



Pravara Rural Education Society's

## COLLEGE OF PHARMACY (FOR WOMEN)



Chincholi, Tal. Sinnar, Dist. Nashik 422103, Maharashtra, India

Ph.No. (02551)271178, Fax No. : (02551)271178

Website: [www.pravarapharmacy.in](http://www.pravarapharmacy.in)

Email ID: [pravaracopc@yahoo.co.in](mailto:pravaracopc@yahoo.co.in)

Approved by A.I.C.T.E., Pharmacy Council of India, New Delhi and recognized by Govt. of Maharashtra  
Affiliated to Savitribai Phule Pune University, Pune

# INDEX

**Criteria No: 4**

**Metric No: 4.4.2**

**File Name:** (QIM) **4.4.2:** *There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.*

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**Pravara Rural Education Society's  
College of Pharmacy (For Women), Chincholi  
Tal: Sinnar, Dist: Nashik**



**MAINTENANCE AND IMPROVEMENT POLICY**

**One Purpose, One Mission, One Dream**

- **Objective**

The objective of this policy is to maintain and improve overall Campus buildings, other infrastructural facilities, instrumental facilities, and other important facilities at PRES's College of Pharmacy (For Women) to support our mission.

- **Roles and Responsibilities**

Campus Facility Services includes building maintenance, grounds maintenance, material handling, utilities, campus health, safety, and security. Normal request for services by staff are accessed through HODs of each department. Physical facilities on campus are protected with security systems and personnel assignments. Internal processes, policies and procedures are developed and revised on continuous basis to address current and future security concerns. The Security incharge provides a periodic operation brief detailing current security concerns and facility information, which is evaluated and used for continuous improvement.

- **Campus Operation, Development and Improvement Planning**

Operation, development and improvement of the College is undertaken in accordance with college Code and procedures, which defines a process for the request, approval and limitations of capital development and improvement since most of the infrastructural development are undertaken by the management. After managements approval the maintenance work would be processed further. Management has also appointed a supervisor who would be responsible for the overall maintenance of the infrastructural facilities.

- **Facility and Equipment Maintenance and Repair**

College Facility Services staff members respond to day-to-day facility and equipment maintenance and repair requests. For requests that required advanced or specialized knowledge and/or skill, equipment vendors and third party vendors are contacted to oversee the project. The staff member submits requests for facility and equipment maintenance and/or repair by writing a letter to the Principal which is the forwarded to the College maintenance register. When requests are submitted, the Office Technician contacts appropriate maintenance personnel in the campus to respond to the request.

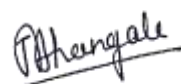
Regular staff meetings are held to check the status of open projects, evaluate resources required to resolve projects and to allocate work-load to ensure efficient response and resolution.

- **Equipment and Supplies**

General facility equipment and supplies are requested annually as part of the College budget process. Facility equipment and supplies needs are revised and prioritized for approval by the College Purchase Committee centrally. For some important equipments and services Annual Maintenance Contract (AMC) is entered where the company representatives visit regularly for the same whereas some Lab equipments are maintained



**Prepared By**



**Principal**

**Principal**  
College of Pharmacy, Chincholi  
Tal. Sinnar, Dist. Nashik 422102



**Principal**  
College of Pharmacy, Chincholi  
Tal. Sinnar, Dist. Nashik 422102



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## ACADEMIC YEAR 2020-21

Sr. No.	Name	Designation
1	Dr. Charushila Bhangale	Principal
2	Mr. Kiran Dhamak	Academic Dean
3	Mr. Vivekanand Kashid	HOD
4	Mr. Bhimrao Karpe	Civil Department
5	Mr. Sanjay Walunj	Electrician
6	Mrs. Pallavi Ekhande	Lab assistant
7	Mrs. Sangita Sonawane	Lab assistant
8	Mrs. Rupali Thete	Lab assistant



*P. Bhangale*  
Principal  
College of Pharmacy, Chincholi  
Tal. Sinnar, Dist. Nashik-422103

An ISO 9001: 2015 certified company

## QUOTATION

### FOR DIGITAL LANGUAGE LAB DONGLE



BY

**Biyani**  
Technologies

Bringing Technology 2 Business

**(Confidentiality Statement:** All the information contained in this document is the property and proprietary of Biyani Technologies and is not to be disclosed in whole or in part without express written consent of Biyani Technologies and shall not be duplicated or used, in whole or in part, for any purpose other than to evaluate Biyani Technologies capability.)

**QUOTATION**

**Date: 08<sup>th</sup> Sept 2021**

**Quotation No: BT/VW/09-21/002**

**To,**

**The Principal,**

**Pravara Rural Education society's college of Pharmacy, Chincholi,-Sinnar, Nashik.**

**Subject: Quotation for Digital Language Lab DONGLE**

**Respected Sir/Madam,**

"Biyani Technologies" is a leading software development company. With over 13 years of huge experience in software consultancy and solutions to Educational Institutes, Schools, Colleges, Universities, Milk Unions & Dairy, Textiles and Other Small & Medium sized businesses we have built up more than 1500 & above client base across entire India and International.

**ACE Digital Language Lab** helps to improve oral and communication skill in English. Excellent study material used in our Digital language Lab software and at par with international standards. Using the lab student can improve the command over their language, gain confidence and get ready for real world challenges like facing interviews, doing presentation, expressing thoughts, etc.

We are glad to quote you our best rates for ACE Digital Language Lab DONGLE

Sr.No.	Module Name	Price(Rs.)
1	Digital Language Lab Dongle	Rs. 12,000/-

**Terms & Conditions:**

- ☐ Taxes : 18% GST Extra and any local taxes if applicable.
- ☐ Payment: 100% advance against the confirmation
- ☐ Quotation submitted is valid for **1 month** from the date mentioned

Regd Office : D1, 2<sup>nd</sup> Floor, Royal Prestige Building, Sykes Extension, Kolhapur - 416001

International Office (US) : 307 Rock Rose Place, Round Rock, TX 78665. Contact Us At : (0)231 - 2526373, +91- 9850819973



#### Why Biyani Technologies?

- ☐ We carry **13 years** of huge Experience and Successful implementation of our products at more than **1500** and above Educational Institutes, Schools/Colleges, Universities, Hospitals, Milk Unions, Other Small & Medium sized businesses, Textiles, Sugar industries, etc
- ☐ Any new implementation could be carried out in a week from order placement date
- ☐ Management & Technical advisors have work experience in India's best Software companies
- ☐ New orders are received from reference from existing satisfied customers
- ☐ Excellent support network : 12 x 6 Telephonic help desk, online support, Remote Desktop Connectivity, dedicated onsite support team
- ☐ We are **ISO 9001 : 2015** certified company
- ☐ Internationally acclaimed training program, with detailed User Manual
- ☐ We train, assist and build up the confidence of your college/school user.

Give us an opportunity to serve your reputed institute and add you to our growing satisfied customer list.  
Because,

- ☐ We deliver what you need – Full Proof software
- ☐ We provide what you need – Easy to use Software
- ☐ We do what you need – Complete Automation

Thanking you,

Yours Sincerely,

**Vrunda Warke,**

**CRM Dept.,**

**Biyani Technologies**

Regd Office : D1, 2<sup>nd</sup> Floor, Royal Prestige Building, Sykes Extension, Kolhapur - 416001

International Office (US) : 307 Rock Rose Place, Round Rock, TX 78665. Contact Us At : (0)231 - 2526373, +91- 9850819973

Date:- 24-09-2021

Outward No: 3329

To,  
The Principal,  
Pravara Rural Education society's college of Pharmacy, Chicholi, Nashik.

Subject: Annual Maintenance Contract

Dear Sir/Madam,

It is our pleasure to be associated with reputed organization like yours. During this period, we have sincerely tried to provide you best service, train the user group and assist them in all possible ways. Our engineers have several times visited your campus and provide you onsite support and services.

It is now time to further strengthen our relationship by signing Renewal & Annual Maintenance Contract. Under this maintenance contract following services will be given:

1. **Unlimited - Telephonic Support:** We have established 10 Hours X 6 Days helpline to solve your queries over phone. [9:30 am to 7: 30pm, Monday to Saturday]
2. **Unlimited - Remote Desktop Connectivity Support:** Under this service our engineers would view your computer from our office over internet, solve your queries remotely and provide you all support. Across the year, you may avail this remote support / service as per your convenience and time. Under this service, we will provide training to any new users, solve the queries, do the routine software maintenance, update to The Principal and Management about the status of the project and provide free consultancy about other software products & office automations.
3. **If Required Free Onsite Support Calls (1 One Day Visits) - :** Across the year, you may avail this onsite support / service as per your convenience and time. Under this service, the engineer will visit your site, provide training to any new users, solve the queries, do the routine software maintenance, update to The Principal and Management about the status of the project and provide free consultancy about other software products & office automations. (You are requested to make lodging & boarding arrangement for our engineer).
4. **Completing the (1 onsite visit) if any visit required travelling, lodging & boarding facility will be provide by your side. The charges will be inform to you before confirmation of visit**

Your Annual Maintenance contract will commence on 01<sup>st</sup> Aug 2021 and will be valid for 1 (One) Year thereafter i.e. up to 31<sup>st</sup> July 2022 and the charges for this Annual Maintenance support would be Rs. 25,063/- (Rs 21,240/- + 3,823/- GST@18%) Only For Digital Language Lab- Enterprise. **Special Discount i.e. Rs. 20,000/-** (Rs. 16,949/- + 3,051/- GST@18%) Only For Digital Language Lab- Enterprise(1+10).

We once again want to stress that Biyani Technologies is committed to provide you the best services, quality software and enable you to stay ahead in the world in terms of Automation and recent developments in technology. Looking for kind cooperation and support from you.

Thanks and regards,

Yours Sincerely,

From,  
Ms. Vrunda Warke  
CRM Dept.  
Biyani Technologies

Billed To,  
The Principal,  
Pravara Rural Education society's college of  
Pharmacy  
Address: Chincholi, Dist-Nashik,  
State:-Maharashtra.  
GSTIN Number:-

Proforma Invoice No. 6219  
Proforma Invoice Date 25<sup>th</sup> Sep 2021  
Purchase Order No. -  
Purchase Order Date -

Sr. No	Description of Item	HSN Code	Qty.	Rate	Total (Rs)
1	DLL AMC Charges For The Period (01 Aug 2021 To 31 July 2022)	85238020	1	16,949/-	27,118.00
2	Dongle Charges	85238020	1	10,169/-	

COMPANY GSTIN NO.:- 27AAHCB9780C1ZX

Sub Total	27,118.00
E & O E	
CGST @ 9%	2,440.62
SGST @ 9%	2,440.62
IGST @ 18%	0.00

Total Amount of GST: - Four Thousand Eight Hundred Eighty One Only.

Round Off 0.76

Grand Invoice Total In Words: - Thirty Two Thousand Only.

Grand Total 32,000.00

Certified that the Particulars given above are true and correct

Electronic Reference Number

**YOUR TERM & CONDITION OF SALE**

1. Warranty: For 1 Year from the date of implementation of software against manufacturing defects only. Warranty does not include any Hardware service, maintaining LAN, physical damage, data loss or its recovery. It is the responsibility of customer to take and maintain regular backup of the data.
2. All the payment to be made by A/C payee Cheque / DD in favor of Kolhapur Bt only.
3. Any late payment will have an interest @ 24% per annum on the total amount.
4. Kindly confirm the material and software at the time of delivery. If any problem intimate us at the time of delivery.
5. Once delivered and installed, Order in any case will not be cancelled and amount will not be refunded thereafter. If entire payment not received within 15 days from invoice date, services thereafter will not be provided. The amount paid till then will be forfeited and will not at all be refunded neither the order can be cancelled.
6. All disputes are subjected to Kolhapur jurisdiction.

Bank Name:- Federal Bank

Branch:- Jaysingpur

A/c No. 14910200013161

A/c Name: - Biyani Technologies Pvt. Ltd.

IFSC Code:- FDRL0001491

**For BIYANI TECHNOLOGIES PVT. LTD.**



*(Signature)*

Receiver's Signature

Authorized Signatory



**PowerTech Energy Solutions**  
Conserve to Consume

# **Energy & Green Audit Report of PRES' College of Pharmacy (For Women), Chincholi, Nashik**



**Submitted By**  
**PowerTech Energy Solutions**

Reg. Office: - 6, Vaikuntha Apt, Hire Nagar, Nashik-Pune Road, Nashik.422 011  
Mumbai Office: Shop No.39, Gokul Nagri 1, Thakur Complex, 90 Feet Road, Kandivali (E), Mumbai. 400101  
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Mob. +91 9226936163, Email: [info@ptesolutions.in](mailto:info@ptesolutions.in)

# ENERGY & GREEN AUDIT COMPLETION CERTIFICATE

This is to certify that following utility has carried out Energy & Green Audit as per guidelines laid down in The Energy Conservation Act, 2001 in the month of September 2021

<b>Name of the Installation</b>	PRES' College of Pharmacy (For Women), Chincholi, Nashik
<b>Details of Facilities Audited</b>	Main college building including laboratories, libraries, etc.
<b>Date of Energy and Green Audit</b>	09 September 2021
<b>Name of Certified Energy Auditor</b>	Mr. Swapnil Gaikwad
<b>Certification No.</b>	EA 20121
<b>Validity of the Certificate</b>	08 September 2022

Authorised Signatory

Signature of Auditor

Atul S Kakad (Partner)  
PowerTech Energy Solutions

(Swapnil Gaikwad)

## 1 Executive Summary – Energy Audit

Sr. No	Area	Proposed Action	Expected Result	Monthly Energy Savings in kWh	Annual Reduction in CO <sub>2</sub> emission in Tons	Monthly Cost Savings in Rs	Investment in Rs.	Payback Period in Months
1	Fan Recommendation 1	Replace existing 75 watt conventional ceiling fans with 40 watt energy efficient fans	<ul style="list-style-type: none"> <li>• Total No. of ceiling fans present = 87Nos.</li> <li>• Total No. of ceiling fans presently operated=87 Nos.</li> <li>• Total No. of ceiling fans to be replace= 17 Nos.</li> <li>• Present Energy Consumption = 631 kWh</li> <li>• Expected Energy Consumption = 533 kWh</li> <li>• Total Energy Saved per Month = 631-533= 98 kWh</li> <li>• Total Saving = 98kWh</li> <li>• Monetary Savings = Rs.986</li> <li>• Investment = Rs. 29750</li> <li>• Simple Payback period = 30 Month</li> </ul>	98	0.952	986	29750	30
<b>Total</b>				<b>98</b>	<b>0.952</b>	<b>986</b>	<b>29750</b>	<b>30</b>



## 2 Executive Summary – Green Audit

Sr.No	Area	Observations	Remark
1	Tree Plantation and Awareness about Energy Conservation	College has carried out tree plantation activity. Several type of trees has been planted by students and staffs	Good initiative taken by college toward green campus
2	Use of renewable energy – Solar PV system for power generation	Solar PV system of 100 kW has been installed by college to generate the electricity from solar energy. It helps to reduce 15 tons of CO <sub>2</sub> emission annually	Good initiative taken by college towards use of renewable energy
3	Rain Water Harvesting	College has set up water storage facility to store the rain water coming from nearby valleys.  This water is then used for gardening and flushing purpose	This is good imitative by college and commitment towards conservation of water
4	Liquid Waste Management	STP plant is installed to treat the waste water for application like gardening. It saves good amount of fresh water	Good Initiative
5	Solid Waste Management	Biogas plant of is installed in college campus to make the use of canteen waste	Good Initiative
5	E waste Management	At present, E -waste generated by college is sent to their Head office	College shall ensure that e-waste generated by them is channelised through collection centre or dealer of authorised producer or dismantler or recycler
6	Workshop on 'Save Electricity'	Workshop was conducted to aware the student about energy conservation	Good Initiative

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### 3 Acknowledgement

PowerTech Energy Solutions extends gratitude to Women's College of Pharmacy, Chincholi, Nashik for extending us the opportunity to conduct the Energy & Green Audit.

We are thankful to the professors & supporting staff of the college for their transparency & consistent support in sharing relevant information and for providing data about policies and projects along with their other valuable information. This report would have not been possible without their support.

The study team would like to acknowledge the following distinguished personnel's of Women's College of Pharmacy, Chincholi, Nashik in person for the diligent involvement and cooperation.

Prof. Dr. C.J.Bhangale

Principal

Prof. Dr. Ramdas T Dolas

Assistant Professor

## 4 About College

Our institute was started in the year 2006, PRES's, College of Pharmacy, (For Women), has achieved the status of Centre for Excellence within a short span of time. The College is affiliated to Savitribai Phule University, Pune. Empowerment of women through education has been the single minded mission of this college. Today Savitribai Phule University has become a symbol of excellence in higher education opportunity. Since the pledge of the college is to impart excellent education and training to the student, there is a perpetual attempt to attain higher levels of quality. Besides having highly qualified faculty with rich academic and industrial experience, the college has a well-designed infrastructure with spacious and well equipped laboratories, updated and spacious library and a playground.

### 4.1 Mission

- To impart knowledge, develop skills and competencies in students in pharmaceutical sciences.
- To develop and advanced the knowledge, attitude and skills of pharmacist and faculty member who can provide comprehensive health care, outcomes and meet societal needs for safe and effective drugs.
- To develop, promote and nurture research activities in pharmaceutical sciences and translating research into healthcare.

### 4.2 Vision

To be amongst the top five women's pharmacy colleges in India by imparting excellence in pharmaceutical education.

## 5 Energy Audit

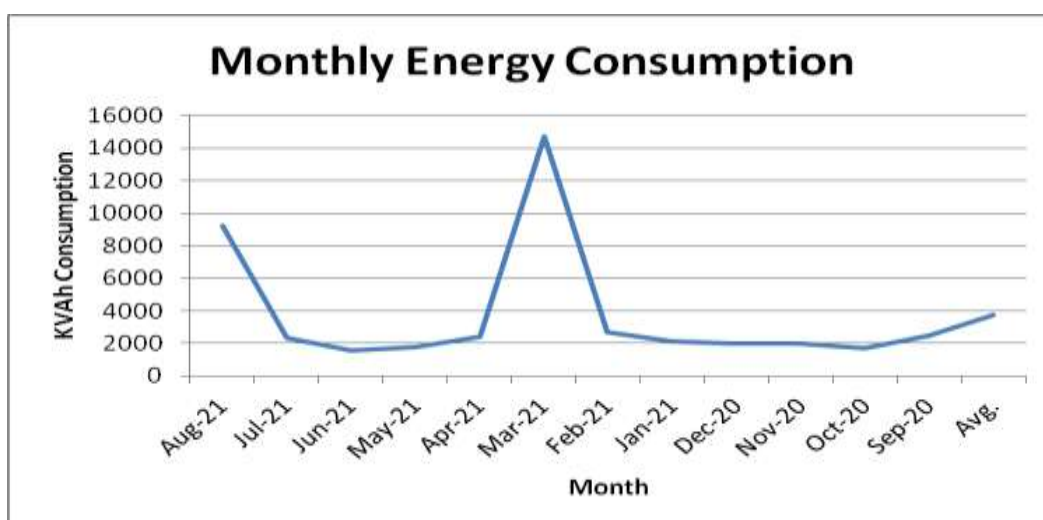
An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

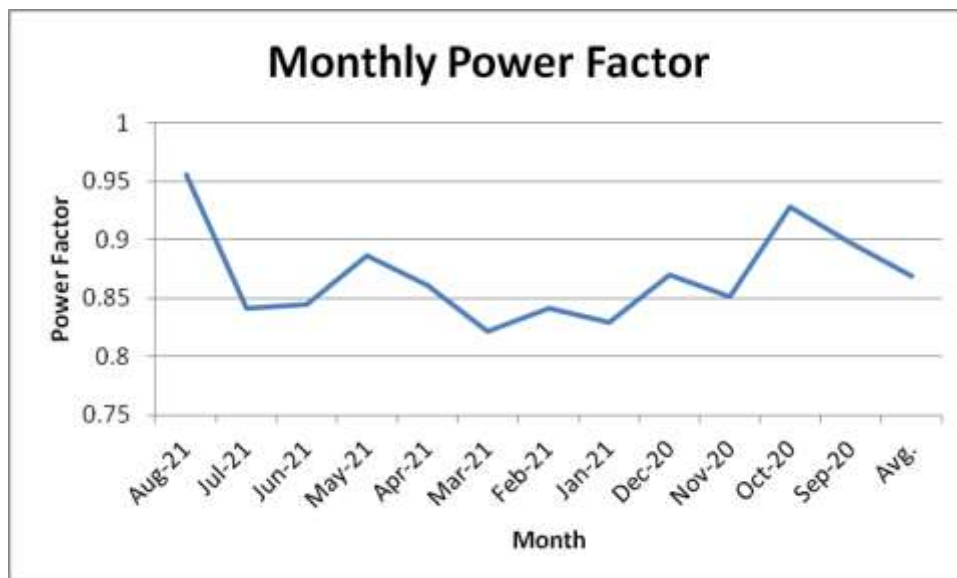
### 5.1 Electricity Bill Analysis

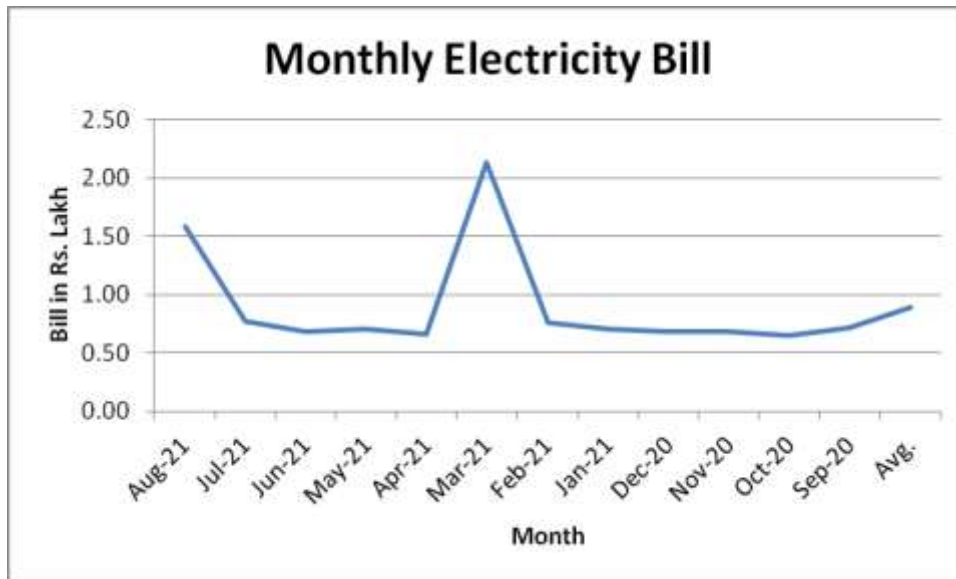
At present, one electricity meter is there for all campus. Contract demand is 150 kVA. Bill analysis for the last 12 months below (Consumer number – 075949015560)

Month	Monthly Unit Consumption		Monthly Bill	Power Factor	Billed Demand	Monthly Maximum Demand	Avg. Unit Rate
	kWh	kVAh	Rs		kVA	kVA	Rs/kVAh
Aug-21	8803	9208	158620	0.956	90	54	17.23
Jul-21	1993	2367	77670	0.842	90	56	32.81
Jun-21	1336	1581	68080	0.845	90	60	43.06
May-21	1550	1749	70330	0.886	90	77	40.21
Apr-21	2073	2408	65930	0.861	90	73	27.38
Mar-21	12080	14696	212940	0.822	83	78	14.49
Feb-21	2295	2726	76500	0.842	83	70	28.06
Jan-21	1760	2123	70240	0.829	83	65	33.09
Dec-20	1741	2001	68590	0.87	83	69	34.28
Nov-20	1717	2018	68820	0.851	83	67	34.10
Oct-20	1588	1711	64650	0.928	83	57	37.78
Sep-20	2215	2467	71497	0.898	83	47	28.98
Avg.	3,263		89,489	0.869	86	64	31

Below graphs shows the monthly energy consumption, maximum demand, power factor and bill trend







#### Observations

- Monthly average energy consumption is 3755 kVAh
- Monthly average maximum demand is 64 kVA
- Monthly avg. power factor is below 0.869 which is on lower side. Improve the power factor to unity.
- Install APFC panel of 50 kVAR (or capacitors of 50 kVAR to maintain unity PF)
- Monthly average electricity bill is Rs.0.89 Lakh
- Avg. unit rate is 30.96 Rs./kWh

## 5.2 Avg. Daily Energy Consumption

College has installed the sub energy meter at main incomer. Daily energy consumption data has been taken by electrical department

Date	Energy Consumption (kWh)
21-Aug	21
22-Aug	15
23-Aug	26
24-Aug	30
25-Aug	21
26-Aug	22
27-Aug	23
28-Aug	39
29-Aug	21
30-Aug	23
31-Aug	21
01-Sep	20
02-Sep	34
03-Sep	24
04-Sep	22
05-Sep	0
06-Sep	24
07-Sep	31
08-Sep	33
09-Sep	35
Avg. Daily Energy Consumption	24

### 5.3 Implemented Energy Saving Projects – LED Lights

College has replaced all conventional 40 watt tube lights with 18 watt LED lights in last year. Total 101 no. of fittings were replaced.

Below is the energy saving achieved due to LED lights

- Total no. of lights replaced = 101 Nos.
- Power Saving = 9.65 kW
- **Monthly Energy Savings = 241 kWh**
- **Monthly Cost Savings = Rs. 3618**
- Investment Required = Rs. 30,300
- **Payback Period = 8.3 Months**

#### 5.4 Connected Load

Area	Type	Total Qty	On	Wattage	Load in kW	Daily Op hr	Daily kWh	Mthly kWh
<b>B. Pharm Building</b>					0			
<b>Ground Floor</b>					0			
<b>Main Entrance</b>	18 W LED	5	5	18	0.09	6	0.54	12.96
<b>Office</b>	18 W LED	8	8	18	0.144	8	1.152	27.648
<b>Office</b>	Fan	5	5	75	0.375	8	3	72
<b>Passage</b>	18 W LED	5	5	18	0.09	1	0.09	2.16
<b>Training and Placement Cell</b>	18 W LED	2	2	18	0.036	3	0.108	2.592
<b>Training and Placement Cell</b>	Fan	2	2	75	0.15	3	0.45	10.8
<b>Exam Control office</b>	18 W LED	2	2	18	0.036	5	0.18	4.32
<b>Exam Control office</b>	Fan	1	1	75	0.075	5	0.375	9
<b>Computer Center</b>	18 W LED	6	6	18	0.108	3	0.324	7.776
<b>Computer Center</b>	Fan	2	2	75	0.15	3	0.45	10.8
<b>Principles Cabin</b>	18 W LED	4	4	18	0.072	4	0.288	6.912
<b>Principles Cabin</b>	Fan	2	2	75	0.15	4	0.6	14.4
<b>microbiology</b>	18 W LED	4	4	18	0.072	4	0.288	6.912
<b>microbiology</b>	Fan	4	4	75	0.3	4	1.2	28.8
<b>Instrument Room</b>	18 W LED	3	3	18	0.054	3	0.162	3.888
<b>Instrument Room</b>	Fan	3	3	75	0.225	3	0.675	16.2
<b>Machine Room</b>	18 W LED	5	5	18	0.09	2	0.18	4.32
<b>Machine Room</b>	Fan	4	4	75	0.3	2	0.6	14.4
<b>Staff Room</b>	18 W LED	7	7	18	0.126	8	1.008	24.192
<b>Staff Room</b>	Fan	4	4	75	0.3	8	2.4	57.6
<b>Pharma Lab 2</b>	18 W LED	8	8	18	0.144	3	0.432	10.368
<b>Pharma Lab 2</b>	Fan	6	6	75	0.45	3	1.35	32.4
<b>Pharm Lab</b>	18 W LED	5	5	18	0.09	6	0.54	12.96
<b>Pharm Lab</b>	Fan	4	4	75	0.3	6	1.8	43.2



Area	Type	Total Qty	On	Wattage	Load in kW	Daily Op hr	Daily kWh	Mthly kWh
Pharma Chemist Lab 1	18 W LED	11	11	18	0.198	5	0.99	23.76
Pharma Chemist Lab 1	Fan	9	9	75	0.675	5	3.375	81
Class Room 1	18 W LED	2	2	18	0.036	3	0.108	2.592
Class Room 1	Fan	4	4	75	0.3	3	0.9	21.6
Class Room 2	18 W LED	2	2	18	0.036	3	0.108	2.592
Class Room 2	Fan	4	4	75	0.3	3	0.9	21.6
Pharmacology Lab	18 W LED	3	3	18	0.054	4	0.216	5.184
Pharmacology Lab	Fan	4	4	75	0.3	4	1.2	28.8
Quality Assurance(Research lab)	18 W LED	5	5	18	0.09	2	0.18	4.32
Quality Assurance(Research lab)	Fan	2	2	75	0.15	2	0.3	7.2
Biochemistry Lab	18 W LED	5	5	18	0.09	4	0.36	8.64
Biochemistry Lab	Fan	5	5	75	0.375	4	1.5	36
Tutorial Room	18 W LED	1	1	18	0.018	2	0.036	0.864
Tutorial Room	Fan	2	2	75	0.15	2	0.3	7.2
Library	18 W LED	8	8	18	0.144	3	0.432	10.368
Library	Fan	9	9	75	0.675	3	2.025	48.6
<b>Total</b>					<b>7.51</b>		<b>31</b>	<b>746</b>

## 5.5 Actual Load Measurement

The power logging is done at the main incomer of the college

The following parameters are logged.

Summary Table for Voltage and Current		
	Voltage (Volt)	Current (Amp)
Min	411	4.1
Average	409	5.2
Max	408	4.7

Summary Tables For kW & Power Factor		
	Power (kW)	Power Factor
Min	2.47	0.847
Average	3.2	0.871
Max	2.7	0.814

### 5.5.1 Observations

- Average and maximum voltage is 409 volts and 411 volts respectively.
- Average and maximum load is 3 kW and 3.2 kW respectively
- Average and minimum power factor recorded is 0.844 and 0.871 respectively during recorded period

## 5.6 Energy Saving Measure 1 – Replacement of conventional ceiling fans with energy efficient ceiling fans

Area	Type	Total Qty	On Qty	UF	Wattage	Daily Op hr	Load	Mthly KWh	New Wattage	New Load	Mthly KWh	Saving KWh	Saving Rs	Unit Rate	Inv	PaYback (Months)
microbiology	Fan	4	4	1	78	4	0.31	32	78	0.31	32	0	0	0	0	0
Instrument Room	Fan	3	3	1	78	3	0.23	18	78	0.23	18	0	0	0	0	0
Machine Room	Fan	4	4	1	78	2	0.31	16	78	0.31	16	0	0	0	0	0
Staff Room	Fan	4	4	1	78	8	0.31	64	40	0.16	33	31	312	1750	7000	22
Pharma Lab 2	Fan	6	6	1	78	3	0.47	36	78	0.47	36	0	0	0	0	0
Pharm Lab	Fan	4	4	1	78	6	0.31	48	40	0.16	24	23	234	1750	7000	30
Pharma Chemist Lab 1	Fan	9	9	1	78	5	0.7	90	40	0.36	46	44	439	1750	15750	36
Class Room 1	Fan	4	4	1	78	3	0.31	24	78	0.31	24	0	0	0	0	0
Class Room 2	Fan	4	4	1	78	3	0.31	24	78	0.31	24	0	0	0	0	0
Pharmacology Lab	Fan	4	4	1	78	4	0.31	32	78	0.31	32	0	0	0	0	0
Quality Assurance(Research lab)	Fan	2	2	1	78	2	0.16	8	78	0.16	8	0	0	0	0	0
Biochemistry Lab	Fan	5	5	1	78	4	0.39	40	78	0.39	40	0	0	0	0	0
Tutorial Room	Fan	2	2	1	78	2	0.16	8	78	0.16	8	0	0	0	0	0
Library	Fan	9	9	1	78	3	0.7	54	78	0.70	54	0	0	0	0	0
Tutorial Room	Fan	4	4	1	78	4	0.31	32	78	0.31	32	0	0	0	0	0
human anatomy lab	Fan	6	6	1	78	4	0.47	48	78	0.47	48	0	0	0	0	0
Class Room 3	Fan	4	4	1	78	2	0.31	16	78	0.31	16	0	0	0	0	0
Class Room 4	Fan	5	5	1	78	2	0.39	20	78	0.39	20	0	0	0	0	0
Pharmacology Lab	Fan	4	4	1	78	3	0.31	24	78	0.31	24	0	0	0	0	0
<b>SUM</b>		<b>87</b>	<b>87</b>				<b>6.79</b>	<b>631</b>		<b>6.14</b>	<b>533</b>	<b>98</b>	<b>986</b>	<b>5250</b>	<b>29750</b>	<b>30</b>

## **Fan Recommendation 1**

Replace existing 75 watt conventional ceiling fans with 40 watt energy efficient fans

- Total No. of ceiling fans present = 87Nos.
- Total No. of ceiling fans presently operated=87 Nos.
- Total No. of ceiling fans to be replace= 17 Nos.
- Present Energy Consumption = 631 kWh
- Expected Energy Consumption = 533 kWh
- Total Energy Saved per Month =  $631-533= 98$  kWh
- Total Saving = 98kWh
- Monetary Savings = Rs.986
- Investment = Rs. 29750
- Simple Payback period = 30 Month

## 6 Requirements of NAAC

### 6.1 Alternative Energy Initiative

Percentage of power requirement met by renewable energy sources  
= (Power requirement met by renewable energy sources / Total power requirement) X 100  
= (111616/39151) X 100  
**= 35%**

### 6.2 Percentage of lighting power requirement met through LED bulbs

Percentage of lighting power requirement met through LED bulbs  
= (Lighting power requirement met through LED bulbs / Total lighting power requirement) X 100  
= (101/101)  
**= 100 %**

## 7 Green Audit

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon-Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade a, Grade B or Grade C according to the scores assigned at the time of accreditation.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

### 7.1 Goals of Green Audit

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

## **7.2 Benefits of Green Audit**

- It would help to shield the environment
- Recognize the cost saving methods through waste minimizing and managing
- Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- It portrays a good image of a company which helps building better relationships with the group of stakeholders
- Enhance the alertness for environmental guidelines and duties

## 8 Initiatives by College towards Sustainable Environment

### 8.1 Tree Plantation and Awareness about Energy Conservation

Tree-planting is the process of transplanting tree seedlings, generally for forestry, land reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of tree seeds.

In silviculture the activity is known as reforestation, or afforestation, depending on whether the area being planted has or has not recently been forested. It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity. Tree planting is carried out in many different parts of the world, and strategies may differ widely across nations and regions and among individual reforestation companies. Tree planting is grounded in forest science, and if performed properly can result in the successful regeneration of a deforested area. Reforestation is the commercial logging industry's answer to the large-scale destruction of old growth forests, but a planted forest rarely replicates the biodiversity and complexity of a natural forest.

Because trees remove carbon dioxide from the air as they grow, tree planting can be used as agro engineering technique to remove CO<sub>2</sub> from the atmosphere. Desert greening projects are also motivated by improved biodiversity and reclamation of natural water systems, but also improved economy and social welfare due to increased number of jobs in farming and forestry.

College has planted the trees campus area to make it more environments friendly.

Tree plantation was celebrated on 9th. July 2018 at PRES'S College of Pharmacy (for women), Chincholi, and Nashik by the NSS Unit and other students of college of pharmacy Chincholi. Dr.Sunil A Nirmal (Principal), Dr.C.J.Bhangale was chief guest of this program. Our NSS volunteers Miss.Rutuja Nalkar guided the students how to plant the tree. In our college campus, we plant the different tree like Aavala,Jambhul,Kashid,Karanj ,Shisaw ,Acacia and many more plant. Total 100 plants were planted by our Students, Teaching and non -Teaching staff.Prof Dolas R.T, Prof. Mr.V.D.Kunde & Prof.Mrs K.T.Vaditake guided the student about importance of tree plantation and benefit of nature to human being.Staff Prof.Mr.V.A.Kashid

Prof.Mr.K.B.Kotade,Prof.Mr.Sachin.Somvanshi,Prof.Mr.SandipLaware,Mr.R.J.Bhor.&Student s from second ,third, final year Pharmacy were actively participated in this event.



## Details of the Event:

### PRES's College of Pharmacy(for Women),Chincholi, Nashik Tree plantation report year 2017-18

Division	District	Taluka	Village	Compartment No.	Latitude-Longitude	Plantation Target	Pits/Trench Achievement During The Month			Total	Percentage Of Pits Completed
							JUNE	JULY	AUG		
Pune	Nashik	Sinnar	Chincholi	107	19.88/73.93	100	100	----	---	100	100%

### Planning

Division	District	Taluka	Village	Compartment No.	Latitude-Longitude	Plantation Target	Implantation achievement During The Month Of June			Total	Percentage Of Pits Completed
							First week	Second week	Third week		
Pune	Nashik	Sinnar	Chincholi	107	19.88/73.93	100	--	100	--	100	100%









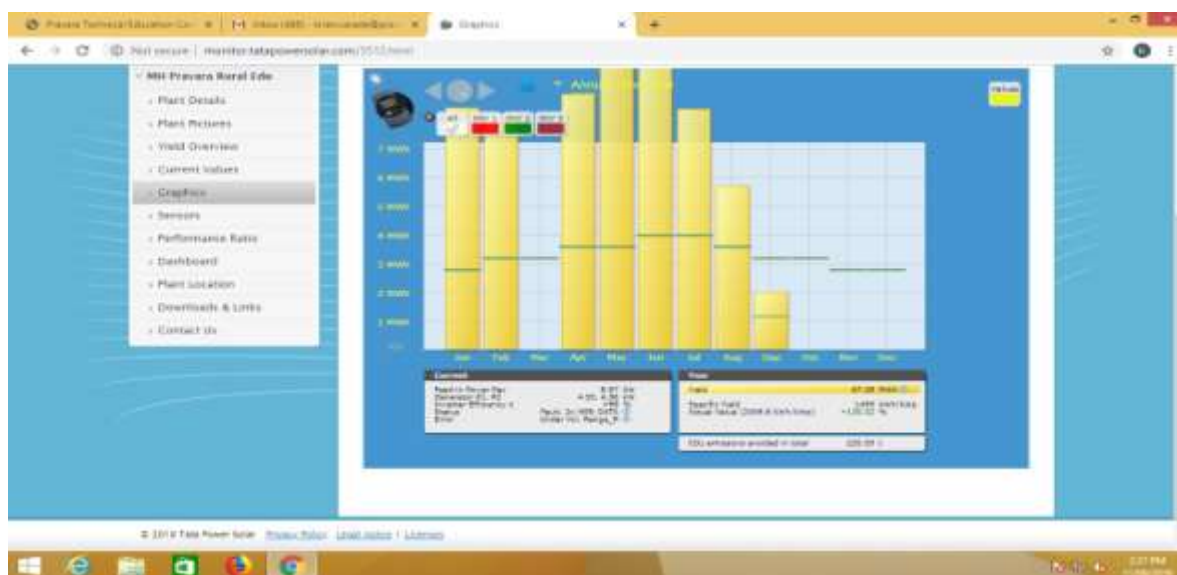
## 8.2 Use of Solar PV System for Power Generation

SVIT has installed 100kW solar PV plant to generate the electricity through solar energy. Solar power plant is generating almost 111616 units annually which results in reduction of 90 Tons of CO<sub>2</sub> emission

Following are the some actual images of installed solar PV plant



Below graph shows the annual solar energy generation





### 8.3 Rain Water Harvesting

College of pharmacy (Women) has taken initiative to collect the rain water coming from nearby valley into the water storage tank

This water is then used for gardening and flushing purpose. This is good initiative taken by college towards conservation of water

Following are the some actual site images



#### 8.4 Sewage Treatment Plant

STP has been installed in college campus to treat the used water. Water comes to STP from various washrooms, basins. It is treated in the plant and has been used for gardening purpose.

Following is the actual site image of STP



### 8.5 Biogas Plant

Biogas plant is installed near canteen. It generates the biogas which has been utilized in kitchen for cooking purpose. It saves good amount of LPG required for cooking application.

Below are the actual site images of biogas plant

Food Waste	Biogas supply to kitchen
	

### 8.6 Seminar on Save Electricity

Workshop on “Save Electricity” was conducted on 15<sup>th</sup> December 2018. The main purpose of the workshop to aware the student about energy conservation awareness

It helps student to understand the various ways of energy saving in day to day life. It result with the remark that “A small change in habits can contribute to energy saving and carbon emission reduction”

Total 25 no. of students were present for the workshop. It was conducted by Mr. Kiran Varade, Asst. Prof. of Electrical Engineering Department of SVIT.

#### Photo gallery

