



CARMEL VIDYA BHAVAN TRUST'S

CHRIST COLLEGE PUNE

(Affiliated to Savitribai Phule Pune University)



Criterion VII

7.1.2

- Alternate Sources of Energy & Energy Conservation Methods
- Management of Degradable & Non-degradable Waste
- Water Conservation
- Green Campus Initiatives
- Disabled-friendly, barrier free environment



FACILITY & INITIATIVES

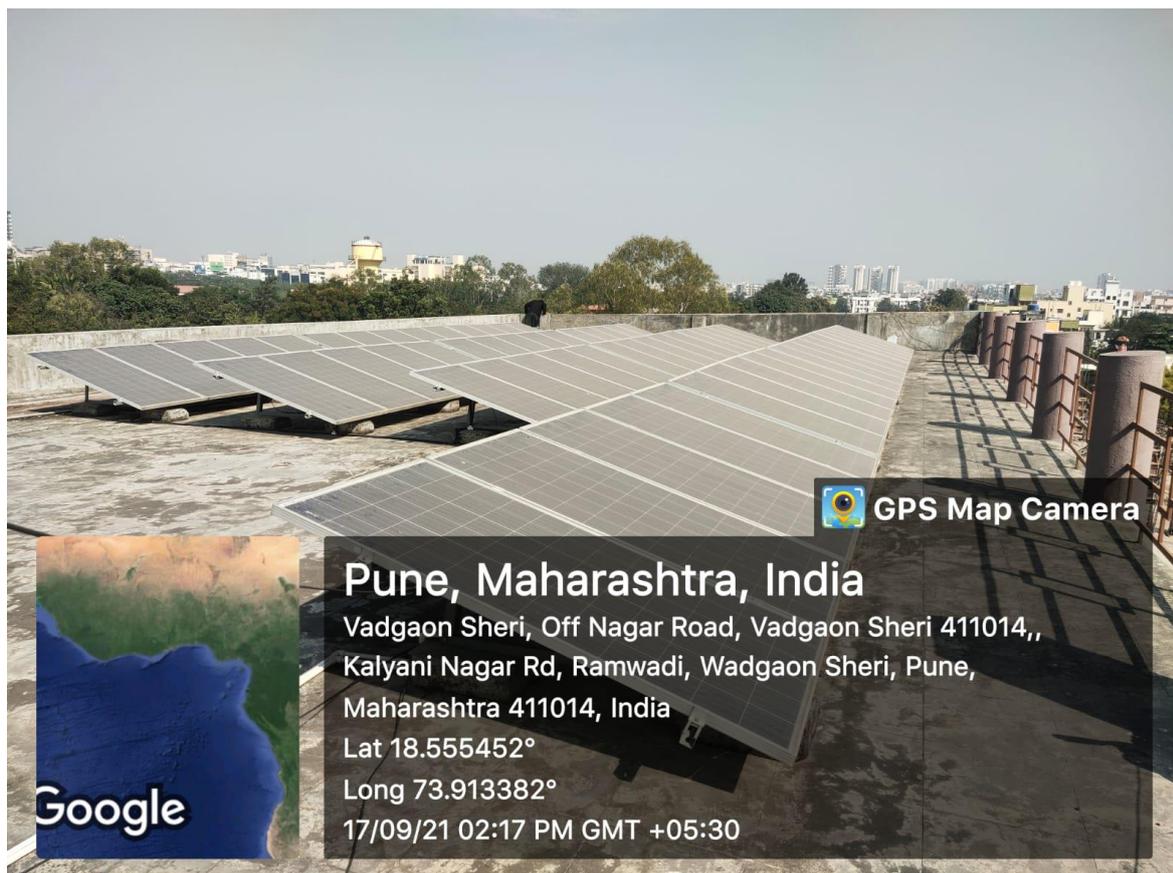
7.1.2 RELEVANT DOCUMENTS

7.1.2 Alternative sources of energy and energy conservation measures

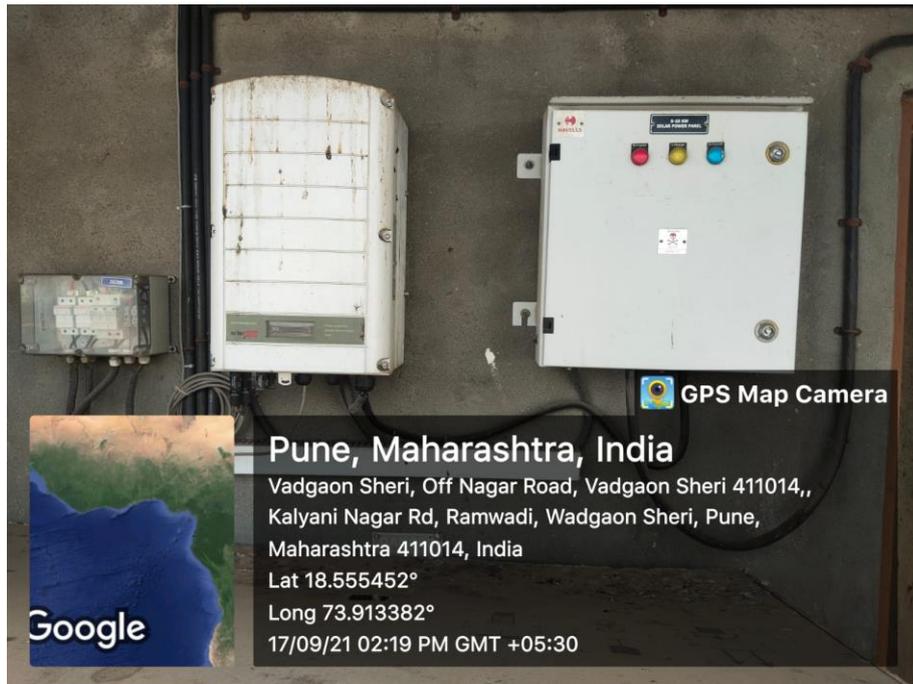
Conserving energy produces a higher quality of life. In addition, it helps to create a healthier planet, or at least helps to sustain the resources we already have. Institute uses following alternative sources of energy and energy conservation measures:

1. SOLAR ENERGY

The institution has installed solar panels on the roof of the college building that produces renewable energy to try to meet the increased electricity demand. Currently, the institute has solar panels that contribute to 37% of the overall monthly electricity consumption. Solar Panels of 20.16 kVA are installed on the college building.



2. WHEELING TO THE GRID



Maharashtra State Electricity Distribution Co. Ltd.
MAHAVITARAN
BILL OF SUPPLY FOR THE MONTH OF Oct-2022

Consumer No.: 160236370152
 Consumer Name: M/S. CHRIST COLLEGE
 Address: SNO-28/44/1 SARIKWADI
 WADGAONSHERI PUNE
 Village: WSHERI PUNE Pin Code: 411014

Bill Date: 12/10/2022
 Due Date: 12/10/2022
 Meter No.: 053-20271096
 Meter Reading: 42230.00
 Meter Status: OK

Sanctioned Load (KW): 36.00
 Connected Load (KW): 36.00
 Contract Demand (KVA): 36.00
 Funder Voltage (KV): 11

Category: Public Business Other
 Activity: M
 Substation: U
 Express Feeder Flag: N

Prev. Highest (Mth): 30881.17
 Security Deposit Hold Rs.: 0.00
 S. D. Arrears Rs.: 0.00

BILLING HISTORY

Month	Units	Bill	Payment
Aug-2022	2478	12	34631.23
Jul-2022	2787	12	38550.36
Jun-2022	3888	19	55055.17
May	4263	21	56387.56
Apr-2022	3886	21	47519.23
Mar-2022	1685	16	23427.83
Feb-2022	531	11	10472.01
Jan-2022	690	11	11927.44
Dec-2021	1149	11	10919.06
Nov-2021	1467	14	10943.37
Oct-2021	788	11	11723.21

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

MAHAVITARAN
 STAY HOME, PAY ONLINE & STAY SAFE
 FOR MORE DETAILS VISIT WWW.MAHAVITARAN.COM

MAHASEDOL ONLINE PAYMENT FACILITY

- Pay Online to Save your Time and Money
- Safe and Secure
- Pay Online from MAHASEDOL Office Website, Maharashtra Mobile App
- Online payment facility available through Net-Banking, Credit Card, Debit Card, Cash Cards, UPI etc.
- 8.25% discount (up to Rs. 500) in next month bill.
- RTGS Payment facility for HT and LT consumers above 20 for last
- For RTGS payment, Virtual account number of consumer and bank details are provided on Consumer Bill.

Important Message

- Consumers can pay online using Net banking, Credit/Debit cards at <https://www.mahaseedol.com/onlinepayment> after registration.
- Submit / update your PAN & GSTIN to Credit Office with copies of PAN & GSTIN for verification.
- Special desk is operational for HT Consumers, please contact: htconsumer@mahaseedol.com for any clarification / query or grievance.
- The Electricity Bill should not be used for the address proof and as a proof of property ownership.
- For any payment to MAHASEDOL, ENSURE & INSIST for computerized receipt with unique system generated receipt number. Do not accept hand written receipt. Pay online to avoid any inconvenience.

CURRENT CONSUMPTION DETAILS

Reading Date	KWH	KVARH	KVAH(LEAD)	KVAH(LEAD)	KVAH(LEAD)	KVAH(LEAD)
31/10/2022	12534.130	126097.710	4047.00	7204.90	25.74	25.74
30/09/2022	124931.000	125280.800	3881.00	7086.10	27.82	27.82
Previous	3410.90	3416.90	90.00	218.50	1.00	1.00
Multiplying Factor	1.00	1.00	1.00	1.00	1.00	1.00
Consumption	3410.90	3417.00	90.00	218.50	26.74	26.74
Add # L.T. Metering	0.00	0.00	0.00	0.00	0.00	0.00
Adjustment	-478.00	0.00	0.00	0.00	0.00	0.00
Assessed Consumption	0.00	0.00	0.00	0.00	0.00	0.00
Total Consumption	2932.90	3417.00	90.00	218.50	27.00	27.00

BILLING DETAILS

Item	Rate	Amount	Item	Rate	Amount
Billed Demand (KVA)	0.0000	0.0000	Demand Charges	1.30	3932.20
Assessed P.F.	0.0000	0.0000	Wholesaling Charges		21188.36
Billed P.F.			Energy Charges	L.F.	4272.80
Consumption Type	Units	Rate	Charges Rs.	TOD Tariff EC	4251.40
Industrial	0.00	0.00	0.00	FAC @ 1.5%	7588.95
Residential	5932.00	7.23	21188.36	Electricity Duty	0.00
Commercial				Other Charges 19.04	0.00
E.S. (Rs.)	Rate	Amount		Tax on Sale @	566.85
0.00	0.00	0.00		P.F. Penal Charges / P.F. Incentive	-1261.56
30/04/23	31.00	7588.95		Charges For Excess Demand	0.00
TOD Tariffs	Units	Demand	Charges Rs.		
0000 Hrs-0000 Hrs	5.5000	787	4	-1180.50	0.00
0000 Hrs-0000 Hrs & 2200 Hrs-2400 Hrs	0.0000	1171	27	0.00	42973.30
0600 Hrs-0900 Hrs & 1200 Hrs-1500 Hrs	0.0000	545	24	436.00	-8.84
0900 Hrs-1200 Hrs	1.0000	429	3	471.90	0.00
1800 Hrs-2200 Hrs					42230.00
Total Bill Amount (Rounded) Rs.					336.42
Delayed Payment Charges Rs.					10949.99
Amount (Rounded) Payable After					42770.00

Amount in Words: FORTY TWO THOUSAND TWO HUNDRED THIRTY ONLY

SOLAR TARIFF

SOLAR TARIFF	IMPORT			EXPORT			GENERATION		
	CURRENT READING	PREVIOUS READING	Units	CURRENT READING	PREVIOUS READING	Units	CURRENT READING	PREVIOUS READING	Units
0000 Hrs - 0600 Hrs & 1200 Hrs - 1800 Hrs	38188.15	38021.70	787.00	0.00	0.00	0.00	68.41	68.41	0.00
0600 Hrs - 0900 Hrs & 1200 Hrs - 1500 Hrs	44915.15	44465.10	1422.00	1476.70	14544.70	251.00	6924.94	59821.08	1933.00
0900 Hrs - 1200 Hrs	22736.00	21864.50	772.00	8336.50	8093.80	227.00	14194.24	14194.24	0.00
1800 Hrs - 2200 Hrs	20661.15	20471.70	426.00	0.40	0.00	0.00	132.48	132.48	0.00
TOTAL	126441.45	124951.00	3411.00	23116.60	22638.80	478.00	7817.13	7304.20	1933.00
Other	478.00								

CONDITIONS

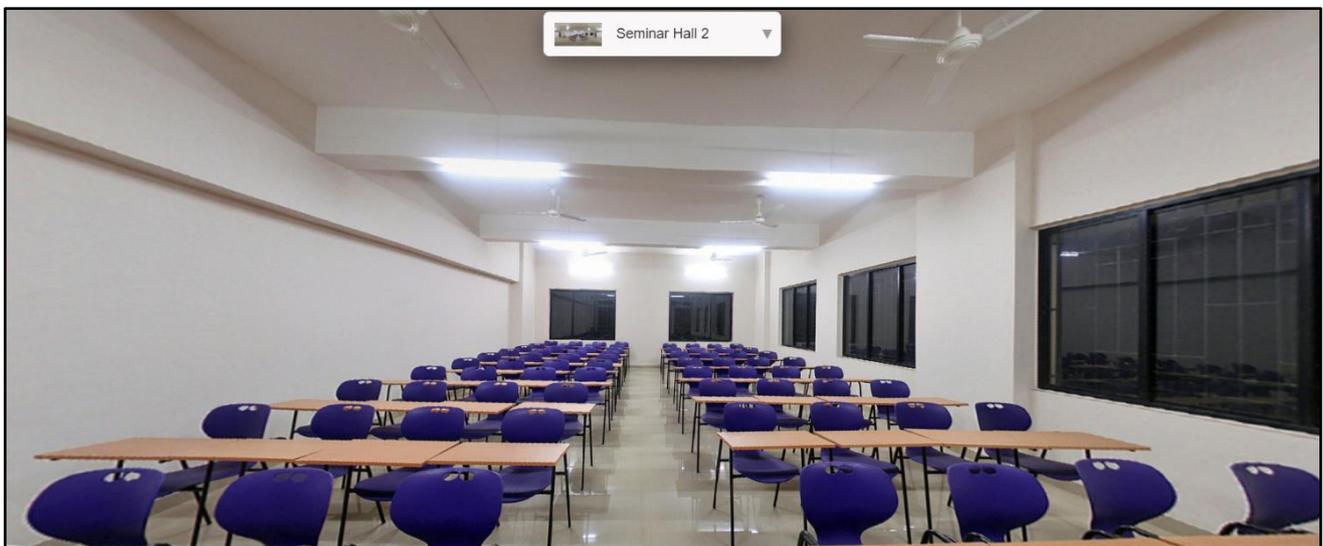
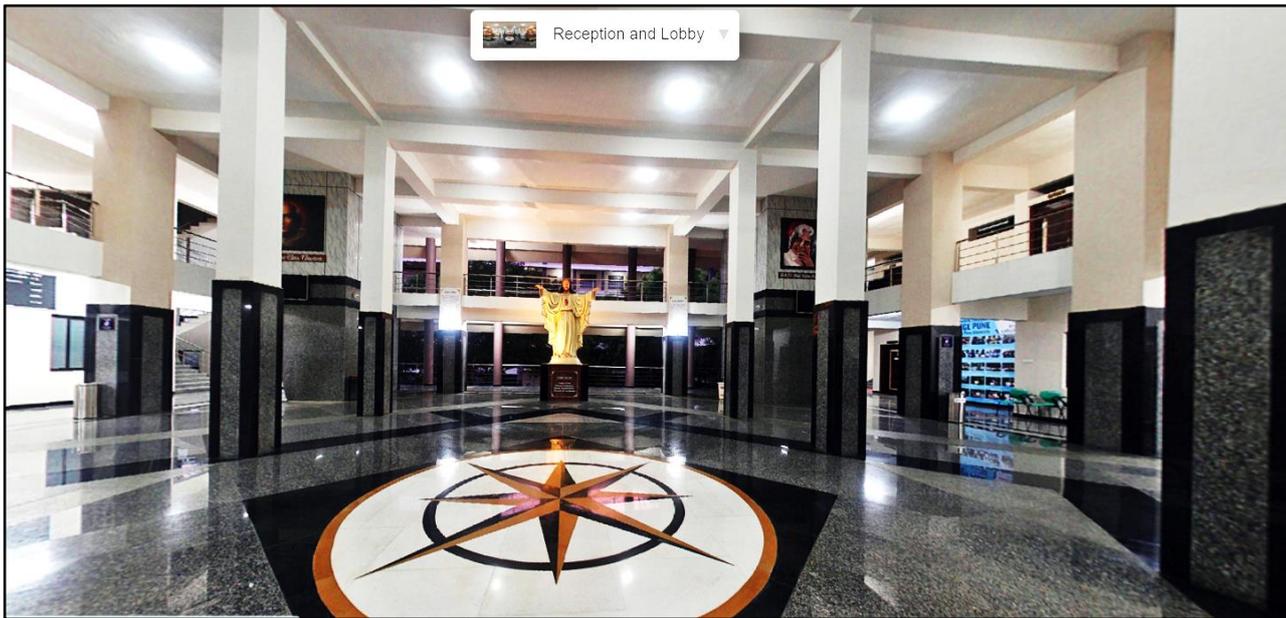
- The total bill amount of the bill may be verified by a Consumer Demand Draft/Check drawn in favour of Maharashtra State Electricity Distribution Co. Ltd. whenever Security Deposit is demanded against the bill.
- The current bill is payable within three days from the date of issue of the bill. Even if there is any discrepancy in the bill or any other clarification needed, consumers are requested to pay the billed amount of the bill immediately or under protest subject to return and subsequent adjustment as that payment of delayed payment charges is levied.
- This bill is issued subject to the provision of the 'Conditions and Modification charges for supply of Electrical Energy' of the Company.
- Please quote the Consumer Number on the back of the Cheque. The payment of the bill should be made at Company's office only.
- If the cheque is sent by post, the date should be noted from the date of issue of the bill.
- In case of payment made through RTGS/NEFT/Check/Drop/Draft, the date of amount credited to MAHASEDOL account will be treated as receipt date.

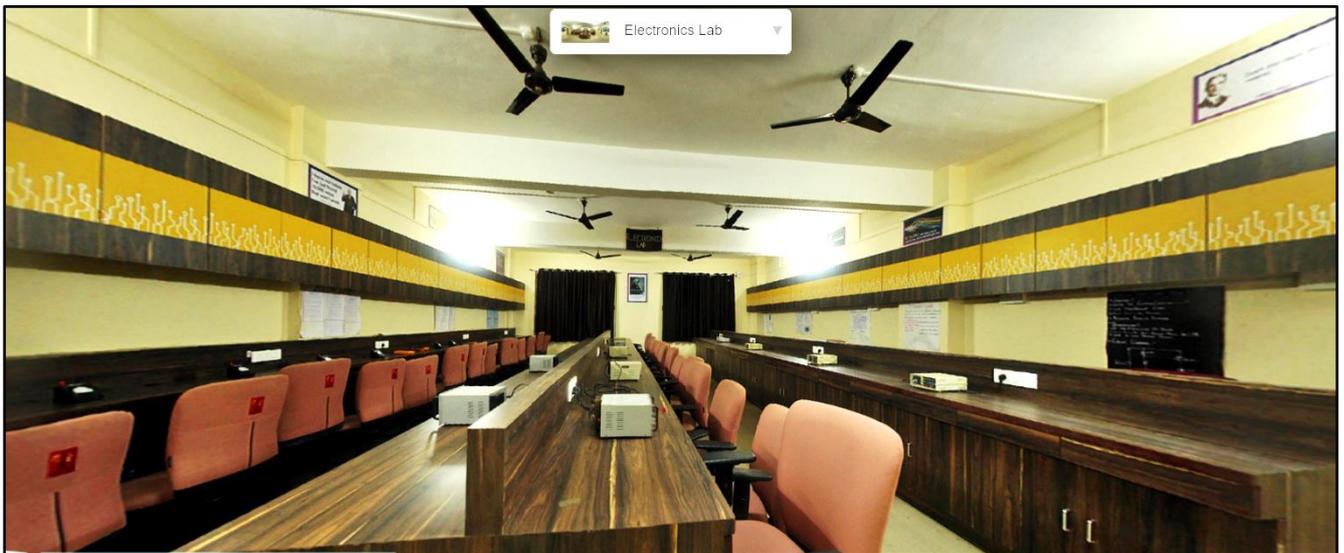
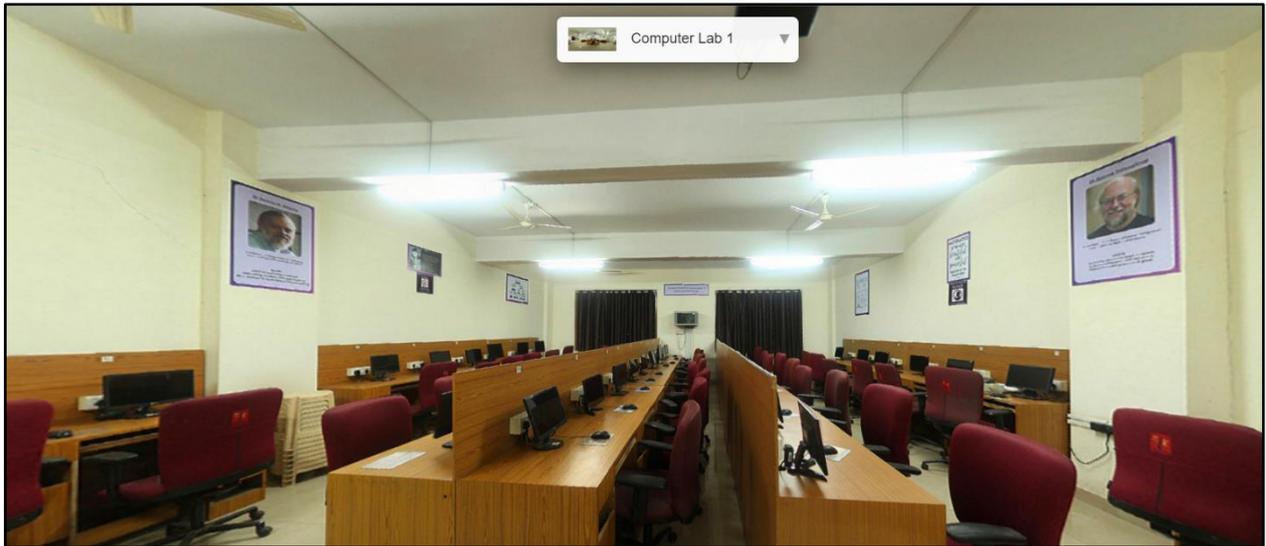
Collection Hours - 10:30 to 16:00 Hours (Except on Bank Holidays, Sundays, 2nd & 4th Saturdays)

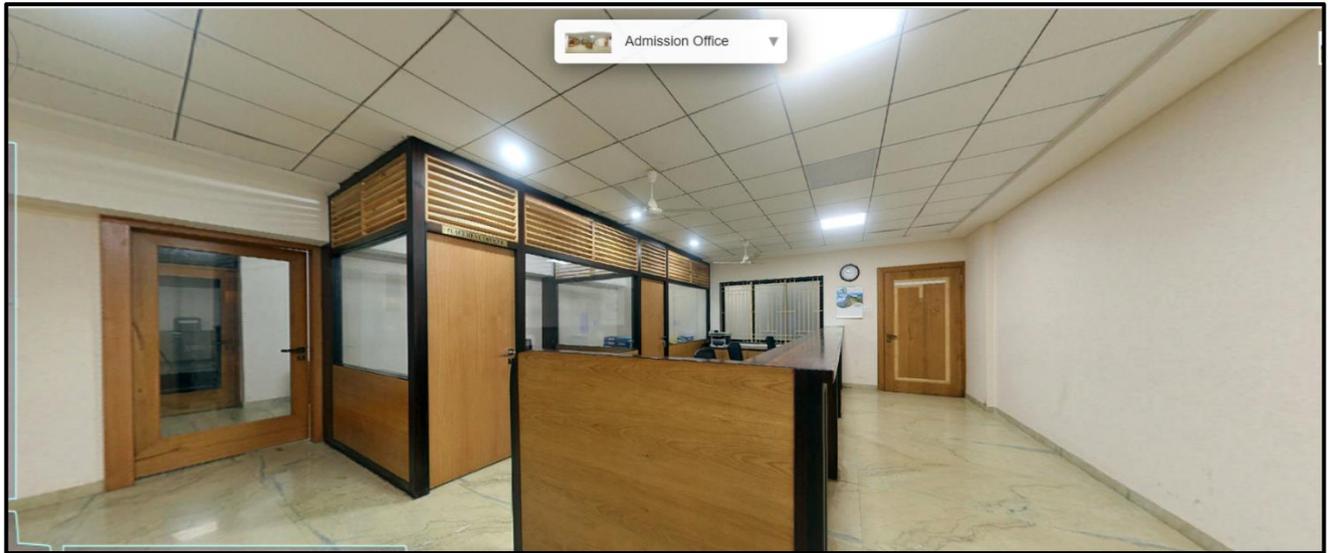
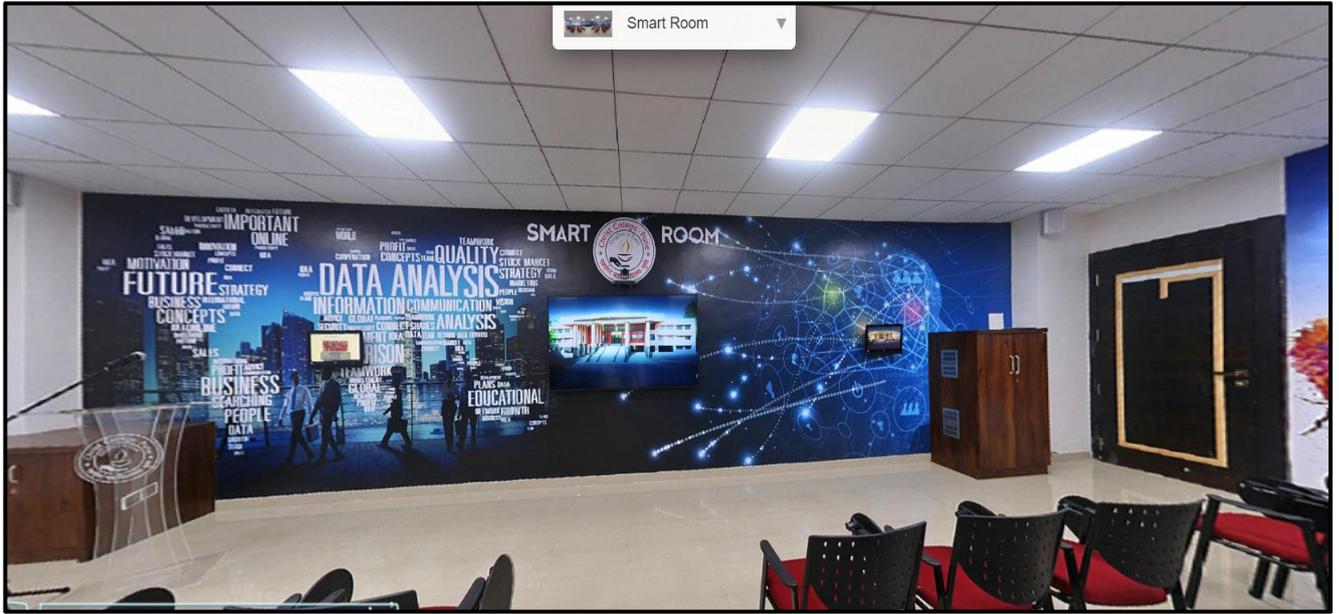
3. USE OF LED BULBS/ POWER EFFICIENT EQUIPMENT

Around 22% power saving in the campus is done by using and replacing the conventional light bulbs by LEDs.

Use of LEDs throughout the Campus







7.1.2 Management of various types of degradable and nondegradable waste

Solid waste management

- Color coded bins for dry, wet, plastic and sanitary waste are used for segregation.
- The students are accustomed to use bins placed in each classroom and all around the campus.
- Vermiculture compost unit is constructed to convert the organic waste into fertilizer.
- Composting pit is used to convert green waste into organic manure for maintaining campus garden.

Liquid waste management

- Recycling of water is promoted through rain water harvesting. 5Lakh liters capacity tank is constructed to recycle and save water which is utilized for construction work, washing purposes and also provided to the local community during scarcity.
- Waste water of washrooms is recycled for gardening purpose.

Bio-medical waste management

- The biomedical waste- sanitary pads are disposed through napkin incinerator installed in campus.

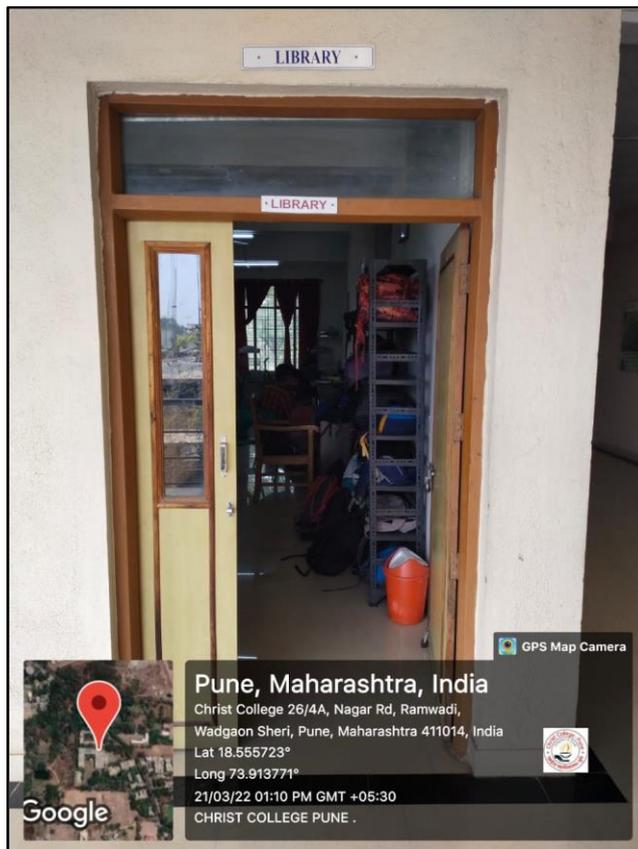
E-waste management

- E-waste disposal is stored in a warehouse from where it is handed over to e-waste collectors.

1. SOLID WASTE MANAGEMENT



Segregated Dry & Wet waste bins in campus





Vermicomposting unit



Composting pit

2. LIQUID WASTE MANAGEMENT

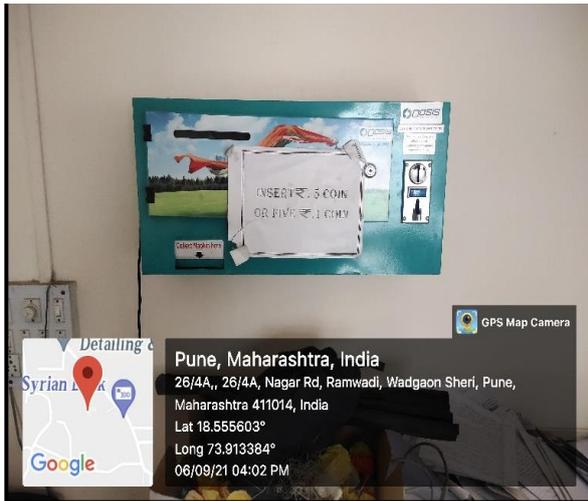


Liquid waste management through Roof top Rain water harvesting system



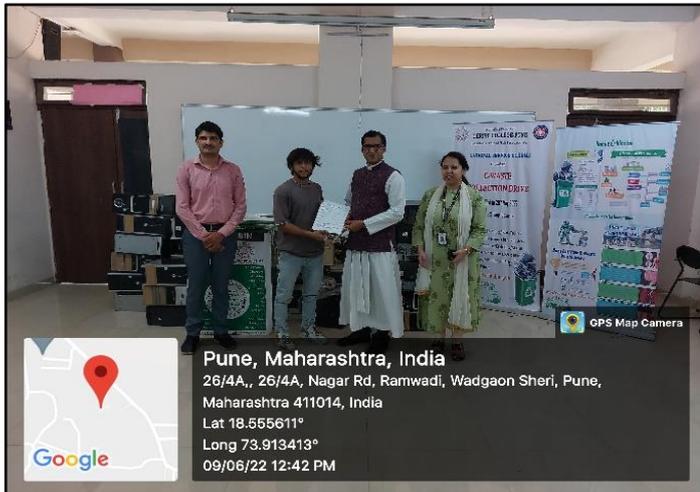
Recycled water used for Gardening

3. BIO-MEDICAL- SANITARY WASTE



Vending machine and Incinerator installed in campus

4. E-WASTE MANAGEMENT



E-Waste Management Drive

As we stand in the midst of extreme environmental and climate deterioration. E-waste hazard is one of the major issues we face in this digital era. Electronic waste or e-waste describes discarded electrical or electronic devices. For example old mobile phones, chargers, laptops keypads, pen drives etc.

To curb this issue the NSS UNIT of Christ College, Pune organised an E-waste awareness drive for a week starting from 23rd of May till 28th of May. All the staff and students were requested to contribute to this drive by bringing any electronic waste and discarding it in e-waste dustbin placed in the lobby area near the college office. This e-waste was then recycled by the Recycling Company (Threco Recycling LLP). A certificate was issued by the company for receiving 318.9 Kgs of E-waste.







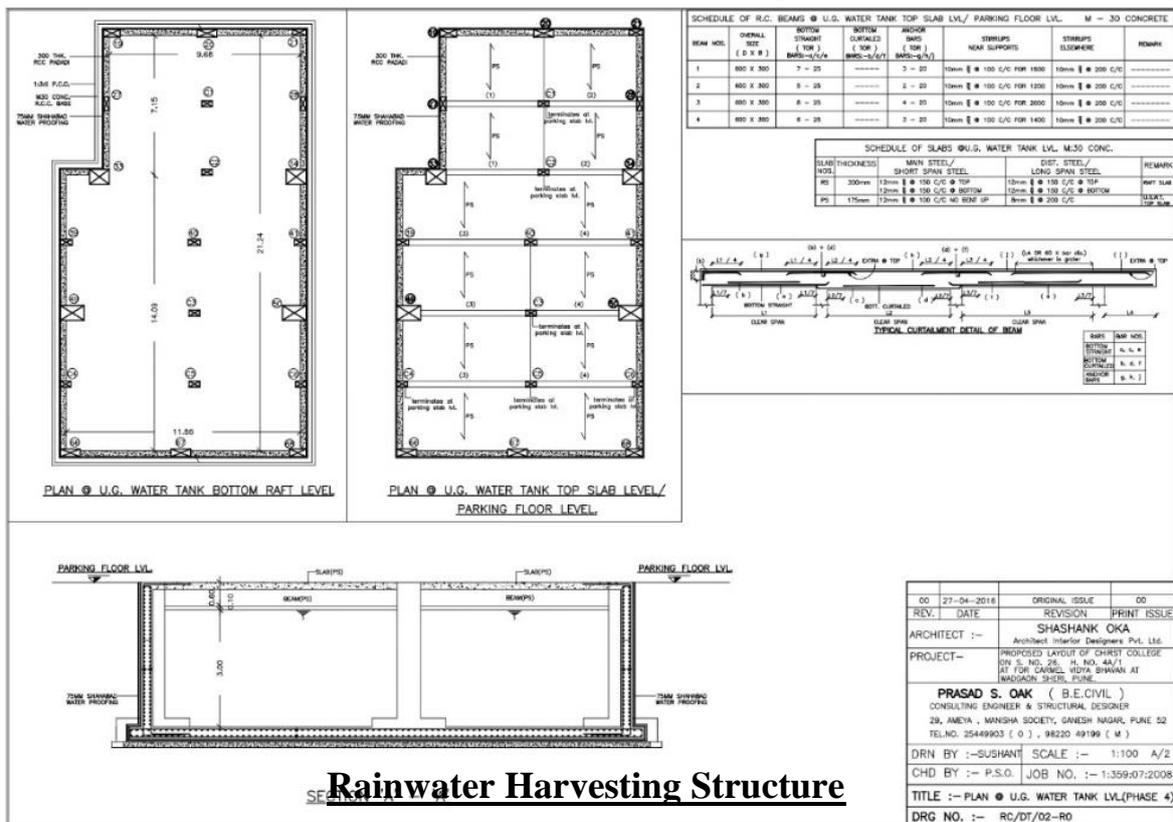
3. Water conservation facilities available in the Institution: Maintenance of water bodies and distribution system in the campus.

A significant portion of the College's original terrain has been preserved, which greatly facilitates groundwater recharge and water percolation. The campus's beautiful ambiance, intellectual setting, and green spaces with trees and lawns, wide hallways, and expansive playgrounds inspire students and staff to learn, develop their talents, and foster the teaching-learning process.

The college practices water conservation through:

1. RAIN WATER HARVESTING

The College is well equipped with the facility of rain water harvesting. We are using roof top type rain water harvesting system which collects rain water from the roof of the building and divert it to a storage tank with a capacity of 502830 liters. The dimension of the tank is 13.84m (length) x 11.72m (width) x 3.10m (height). The recycled water is used to cater the need for construction work, washing purposes, irrigating the lawn and landscape, flush water in toilets, as fire extinguisher etc. During water crisis, this stored water is used by the local community too.



Rainwater Harvesting Structure

2. OPEN WELL RECHARGE

A huge open well, constructed in the campus is recharged by rain water. The water is used for washing and irrigation purposes.



Open Well in campus

3. CONSTRUCTION OF TANKS

As the water crisis continues to become severe, there is a need to save it properly. The college has rooftop tanks of around 20,000 Lts. and 5000 Lts. capacity. Water

from corporation is stored in the underground water tank in the campus. Separate tank of 502830 Lts. is constructed to collect rain water.



Rooftop and underground water tanks



Water tank for birds and watering in vegetable garden

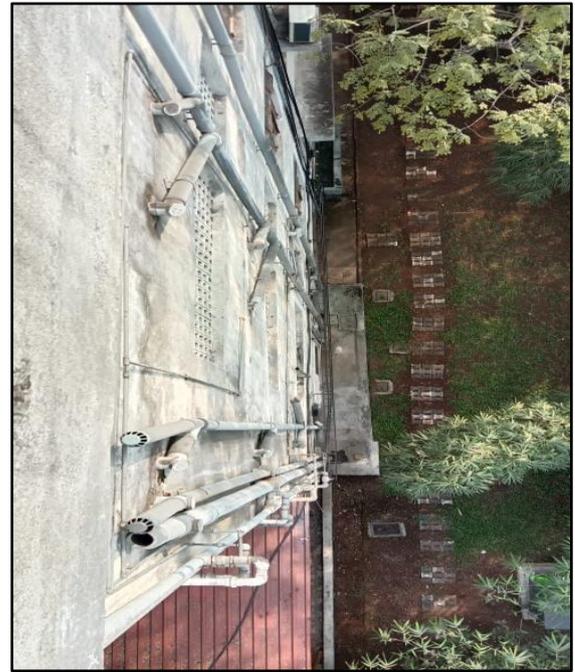
4. WASTE WATER RECYCLING

Wastewater discharged as effluent from washroom, canteen wastewater and other are used for gardening, watering of trees, maintaining fish tank etc.



5.MAINTENANCE OF WATER BODIES AND DISTRIBUTION SYSTEM IN THE CAMPUS

The ground water is pumped into storage tanks located at different places in the campus. The water is distributed through well laid pipe network. Drinking water from Municipal corporation is supplied through a separate set of distribution pipes. Drainage pipes are connected with Municipal Corporation drainage system. Entire distribution system is well supervised to ensure that there are no leakages and wastage through joints, valves, overflow etc. Water Coolers and Water Filters are provided separately for staff and students. Staff, students and stakeholders of the college are made well aware to use water economically and efficiently.



Drainage lines connected to corporation drainage lines



Water Filters & coolers installed in campus

4. GREEN CAMPUS INITIATIVES

A Green Campus is a place where environmental-friendly practices and education combine to promote sustainable and eco-friendly environment in the campus. The institute has a serene, lush green campus providing a natural environment for the holistic development of students. The institution takes special efforts to inculcate a conducive green environment for teaching-learning process. The 'Green Campus' culture is imbibed among the students so that it becomes an integral part of their personal growth. Following are the initiatives taken by the institution for greening the campus:

1.RESTRICTED ENTRY OF AUTOMOBILES

The ambience of the College is calm, spacious with good amenities and utilities in a visually appealing landscape. To maintain a pollution free environment, automobiles are restricted inside the campus beyond the parking area. Vehicle parking space is provided at the main entrance of the college campus. The building in the campus is designed in such a way that the area surrounding the classrooms and playgrounds have a sound free and pollution free environment for students. It is ensured that all the vehicles used by staff and students for daily commute are PUC certified. Staff and students are encouraged to take public transport, bicycle, walk, and carpool to campus.

2. USE OF BICYCLES/ BATTERY-POWERED VEHICLES

The location of the college is such an advantage that it has connectivity with the city buses which the staff and students use on daily basis. Locational advantage again takes credit to this that many staff members and students who are staying in the nearby area are encouraged to use bicycles or battery-operated vehicles. Around 20% students and 3% of staff members use bicycles for daily commute. To spread awareness and maintain habit, 'Bicycle Day' is celebrated in the campus.

3. PEDESTRIAN-FRIENDLY PATHWAYS

To facilitate safe and easy movement around the lush green campus, pedestrian-friendly pathways are made which give wide walking area inside the campus.

4. LANDSCAPING

College campus is having worth seeing lush green canopy of trees and plants which make the environment pollution free and provides soothing and serene environment for making environment healthy climate for studying and learning. The institute works to develop an eco-friendly, sustainable campus and to disseminate the concept of eco-friendly culture. The campus has a green landscape where students can freely sit and have academic discussions. This environment is maintained so that students feel one with nature. 60% of the 5 acres land is covered by more than 400 trees of varied varieties. The college has developed a garden with many seasonal, perennial, and medicinal plants. Keeping

a complete balance of flora and fauna for a green ecosystem domestic animals like rabbits, guinea pigs, hens, black chickens, goats, fishes, and various varieties of birds are reared. Organic vegetables and fruits are cultivated and distributed to the neighboring communities free of cost. The students are encouraged to actively participate in activities like plantation, cleanliness drives, awareness rallies, campaigns, exhibitions, and lectures.



Certificate of Appreciation

This certificate is awarded to

*CARMEL VIDYA BHAVAN TRUST'S
CHRIST COLLEGE,
PUNE*

in recognition of the Institution's efforts for sustainable development. The Institution has successfully undergone Green Audit for the year 2021-2022 by Greenex Environmental, Pune and is credited with grade 'A'.

Place: Pune

Date: 11.02.2022



**Arati Bhosale
EMS Lead Auditor
Greenex Environmental
Registration Number:104796202003**



Certificate of Appreciation

This certificate is awarded to

CARMEL VIDYA BHAVAN TRUST'S

*CHRIST COLLEGE,
PUNE*

in recognition of the Institution's efforts for sustainable development. The Institution has successfully undergone Environmental Audit for the year 2021-2022 by Greenex Environmental, Pune and is credited with grade 'A'.

Place: Pune

Date: 11.02.2022



Arati Bhosale

EMS Lead Auditor

Greenex Environmental

Registration Number: 104796202003



ENERGY AUDIT CERTIFICATE

The study is conducted as per Bureau of Energy Efficiency Standards initiated in the capacity of an Accredited & Certified Energy Audit Professional

It is awarded for 2022-2023 to the Esteemed Institution

“CHRIST COLLEGE, PUNE”

26/4 A, Off Pune Nagar Road, Opposite Weikfield IT Citi Info Park, 26/4A, Nagar Rd, Ramwadi, Wadgaon Sheri, Pune, Maharashtra 411014 (On the basis of the actual site visit at college)

As part of the Institution's initiatives for a Healthy & Sustainable College the audit was conducted.
We appreciate the immense efforts taken by Staff and students towards the Energy Management and Conservation.

Mr. Harshad Batule
BEE-Certified Energy Auditor
(CEA - 34724)
harshad@enerteksolutions.com
Director

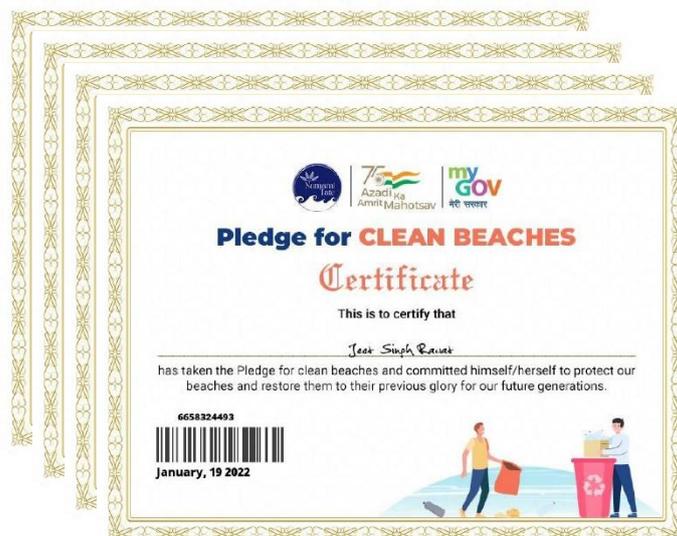


ENERTEK SOLUTIONS INDIA PVT LTD
615-B, Nana Peth, Nr. Parasi Agyari,
Pune - 411 002

BEYOND THE CAMPUS ENVIRONMENTAL PROMOTIONAL ACTIVITIES

Pledges taken by NSS Volunteers

NSS volunteers took pledge for saving environment in various ways through the government website- Unified Online Pledge Platform of MyGov. <https://pledge.mygov.in>. The purpose of the #Epledge is to motivate each citizen to take a conscious and collaborative effort towards the betterment of the environment.



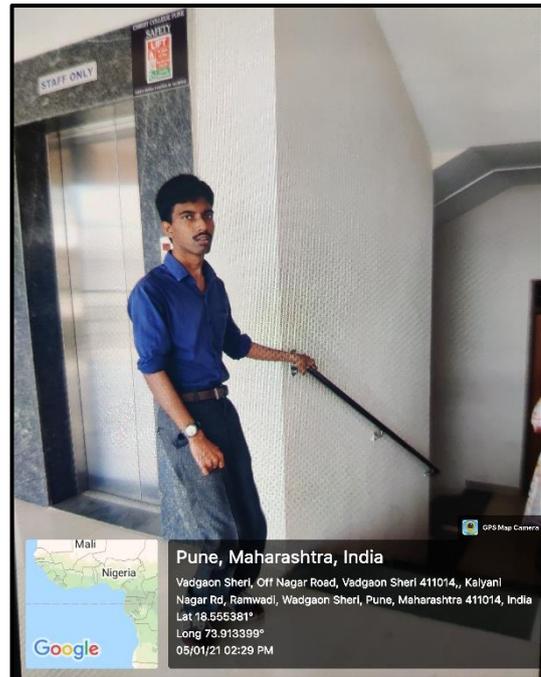
PLANTATION DRIVES



5. DISABLED-FRIENDLY BARRIER FREE ENVIRONMENT

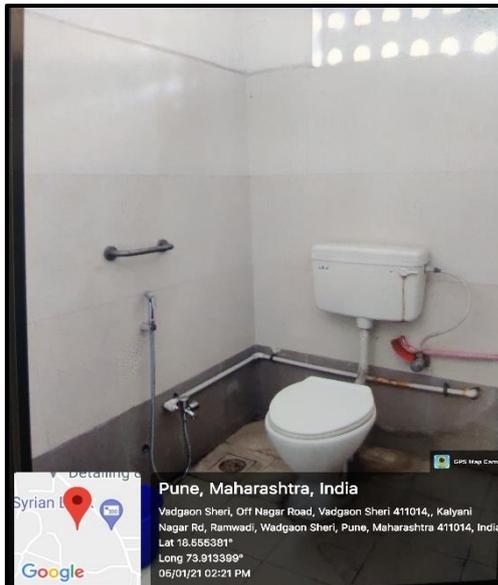
1.BUILT ENVIRONMENT WITH RAMPS/LIFTS FOR EASY ACCESS TO CLASSROOMS

The campus is equipped with Ramp-Rails and Lift in addition to staircases in the campus. The rails are carefully designed as per specifications to be used by the differently-abled people.

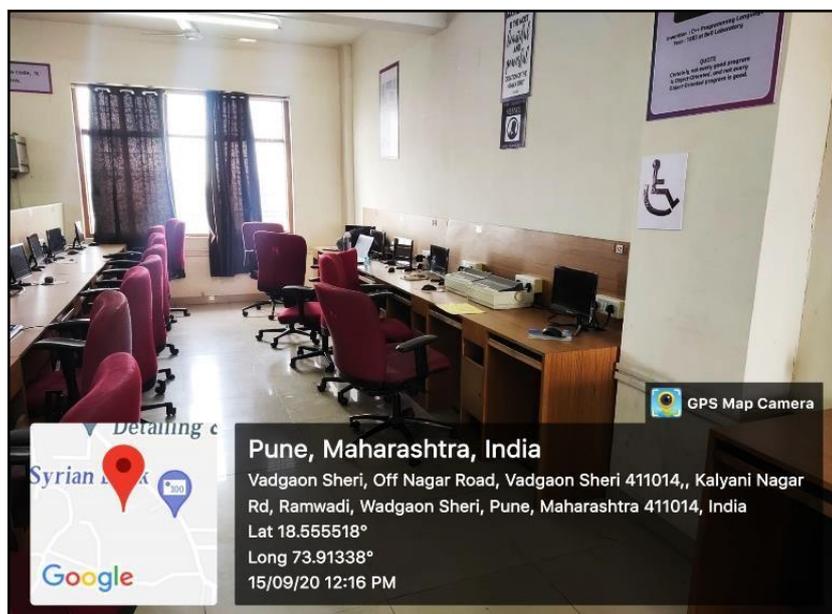


2.DISABLED-FRIENDLY WASHROOMS AND REST ROOM

The campus has accessible restroom with the fixtures and fittings that are comfortable and convenient to the differently-abled people. The washroom has nonslip floor and grab bars that provide easy access to the differently-abled people.



3. SIGNAGE, LIGHTS, DISPLAY BOARDS AND SIGNPOSTS



4. ASSISTIVE TECHNOLOGY AND FACILITIES FOR PERSONS WITH DISABILITIES (DIVYANGJAN)

ACCESSIBLE WEBSITE, SCREEN-READING SOFTWARE, MECHANIZED EQUIPMENT

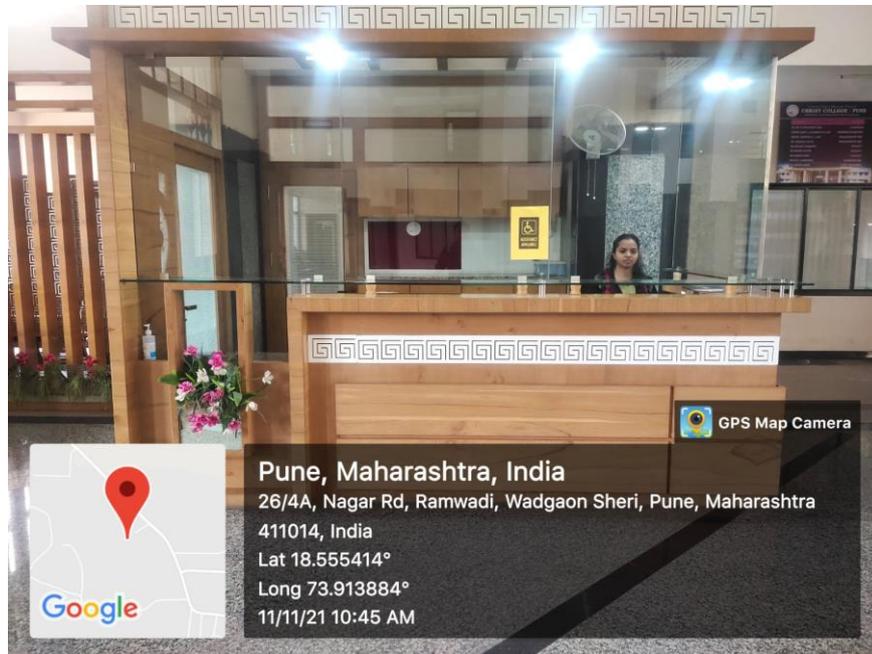
The college library has installed the NVDA NV Access software for differently-abled students. NonVisual Desktop Access is a free and open-source, portable screen reader for Microsoft Windows. *NVDA* allows blind and vision impaired people to access and interact with the *Windows* operating system and many third party applications.

Alexa- virtual assistant technology is also used in the library.

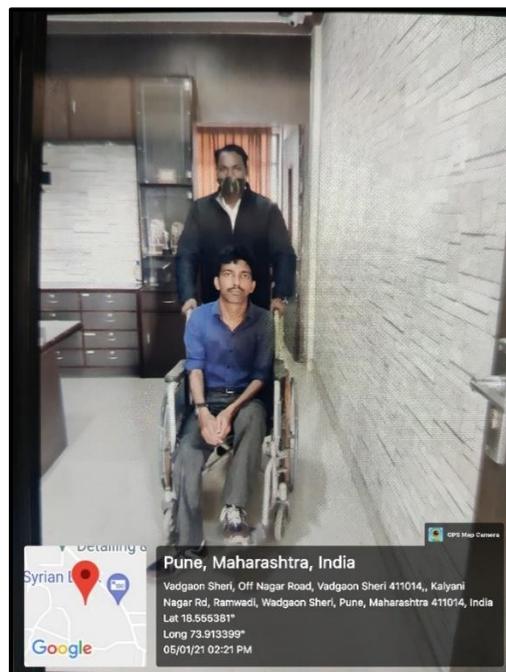


5. PROVISION FOR ENQUIRY AND INFORMATION: HUMAN ASSISTANCE, READER, SCRIBE, SOFT COPIES OF READING MATERIAL, SCREEN READING

- The college provides Reception Counter for information to the differently-abled people.



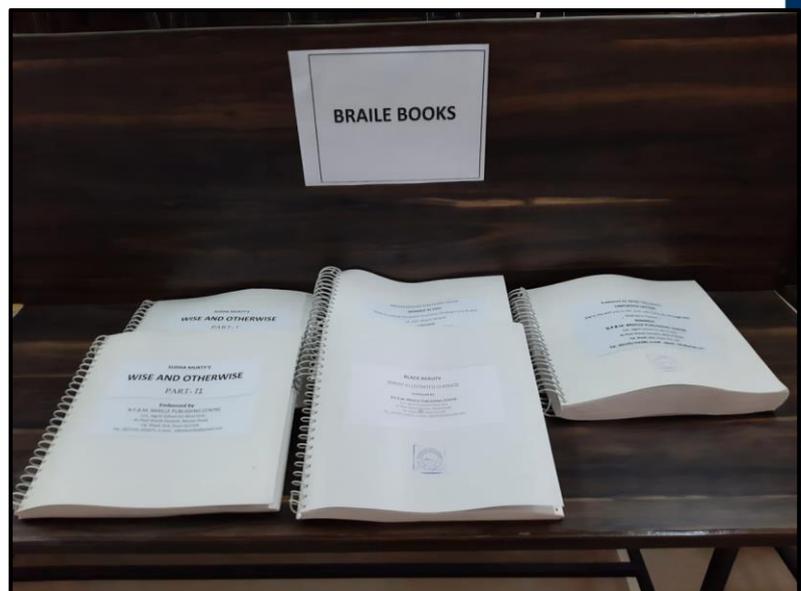
- Wheelchair is provided with human assistance



- Facility of providing Scribes during examination



- Braille books are provided in library



- Separate sitting area in lab and library to provide safety and comfort

