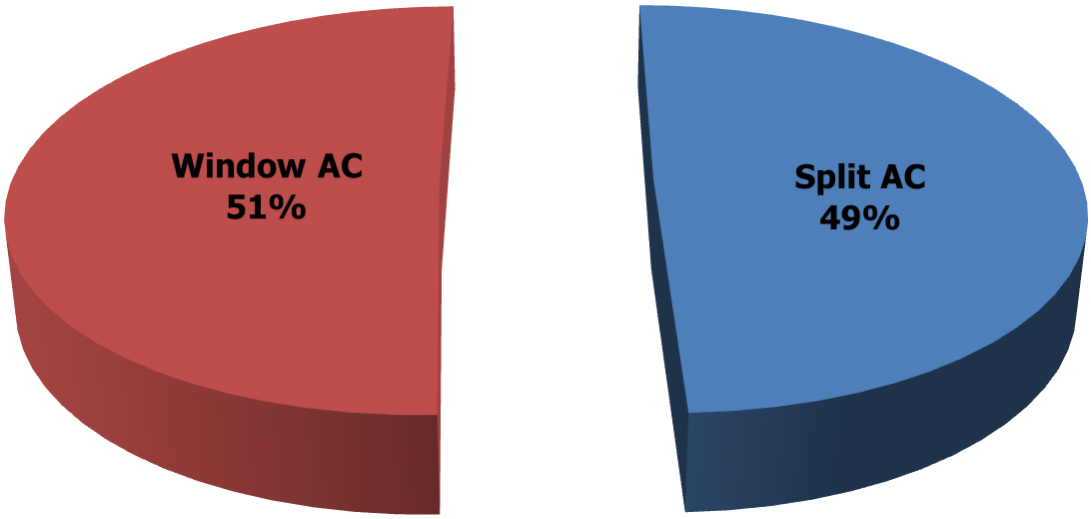


Figure 11: Type of AC in premise

The above analysis shows that **Window AC consume the maximum energy of 7,395 kWh at 51%** though they are only 6 in numbers whereas **the Split AC consume 7,242 kWh at 49%** but they are 8 in numbers.

7.7.3 Room – wise consumption analysis

The energy consumption of AC is **14,637** kWh of energy, the following graph shows the room wise consumption as all the AC's are located on the Ground floor.

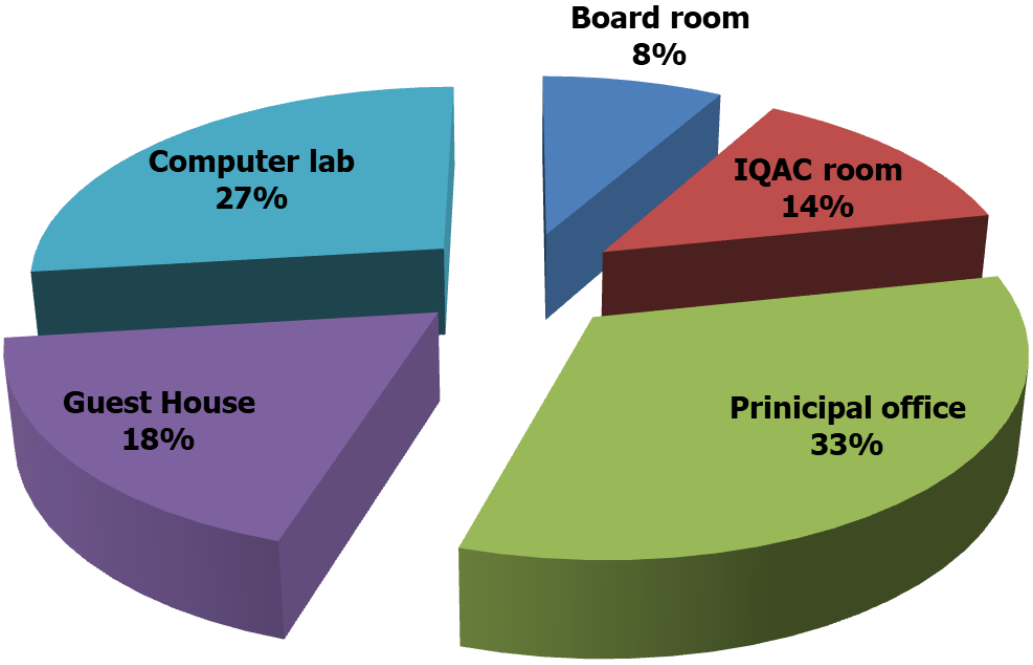


Figure 12: Energy consumed by AC room wise

The above analysis shows the **Principal Office consumes the highest amount of energy of 4,828 kWh at 33%** due to long usage hours whereas the **Board Room consumes 1,207 kWh at 8%** which is the least owing to minimal usage.

7.7.4 Site investigation observations

Some of the points noticed are as follows:

1. All AC are in working conditions.
2. Some of the AC are old and should be replaced.
3. Daily monitoring and check is done by the maintenance staff and admin staff in an excellent manner.
4. The Outdoor Units are properly cleaned and maintained well
5. The Outdoor Units do not have any dust collection problem was there while during audit.

7.8 Equipment

7.8.1 Types of Equipment

There are a total of **12 types of equipment totalling to 97 in number** in the premise. The various types are mentioned in the table below.

S. No.	Name	Nos.
1	Xerox Machine	2
2	Sanitary Napkin Disposal machine	2
3	Printer	4
4	LED Screen	4
5	Television	2
6	Computer	34
7	CCTV Camera	32
8	Web Camera	4
9	Water Pump (2 HP)	7
10	RO Water Cooler system	1
11	Projector	1
12	Aqua guard	4
Total		**97**

Table 14: Types of equipment in the premise

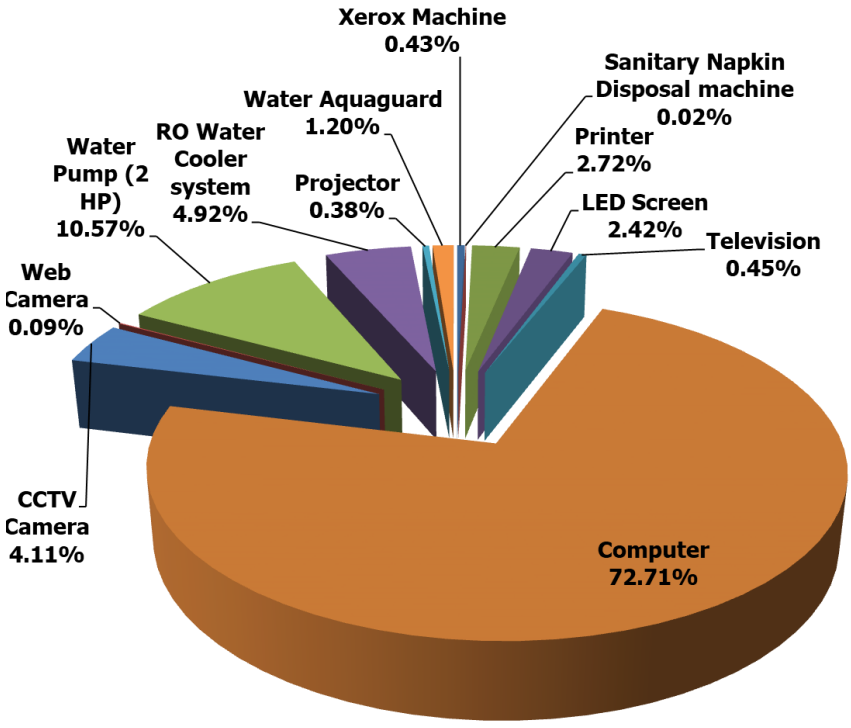


Figure 13: Summary Energy consumed by Equipment

The above summary shows that **Computer consumes more energy at 72.71%** while **Water Pump (2 HP) at 10.57%** the **RO Water Cooler consumes 4.92%** and **CCTV Cameras consume 4.11%** these are maximum consumers as compared to other equipment.

7.8.2 Indoor-outdoor consumption analysis

The energy consumption of Equipment is **20,867 kWh** of energy; the following graph shows the floor wise consumption.

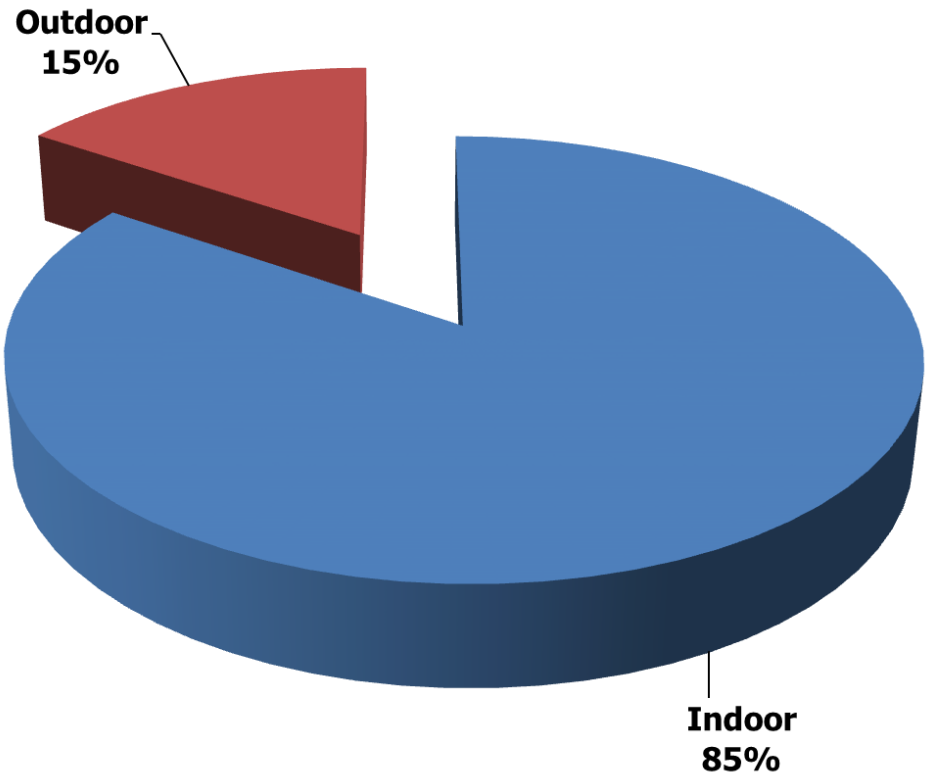


Figure 14: Energy consumed by Equipment floor wise

The above analysis shows the equipment in the **Indoors consumes the highest amount of energy of 17,636 kWh at 85%** whereas the equipment in the **Outdoor** (Water Pump (2 HP) and RO Water Cooler system) **consume 3,231kWh at 15%**

7.8.3 Site investigation observations

Some of the points noticed are as follows:

1. All Equipments are in working conditions and Daily monitoring and check is done by the maintenance staff and admin staff in an excellent manner.
2. No defect was found in any equipment of electrical consumption.

7.9 Recommendations for a Sustainable Habitat

Over the time energy efficient appliances have been a boon not only to the energy saving parameters they adhere to but also the eco-friendly habits it helps to inculcate. The Institution such as Schools and Colleges are the best way to implement these initiatives. It creates awareness among the students at a young age. The Institutions also act as a symbol and representative of being an energy efficient premise.

Following the analysis we found are some of the suggestions which can be implemented for an energy efficient Institution. This would help in reduction of the current electrical consumption by a major percentage.

7.9.1 Fans

The current Fans are in proper working conditions and maintained well. The ceiling fans are in more quantity and consume at least 60W when in use. These should be replaced with energy efficient fans consuming 32W when in use.

The following graph shows a comparison of the current consumption and consumption of all **142 ceiling fans on all floors** if replaced with star rated appliance.

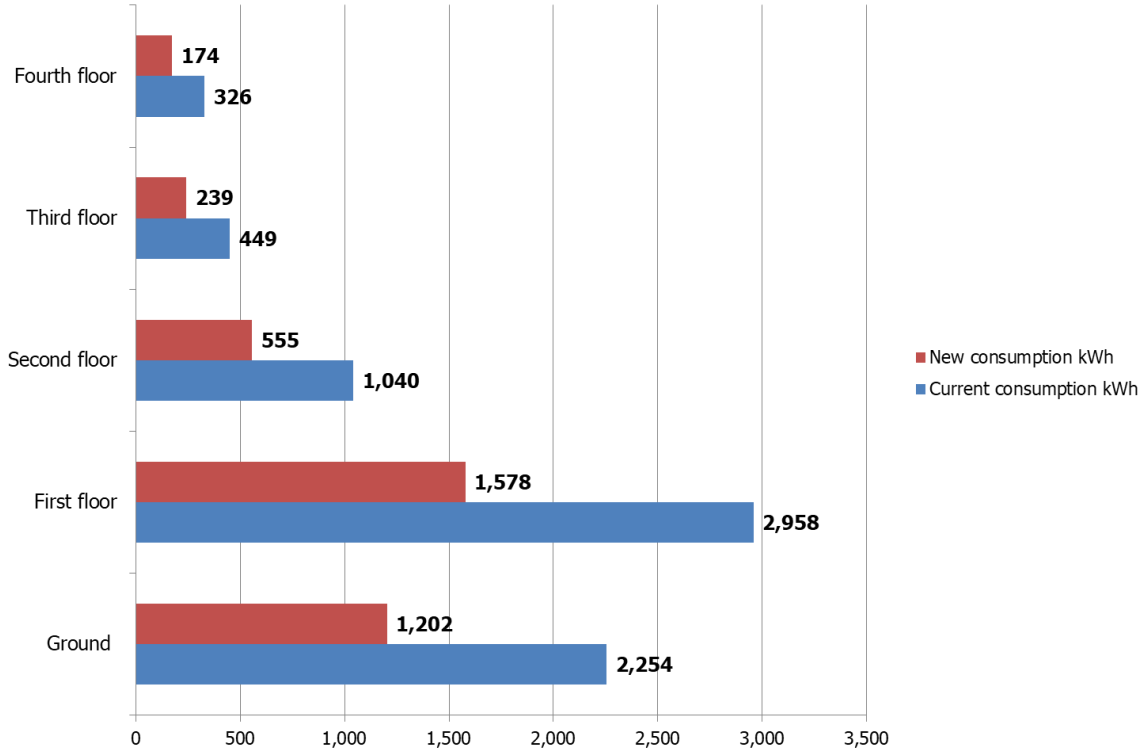


Figure 15: Analysis of current and new fans

The above analysis shows reduction of average of **53% reduction** in energy consumption if replaced with energy efficient appliance.

7.9.2 AC

The current Air conditioners have become old. Most of these are not star rated and are consuming more energy. These should be replaced with energy efficient and star rated air conditioners consuming approximately 1500W and being 1 ton.

The following graph shows a comparison of the current consumption and consumption of the **14 air conditioners on ground floor** if replaced with star rated appliance.

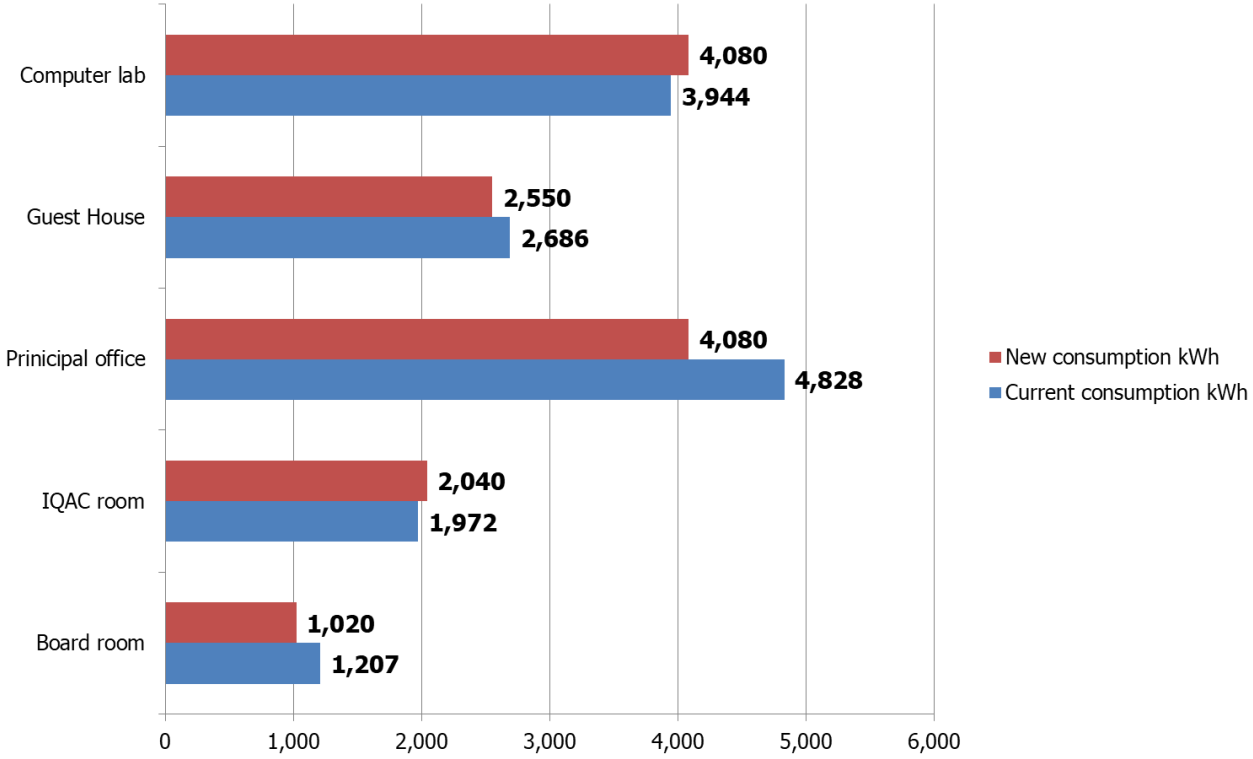


Figure 16: Analysis of current and new air conditioners

The above analysis shows reduction of average of **6% reduction** in energy consumption if replaced with energy efficient appliance.

7.9.3 Equipment

Among all equipment the computers are in maximum number and suggested to be replaced with laptops as this would be energy efficient. A normal computer consumes on an average 250W and it is to be connected all time when it has to be used. On the contrary a laptop consumes 40W and has a battery backup which lasts upto 4 hours.

The following table shows a comparison of the current consumption and consumption of the **34 desktop computers** if replaced with star rated appliance.

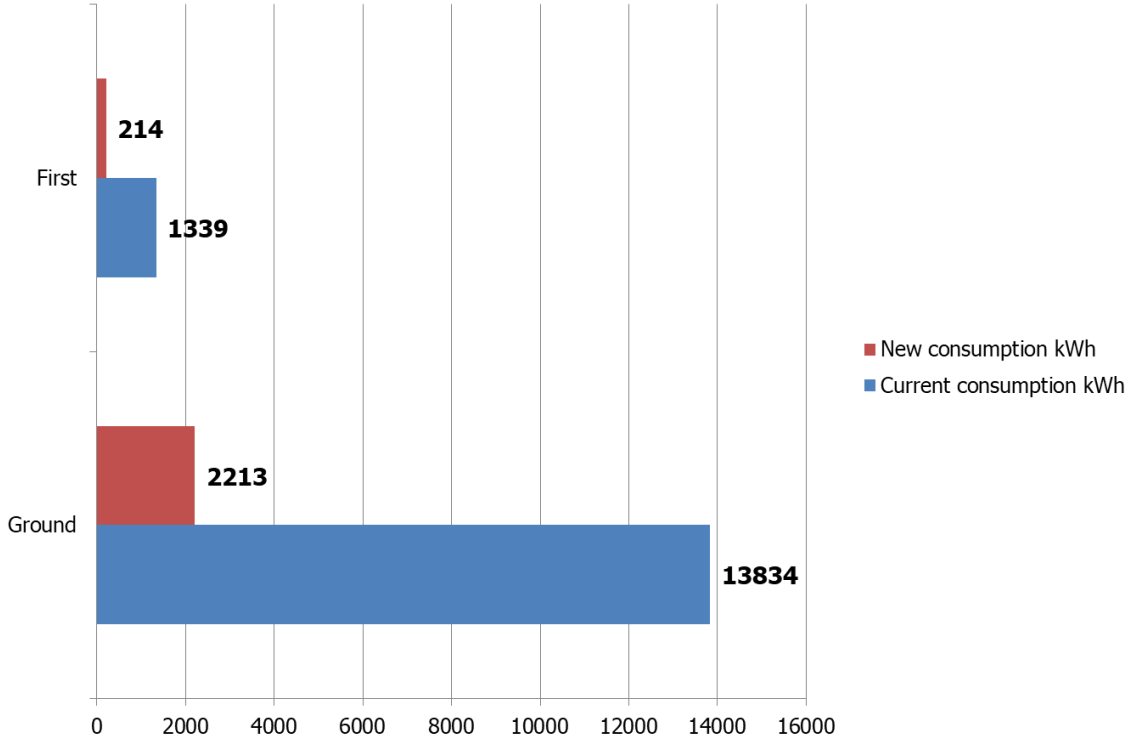
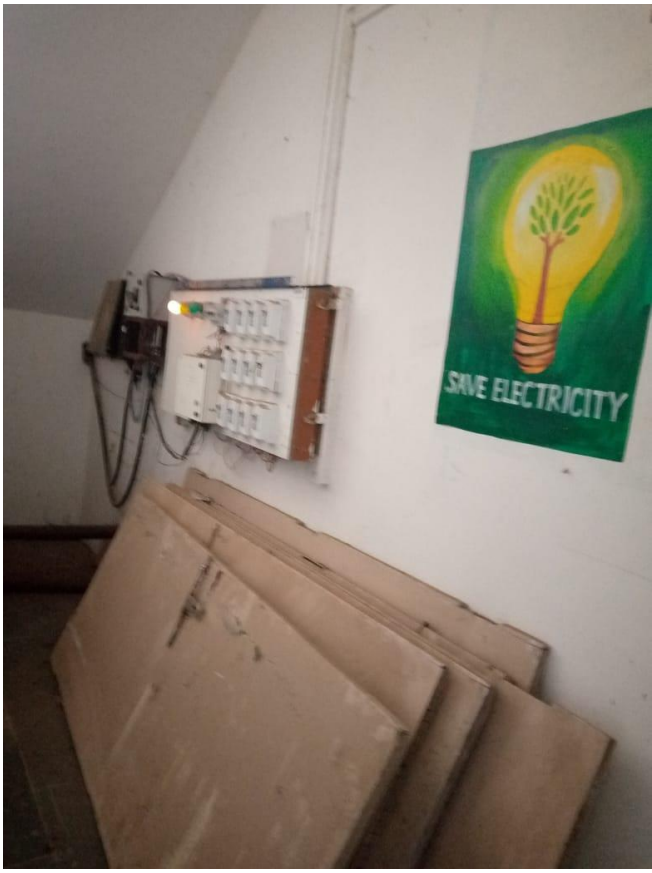


Figure 17: Analysis of current computers and new laptops

The above analysis shows reduction of average of **32% reduction** in energy consumption if replaced with energy efficient appliance.

Site investigation and data collection




RAIN WATER HARVESTING
ON GRID

8. Towards a Healthy & Sustainable Institution

Based on the analysis of the study of premises in addition to the recommendations provided in each section of Ecological, Water, Waste and Energy Audit the College can adopt the following strategies towards a Healthy and Sustainable Institution practices.

a) **Terrace farming -** There can be provision of terrace farming alongside the Canteen on Terrace and kitchen garden practices in a designated area of the open space this would enhance the biodiversity and be useful in training students and staff about the healthy practices and vegetables grown which would be used in Canteen. It helps in capacity building as well as the smaller steps taken have huge impacts when each student would adopt these practices in their homes or societies and grow kitchen garden, terrace garden there will be a long term benefit for the environment as a whole.

b) **Amphitheatre cum open learning space -** The College can create an open space amphitheatre in the open area and include open space learning and activities there providing a holistic approach to education and being one of its kind Institute to adopt this practice.

c) **Cutlery in the Canteen –** The regular plastic and steel plates, spoons used in Canteen can be replaced with eco-friendly and organic leaves, paper straw, disposable plates, edible spoons and tables made out of sugarcane waste or bamboo. This will be first of its kind initiative to be adopted and practiced thus also inculcating the healthy practices in students.

d) **Eco clubs –** In addition to the NSS there can be an eco-club which will help the collaboration to yield results right from micro level. The role of students and staff will be to engage in environmental awareness and protection activities. The functioning would be through various events, workshops and similar outreach programs.

e) **Additional fire safety -** The premises at present has only Fire extinguisher as the safety practice but additional fire safety measures should be adopted such as Hose reel, signages, fire-fighting tank, fire alarm and sprinkler system. There should be fire extinguisher minimum two per floor. Canteen should have

additional fire extinguishers.

f) **Waste vio –** Stepping up a little further an initiative can be undertaken wherein College can tie up with an organisation and students can be encouraged to collect dry waste and electronic waste such as newspapers, old computers and others and hand over to organisation on a weekly or monthly basis thereby making a waste reduction approach in the community. This has benefits such as awareness, eco-friendly habits in becoming a responsible citizen.

g) **Signages –** In addition to the signages being in regular language there can be additional signages in braille language for the specially abled students.

9. References

1. Uniform Plumbing Code – India, 2008
2. IGBC Green Existing Buildings – Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
3. IGBC Green Landscape Rating system, March 2013
4. BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST - Canada
5. Climate data https://en.climate-data.org/asia/india/maharashtra/ahmadnagar-2808/
6. Used only for understanding Universal design - Universal accessibility Guidelines for Pedestrian, Non-motorizes vehicle and Public Transport Infrastructure – Report guidelines by Samarthyam (National centre for Accessible Environments) – an initiative supported by Shakti Sustainable Energy Foundation.

10. Annexure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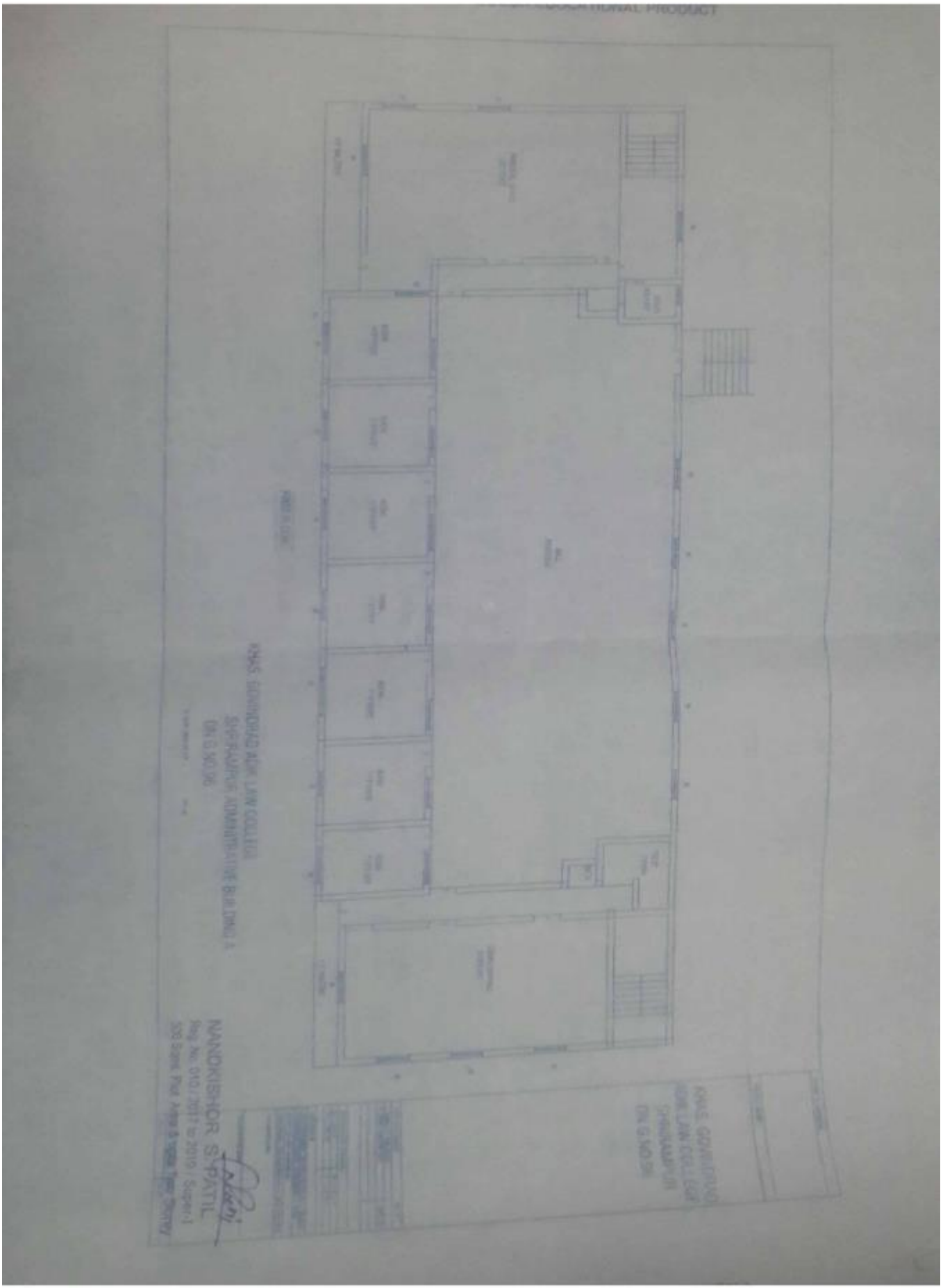
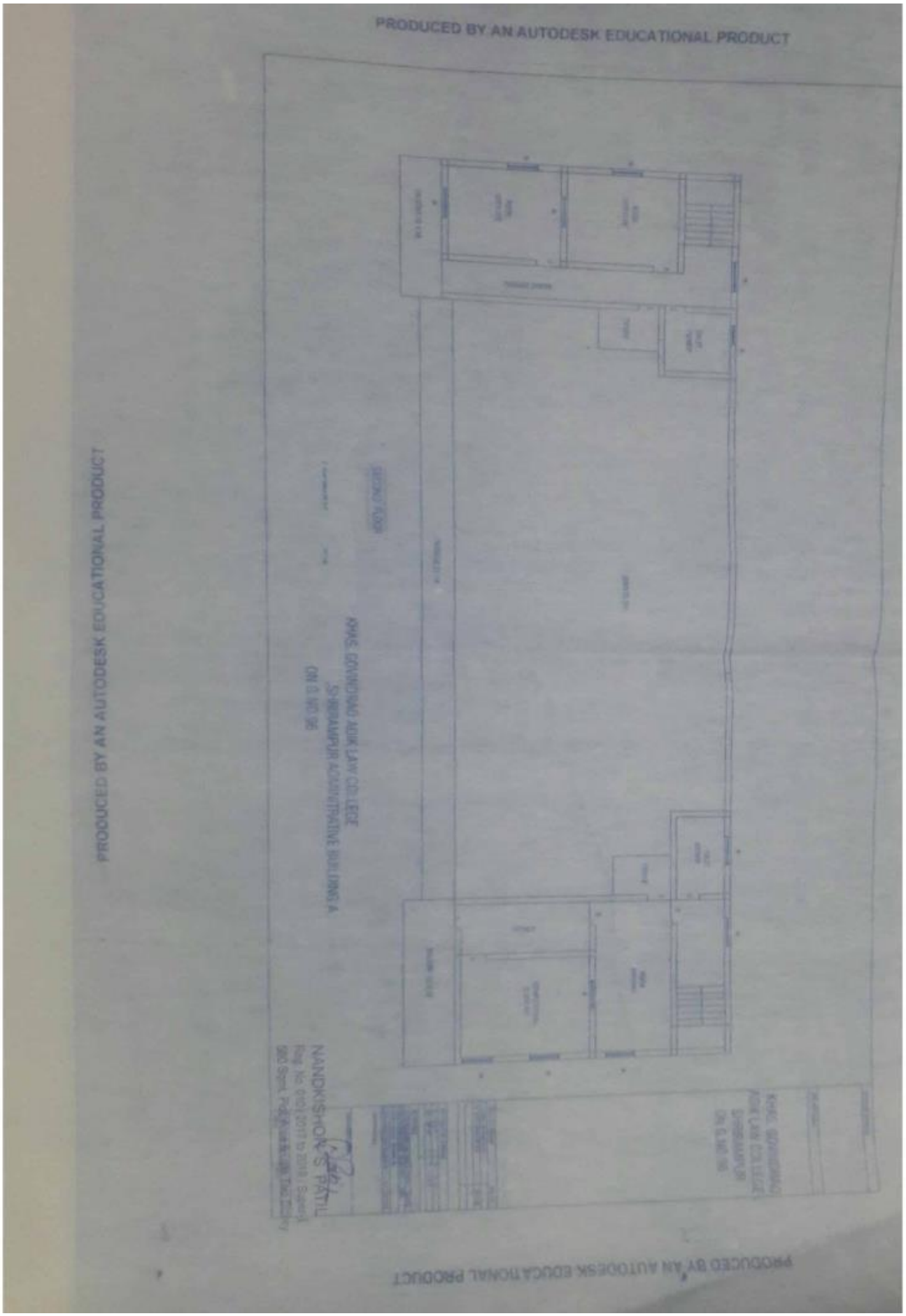
KHAS GOVINDRAO ADIK LAW COLLEGE
SHRIRAMPUR ADMINISTRATIVE BUILDING A
GN G NO 56
NANDKISHOR S. PATIL

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Reg. No. 010 / 2017 to 2019 / Super-I
500 Sqmt. Plot Area & upto Two Storey
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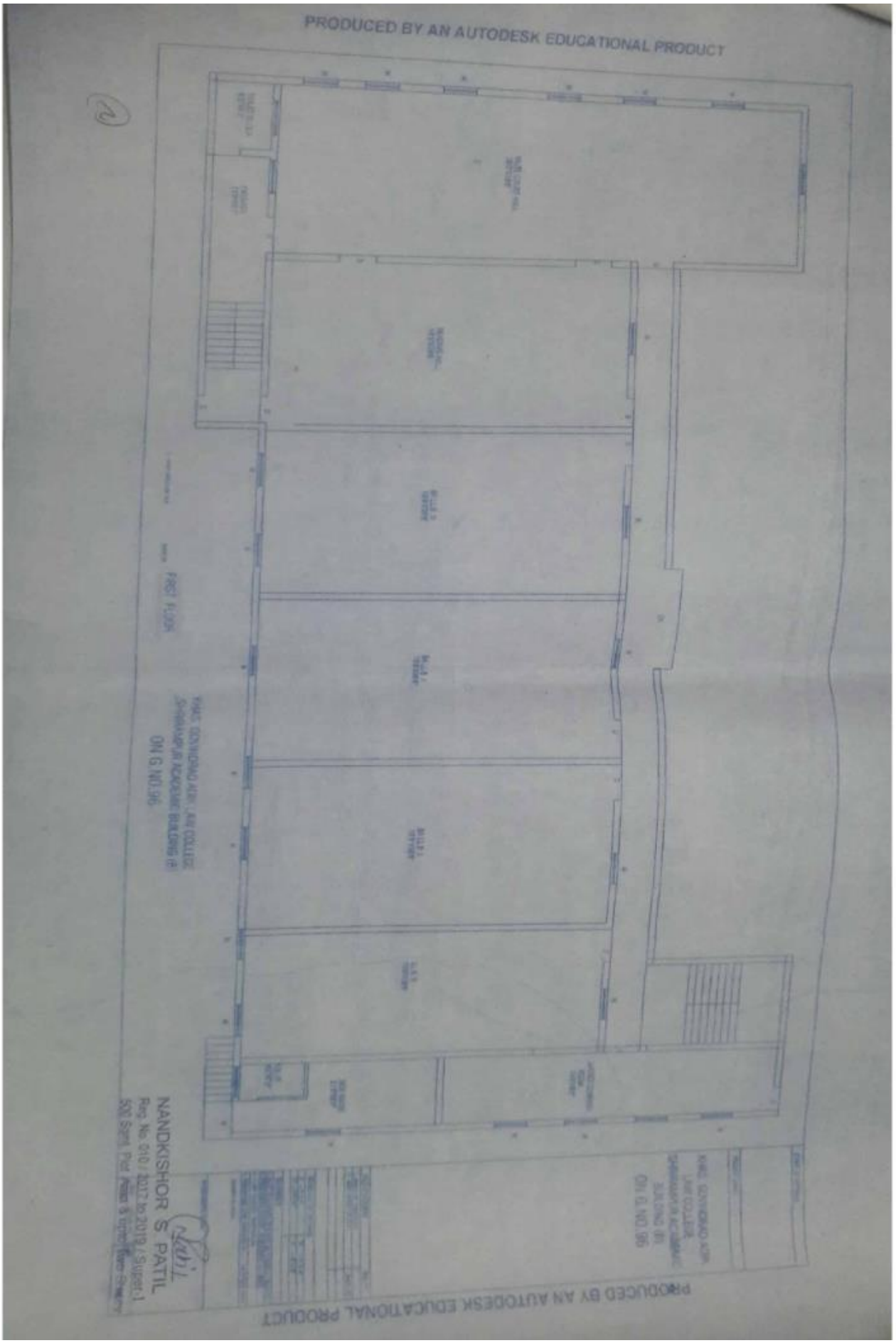
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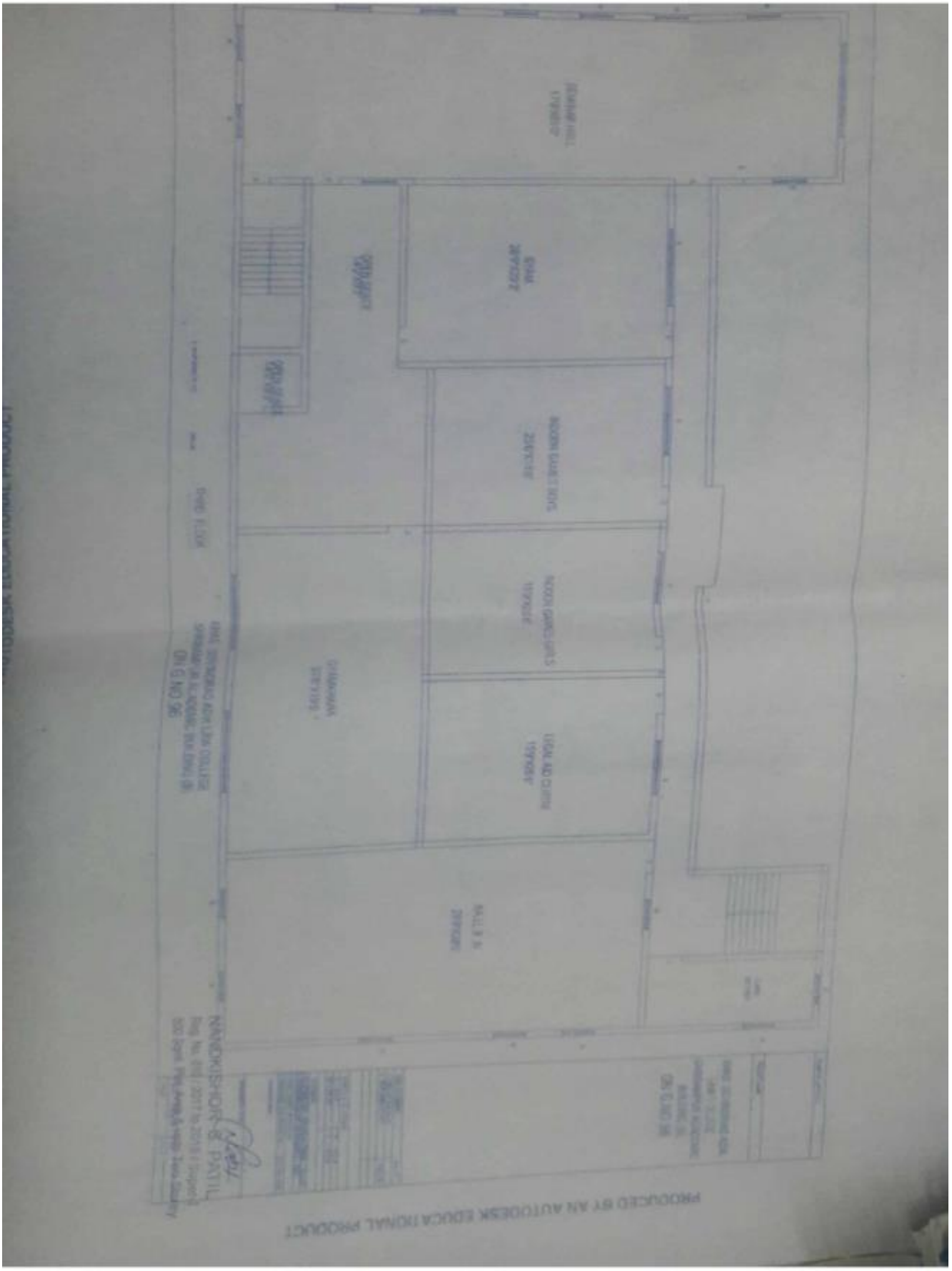
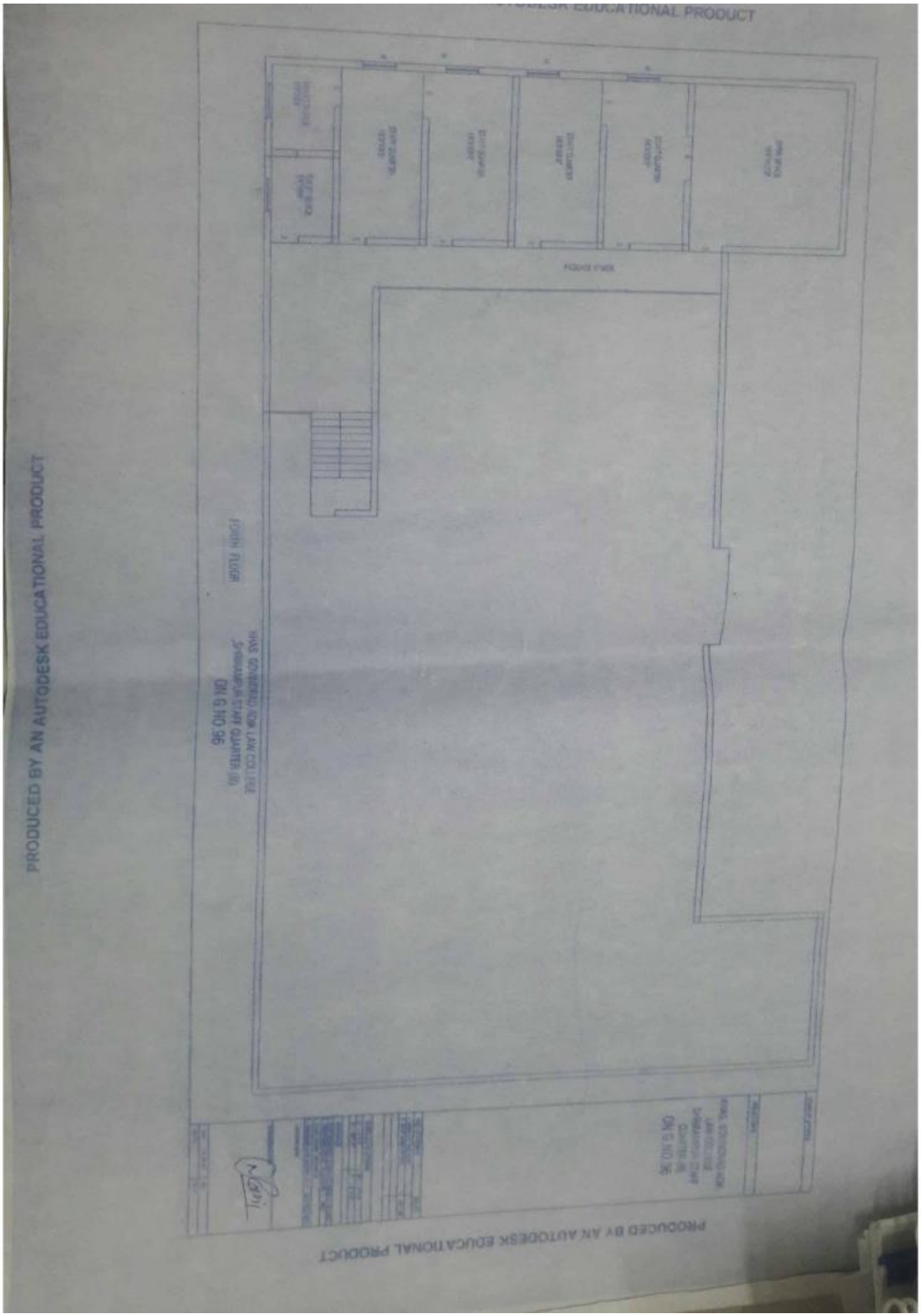
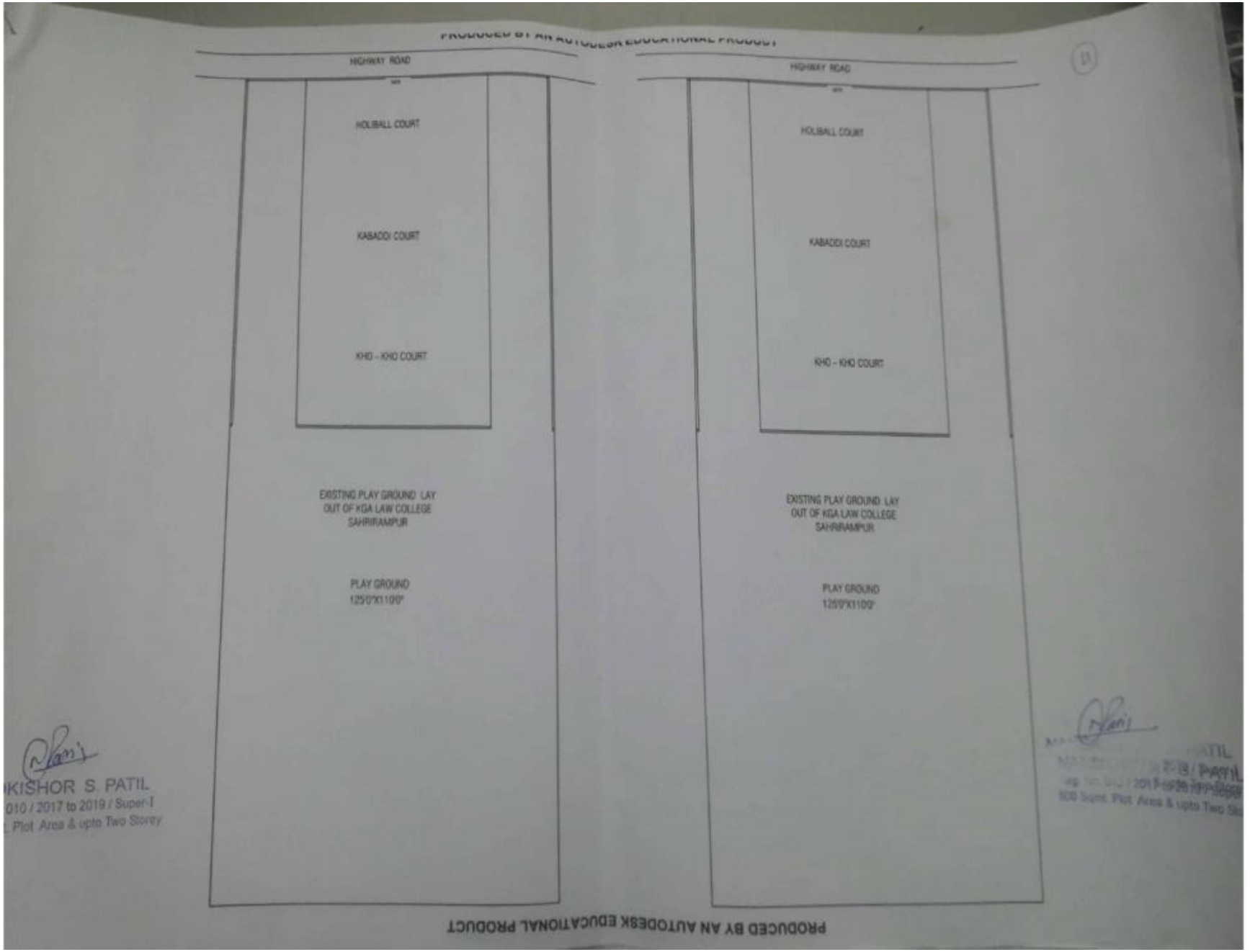
FIRST FLOOR
GROUND FLOOR
NANDKISHOR S PATIL
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT


PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
NANDKISHOR S. PATIL
Reg. No. 010 / 2017 to 2019 / Super-1
500 Sqmt. Plot Area & upto Two Storey

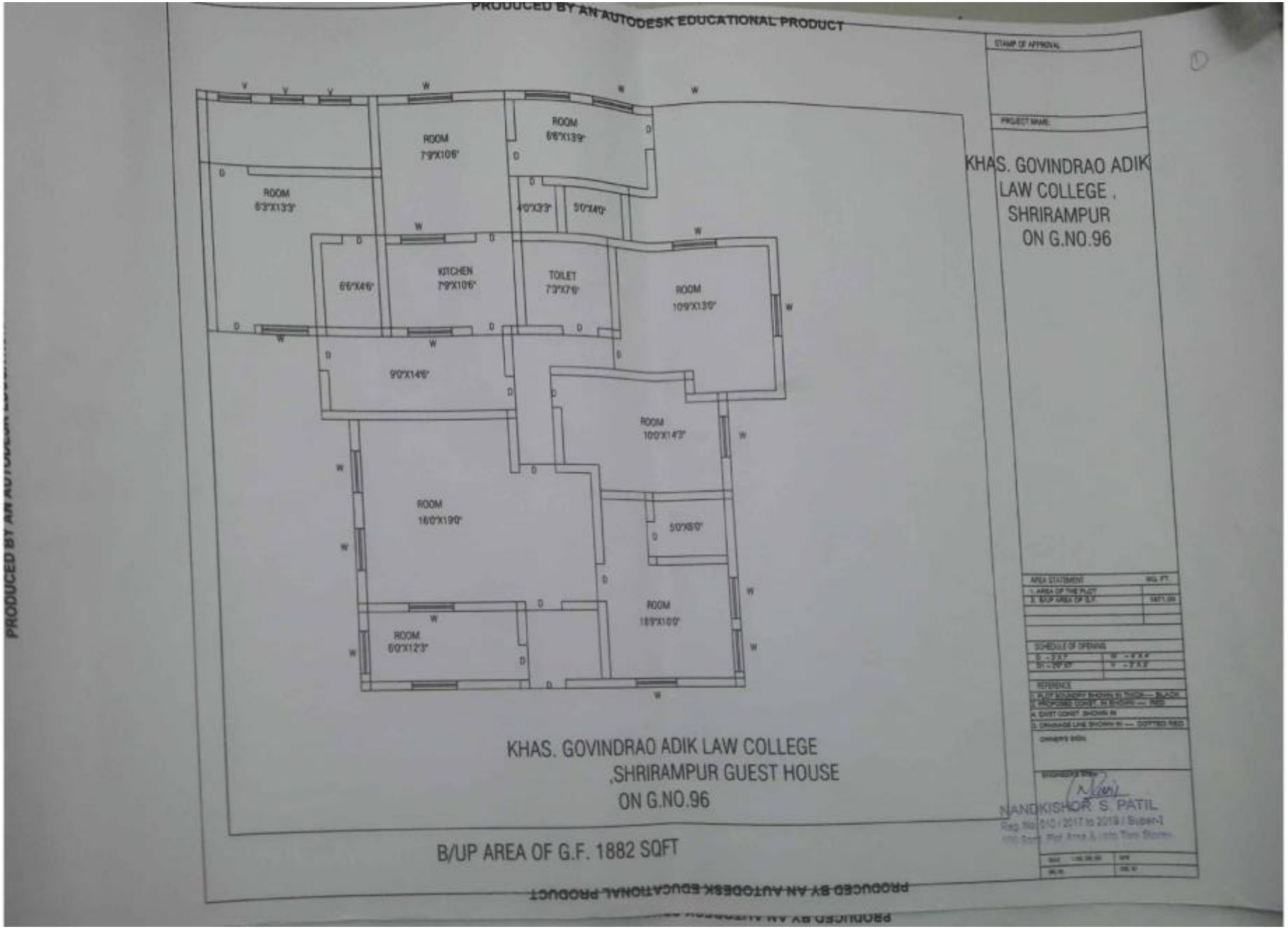


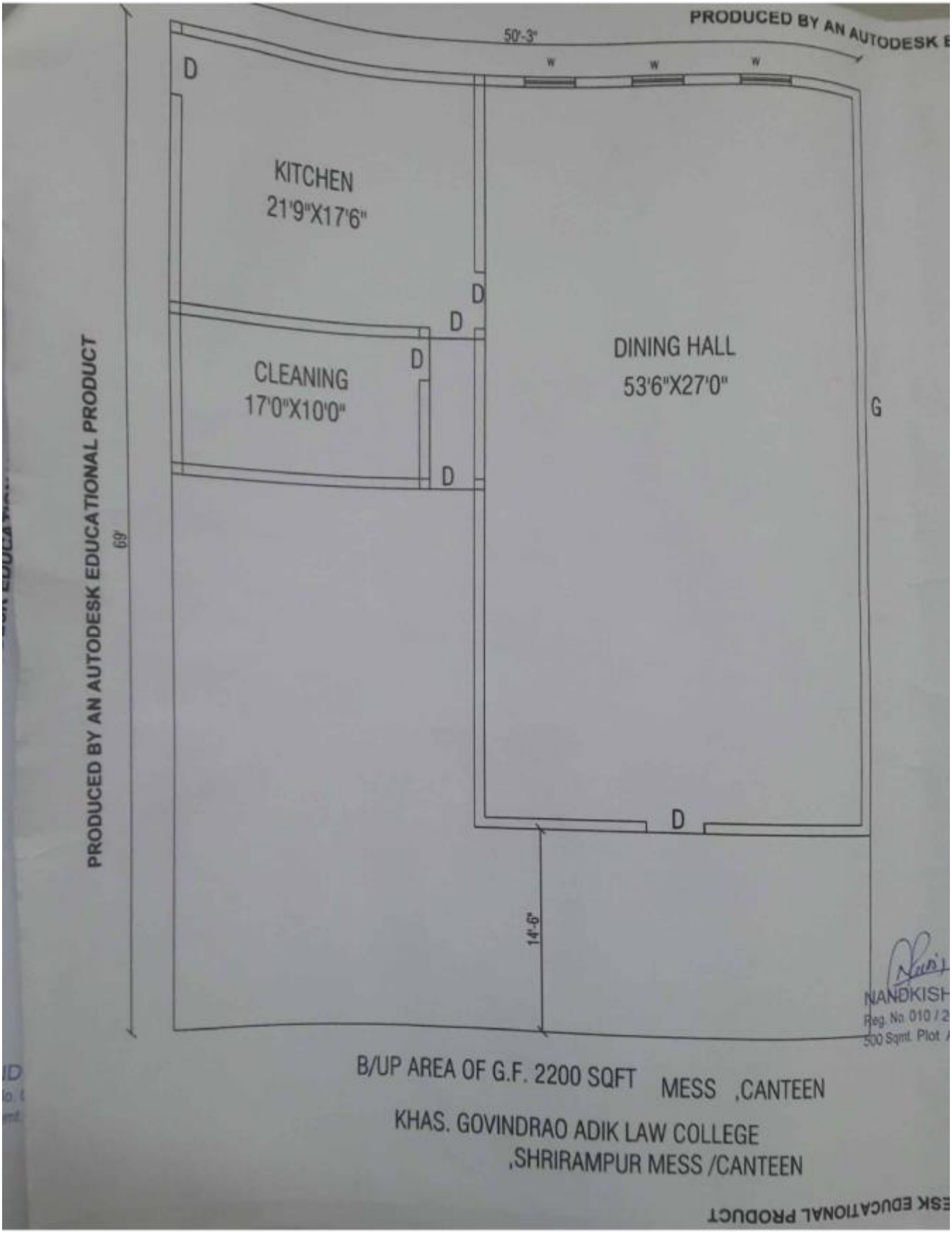

PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
FOURTH FLOOR
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

Annexure – Guest House and Canteen



Annexure – Guest House and Canteen




PRODUCED BY AN AUTODESK
50'-3"
KITCHEN
21'9"X17'6"
CLEANING
17'0"X10'0"
DINING HALL
53'6"X27'0"
D
W
G
69'
14'-6"
PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT
B/UP AREA OF G.F. 2200 SQFT MESS ,CANTEEN
KHAS. GOVINDRAO ADIK LAW COLLEGE
,SHRIRAMPUR MESS /CANTEEN

Maharashtra State Electricity Distribution Co. Ltd.

MAHAVITARAN
CIN : U40109MH2005SGC153645

BILL OF SUPPLY FOR THE MONTH OF Apr-2021

GSTIN: 27AAECM2933K1ZB | Website: www.mahadiscom.in | HSN CODE: 27160000

AHMEDNAGAR CIRCLE : 570 | SHRIRAMPUR DIVISION : 576 | SHRIRAMPUR SDN : 839 | BU 4839

Consumer No. 050710179534	SOLAR NET METER (10.00 KW)
Consumer Name : KYV INDRAD ADIK VIDHI MAHAVIDYALAYA	
Address : INDUSTRIAL ESTATE INDUSTRIAL ESTATE	
Village SHRIRAMPUR	Pin Code : 413709

BILL DATE : 15/05/2021 DUE DATE : 04/06/2021	₹	0.00
IF PAID UPTO 24/05/2021	₹	0.00
IF PAID AFTER 04/06/2021	₹	0.00
Last Receipt No./Date	07-08-2019	
Last Month Payment	0.00	
Scale / Sector	Large Scale / Private Sector	

E-mail:		Activity :
Mobile No. 98xxxxxx13	Meter No. : 056-X1012006	Seasonal N
Sanctioned Load (KW) 10.00 KW	Connected Load (KW) 10.00 KW	Urban/Rural Flag : U — Express Feeder Flag : N
Contract Demand (KVA): 0.00	50% of Con. Demand (KVA) 0.00	Feeder Voltage (KV) : 11
Tariff 92 LT-I A	DTC : 4809038	GIS DT/Pole — PC-MR ROUTE-SEQ 08-01-1022-0000

Date of Connection: 01/02/2011	Category: Residential	GSTIN:
Supply at: LT	Elec. Duty: 51 PART A	PAN:
Prev. Highest (Mth):	Prev. Highest Bill Demand (KVA):	
Security Deposit Held Rs.: 17210.00	Addl. S.D. Demanded Rs.: 0.00	
Bank Guarantee Rs. :	S D Arrears Rs.: 0.00	

BILLING HISTORY

Bill Month	Units	Bill Demand(KVA)	Bill Amount
Mar-2021	0	0	340.00
Feb-2021	0	0	340.00
Jan-2021	0	0	340.00
Dec-2020	0	0	340.00
Nov-2020	0	0	340.00
Oct-2020	0	0	340.00
Sep-2020	0	0	340.00
Aug-2020	0	0	340.00
Jul-2020	0	0	340.00
Jun-2020	0	0	340.00
May-	0	0	340.00
Apr-2020	0	0	340.00

CUSTOMER CARE Toll Free No. 1912,1800-233-3435, 1800 102-3435

Rule & Procedure for Consumer Grievances Redressal is available at www.mahadiscom.in->consumer portal->CGRF

Instead of Printed bill, register for E-bill and avail Rs. 10 per bill as a "Go-green" discount.
For registration visit at www.mahadiscom.in ->consumer portal->Quick access->Go-green request

Maintain Harmonic distortion within limit as prescribed by IEEE STANDARD 519-1992 to avoid penalty

Avail Power factor incentive up to 3.5% maintaining power factor above 95% to 100%

Avail load factor Incentive up to 15% by maintaining constant load profile.

Avail 1% prompt payment discount by paying bills within prompt payment date.

Trimurti Pawan Pratishthan's

KHA. GOVINDRAO ADIK LAW COLLEGE

SHRIRAMPUR

Pay to करंदीकर राम.

No.

On account of पाणीपट्टी खर्च खाते

Date 29/09/20

Particulars	Rs.	Ps.
2020-21 ची पाणीपट्टी भरण्यासाठी रक्कम अदा.	6000/	
	6000/	

In words सहा हजार रुपये मात्र.

Approved by

Cashier / Accountant O.S Principal Received Sign.

29/09/020

श्रीरामपूर नगरपरिषद, श्रीरामपूर

RECEIPT/पावती Customer Copy/ग्राहक प्रत

नमुना नं. ४९ (नियम ७८(१)८३(४) ८५/८६(४) आणि ९६(४) पहा)

F.Y. 2020-2021

Receipt No./पावती नं.	Date/दिनांक	Related To/च्या करीता	CFC Ref./सि.एफ.सि. निर्देश	Counter Ref./खिडकी निर्देश
WT/1230	29/09/2020	पाणीपुरवठा विभाग	5/80	34/80

Received From/कोणाकडून	मौ सुनिता साहेबराव घाडगेपाटील , सहयोग हॉ. लॉ कॉलेज
Title/विषय	बिलाची रक्कम देणे
Narration/विवरण	नळजोडणी क्र. W020000102 साठी पावती घेतली
जुना ग्राहक क्रमांक	021

Mode/ देय प्रकार	Amount/रूपये	Cheque No./धनादेश नं.	Cheque Date/धनादेश-दिनांक	Bank Name/बँकेचे नाव
रोख	3000.00			

Reference No./ निर्देश नं.	Date/ दिनांक	Bill Period/ बिल कालावधी	Details/ माहिती	Payable Amount/ देय रक्कम		Received Amount/स्विकारलेली रक्कम	
				Arrears/ थकबाकी	Current/ चालू	Arrears/ थकबाकी	Current/ चालू
WB2580	24-06-2020	01-04-2020 - 31-03-2021	पाणीपट्टी	0.00	3000.00	0.00	3000.00
			Total Amount/ एकूण रक्कम	0.00	3000.00	0.00	3000.00

CHECKED

Excess/ Advance Amount अतिरीक्त/ आगाऊ रक्कम :	0.00

Payable Amt./ देय रक्कम	Rebate Amt./ सुट रक्कम	Actual Payable Amt./एकूण देय रक्कम	Total Received Amt./ एकूण स्विकृत रक्कम
3000.00	0.00	3000.00	3000.00

Amount (Words) / अक्षरी रूपये : तीन हजार फक्त

टिप - चुटी आढळल्यास संबधित अधिका-याम कळविण्यात यावी. HELP LINE 02422-222154

Receiver's Signature/ स्विकारणा-याची स्वाक्षरी

34/80 / 5/80 / वैभव चव्हाण / 29-09-2020 / 02:01 PM

Trimurti Pawan Pratishthan's 81

KHA. GOVINDRAO ADIK LAW COLLEGE

SHRIRAMPUR

Pay to अंनिस्य सासवड No. 524

On account of जनरेटर इंधन खर्चे Date 30/1/21

Particulars	Rs.	Ps.
जनरेटर साठी डिझेल खर्चाची	2000/	
रोख रक्कम अदा.		
CHECKED		
In words दोन हजार रुपये मात्र.	2000/	

Approved by

Cashier / Accountant — O.S — Principal — Received Sign.

82

जनरेटर डिझेल 30/1/21

HP

AMPUR A.P.M.C
SA ROAD
RAMPUR
NAGAR
No : 27430268741C
S.T No: 27430268741V
ORIGINAL

30-JAN-2021 09:50:49
TXN NO: 1013006516
INVOICE NO: 331509
VEHICLE NO: NOT ENTERED

CHECKED

NOZZLE NO : 1
PRODUCT: Product 1
DENSITY: 826.1 kg/m3
RATE : 82.34 INR/Ltr
VOLUME: 24.29 Ltr
AMOUNT: 2000.00 INR

Thank You! Visit Again