



THE BHAWANIPUR EDUCATION SOCIETY COLLEGE

5 Lala Lalpatral Sarani, Kolkata - 700 020
Phone : 4019-5555 • Fax : 91 33 2281 4275
Website : www.thobgos.edu.in

GREEN AUDIT REPORT FOR THE YEAR 2017 - 2018

ACKNOWLEDGEMENT

The green audit conducted by The Bhawanipur Education Society College is an internal audit that aims towards looking after a healthy environment. Though nascent, the initiative is taken up to foster the concept of environmental sustainability.

Sincere thanks to all for providing us necessary amenities and co-operation during the audit that helped in making the audit, a success.

THE INTERNAL AUDIT TEAM MEMBERS

1.	Mr. Tathagata Sen	IQAC co-ordinator
2.	Dr. Purba Roy Chowdhury	Co-ordinator, Environmental Development Committee
3.	Dr. Samir Kanti Dutta	Vice Principal, Science
4.	Dr. Samir Kumar Siddhanta	Department of Chemistry
5.	Mr. Debarup Roy	Department of Electronics
6.	Mr. Sanjib Halder	Department of Computer Science
7.	Ms. Paramita Chakravarty	Coordinator, M.Com & NAAC Co-ordinator
8.	Mr. Prasanta Chowdhury	Maintenance

THE EXTERNAL AUDIT TEAM MEMBERS

An Expert Committee constituted by the Authorities of Vivekananda Institute of Environment & Management, Kolkata (VIEM) comprising:

Expert 1.	Prof. B. B. Paira	Former Prof. and Head Department of Chemical Engineering, University of Calcutta
Expert 2.	Dr. Anup Kumar Sikdar	Emeritus Prof. (Department Of Bio-Technology) Institute of Engineering & Management
Expert 3 Statutory Representative of VIEM.	Swami Vedajnananda, PhD (Engg.)	Environment Expert & President (Honorary), Vivekananda Institute of Environment & Management, Kolkata

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AUDIT KEY STEPS

Planning completed	March 2018
On site inspection completed	June 2018
Report presented to the IQAC by the audit team	July 2018
Report presented to the Management	August 2018
Report Accepted by the Management	August 2018

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EXECUTIVE SUMMARY

The Bhawanipur Education Society College planned for conducting a green audit of the college in March 2018, at the behest of the Internal Quality Assurance Cell (IQAC) of the college, which resolved to have a Green Campus Evaluation Plan. The report was finally submitted for approval to the principal and IQAC in June 2018, after completion of onsite inspection and assessment of current practices, and scope for improvements.

The purpose of the audit was to make sure that the practices followed in the campus are healthy and environmentally sustainable. With this in mind, the specific objectives of the audit were to evaluate the degree to which the Departments are in compliance with the applicable regulations, policies and standards enjoined by regulatory authorities and to ensure that the development of the college aims at sustainable development and green campus.

The methodology used included physical inspection of the campus and review of the relevant documentation.

STATEMENT OF ASSURANCE

This kind of comprehensive audit has been conducted for the first time in the college. The audit procedure tried to meet the terms of International Standards of Internal Auditing.

The audit team is satisfied that sufficient and appropriate audit procedures were completed and evidence gathered to support the accuracy of the conclusions reached and contained in this report. The conclusions are based on an assessment of the situations as they existed at the time of the audit.

SUMMARY OF FINDINGS

The main findings of the audit show that, in general, all the departments and students are aware about the need for environmental protection at a general level.

However, on detailed review, it was observed that, as the college is implementing Green Campus Policy for the first time, many of the practices followed in the institution are still in nascent stage and needs further nurture. In addition, certain processes could benefit from further review in order to improve their efficiency, fairness and consistency.

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OBJECTIVE AND SCOPE

Although there is no universal definition of Green Audit, we may define it as **systematic identification, quantification, recording, reporting and analysis of components of environmental diversity**. A Green Audit aims to analyze environmental practices within and outside (not in our purview) any organisation, which will have an impact on the ecological health and balance. It is initiated with the motive of inspecting activities within an institution which have the potential to affect the health and well being of its members and society at large, particularly the immediate neighborhood. Subsequently it is conducted as a measure to ensure continuation of practices to ensure a healthy environment. In the case of educational institutions, a Green audit is assigned to the criteria 7 of NAAC, (National Assessment and Accreditation Council) which is a self governing organization of India which declares the institutions as Grade A, B or C according to the scores assigned during the accreditation.

The main objectives of Green Audit are as follows:

- To ensure development along with safeguarding the environment.
- To reduce energy consumption to foster environment.
- To assess whether the measures implemented by The Bhawanipur Education Society College have helped to reduce the Carbon Footprint.
- To assess whether investments made in increasing awareness among students regarding electricity, water management and environment in general have helped the Institution improve its carbon footprint.
- To assess whether non-academic activities of the Institution support the collection, recovery, reuse and recycling of solid wastes that harm the environment
- To identify gaps and suggest recommendations to improve the Green Campus status of the institution.
- Impart environmental education through systematic environmental management approach and benchmarking for environmental protection.
- To enable waste management through reduction of waste generation, solid- waste and water recycling.
- More efficient resource management.
- Recognize cost saving methods through waste minimizing and effective management.

The present Audit is conducted in view of assessing all necessary environmental components of The Bhawanipur Education Society College.

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ABOUT THE COLLEGE

The Bhawanipur Education Society, founded in 1966, is a General Degree college affiliated to the University of Calcutta, which is administered as a linguistic minority institution by the Bhawanipur Gujarati Education Society. It runs programmes in B. Com, B.A, B.Sc., BBA, M.Com and M.A. (English). It is one of the renowned colleges of Kolkata, which is located in the heart of the city with a robust student strength of over 10,763. The college runs on three shifts which means that most of the infrastructural facilities are constantly in use. It has a number of laboratories in its premises.

The college intends to adopt the 'Green Campus' system for environmental sustainability. The goal is to reduce CO₂ emission, energy and water usage, while creating an environmentally literate campus where students can learn the idea of protection of environment and stay healthy. The 'Green Campus' is a very new concept adopted by this college. The college administration is still working on the multiple facets of 'Green Campus' including efficient Resource Management, Waste Management, Reducing Paper Use, and use of Alternative Energy.

	ATTRIBUTES	VARIABLES
COLLEGE AREA	CAMPUS AREA	2 Bigha 11 Khatta 11 Chitak 17 Sq.ft.
	BUILT UP AREA	1,38,326 Sq.ft.
POPULATION	STUDENTS	10763
	TEACHERS	151
	NON TEACHING STAFF	66

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AUDIT GOALS OF THE COLLEGE

The college, with the advice of the Internal Quality Assessment Cell (IQAC) has set up an environmental quality assessment body aimed at performing the green audit of the institution.

METHODOLOGY

The Green Audit taken up by the Green Audit team of The Bhawanipur Education Society College had been divided into three stages:

THE PRE AUDIT STAGE:

In the pre-audit stage, meetings provided opportunities to discuss the feasibility of such an audit. It also provided the team with basic data required to start the process, prior to the onsite inspection by the team. The audit procedure and audit plan was handed over at this meeting and discussed in advance of the audit itself. The Audit team was also approved at this meeting. The audit protocol and audit plan were handed over at this meeting and discussed in advance of the audit itself.

The Management of the college showed commitment towards the green audit and its outcome, during the pre-audit meeting. They were ready to encourage all green activities were willing to formulate policies based on green auditing report

THE AUDIT STAGE:

The Audit Stage encompasses of the team selection and the field works performed. Looking after the unique structure, location and ambiance of the college, the Green Audit Team focused on Material Issues pertaining to college which have the highest influence on the Green Attributes of the College. The Audit stage also focused on the Methodology adopted. Checklist approach is adopted for transparent evaluation of the topics and increase readability for independent reader.

THE POST AUDIT STAGE:

The post-audit stage ensures formulation of Draft findings and sent to management response. Since the audit is done internally, it was important to ensure management approval for the draft. After getting draft approval, the audit team went for final report formulation

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AUDIT FRAMEWORK AND DETAILED FINDINGS

The following audit framework is used for conducting Green Audit in 2017-18. The framework also lists the findings and observations for every criterion.

Control Objective	Control (S)	Audit Observation
Water Management	Repair sources of water leakage, such as dripping taps.	Regular checking and maintenance of pipelines are done to control water wastage.
	Minimize wastage of water and use of electricity during water filtration process, if used, such as water purifier.	Yes, the college has water purifiers of reputed brands installed in all departments.
	Use an efficient and hygienic water storage mechanism to minimize the loss of water during storage	Bulk water supply is provided by KMC, and it is stored in an Underground reservoir as well as overhead tanks.
	Encourage to decrease excess water usage.	Sanitary ware has been installed which uses modern technology for minimizing wastage of water. Posters in the campus alert everyone to the importance of saving water and turning off taps.
	Install water recycling mechanism.	No such mechanism is adopted.
Energy Management	Appreciate that it is preferable to purchase electricity from companies that invest in new sources of renewable and carbon-neutral electricity	The college does not have any choice other than CESC for electric supply.
	Look into the possibility of on-site micro-generation of renewable electricity.	The college is planning for introduction of 100 kw SOLAR PANELS in added campus area as structural constraints are there in the existing campus.
	Encourage staff, students and conference guests to save energy through visible reminders, incentives and information to increase awareness. This particularly concerns turning off electrical appliances when not in use	Yes, the college has put up several posters and reminder notes in classrooms and other relevant places to turn off electric appliances when not in use. A single main switch per room would also be installed.
	Monitor and understand the importance of energy consumption.	The college tries to put photo-sensor to minimize the consumption of electricity.

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	Ensures that all electronic and electrical equipment, such as computers, are switched off when not in use and is generally configured in power saving mode when such option is available	
<u>Use Of Non-Toxic Organic/Green Products</u>	Minimize the use of chemical fertilizers and pesticides in college grounds, opting for the use of vermin compost produced on site wherever possible	Moderate amounts of bio-fertilizers are used in the college.
	Ensure that all cleaning products used by college staff have a minimal detrimental impact on the environment, i.e. are biodegradable and non-toxic	Cleaning products used in the college are all green products. For pest control management, agents used are recommended by WHO and CIB, with LD 50 level.

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Waste Management	Make full use of all recycling facilities from students canteen and private suppliers, including glass, cans, white, coloured and brown paper, batteries, print cartridges, cardboard and furniture.	No, the college does not have any such recycling device to carry on the procedure. Waste is segregated at the origin and handed over to KMC for disposal.
	Compost, or cause to be composted, all organic waste, green waste and non-recycled collected from kitchens, gardens, offices and rooms.	No, the college does not have any such devices.
	Recycle or safely dispose of dry wastes, computers and electrical appliances.	All dry wastes (paper, metal, glass, other dry waste, e-waste, etc.) are separated in different bins in the college and resell to the local vendor
	Provide sufficient, accessible and well-publicized collection points for recyclable waste, with responsibility for recycling clearly allocated	The college has set up separate bins to ensure proper segregation and collection of the various wastes. The responsibility of recyclable waste is however still not taken up the college.
	Make specific arrangements for events, such as community events, seminars and conferences in order to arouse consciousness among students and others and also to minimize the waste produced and maximize what is recycled/reused	The college organized several seminar and community program by the departments to ensure both consciousness and awareness among students and community members.
	Dispose all waste, whether solid or otherwise, in a scientific manner and ensure that it is not released directly to the environment	Yes, the college disposes all wastes, whether solid or otherwise, in a scientific manner and ensure that it is not released directly to the environment.
	To recycle and reuse of kitchen wastes (from canteen)	To be incorporated

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<u>Optimising Recycling Of Waste And Minimizing The Generation Of Non-Recyclable Waste</u>	Proposals have been made for the following installations in the Chemistry Laboratory: 1. Water Chiller Plant for water condenser to save water	Not Achieved.
<u>Reducing Energy Consumption From Conventional Energy Sources</u>	100% use of LED lights	Achieved
	Replacement of old Air conditioners with energy efficient ACs.	Number of ACs replaced: 62 Only BIS Compliant Star rated ACs need to be used.
	Having more classrooms with adequate natural light to reduce consumption of electricity.	For operating ACs, the windows have to remain closed, thus barring natural light/ventilation.
<u>Minimising The Use Of Chemical Pollutants</u>	In the Chemistry Lab : 1. Chemicals used in the lab for reaction are not discharged into the environment, rather stored in scaled containers. 2. Harmful gases like H ₂ S, Cl ₂ , etc, need to be burned using Fume Chamber 3. Micro amount of starting material is provided to the students for laboratory experiments.	Achieved
<u>Confirming To The Standards Of Green Building</u>	The college has been a member of the Indian Green Building Council from August, 2017 – December, 2017.	Achieved
<u>Enforcement Of Environmental Policy</u>	Ensure that all students, teachers and staff in general and the Environmental Development Committee and the Canteen Squad are appraised of the environmental objectives and policies of the institutions.	Achieved
	Ensure that an Audit is conducted regularly and the recommendations implemented on the ground.	Achieved

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Carbon Footprint Reduction	Ensure use of eco friendly transport option	College does not provide transport to either staff or students.
	Promote environmental awareness as a part of course work in various curricular areas, independent research projects, and community service	UGC projects on sustainable development/ natural resources. Compulsory ENVS paper of 100 marks in the University Syllabus for all the students of all streams to develop Environmental Awareness (70 MCQ + 30 Project).
	Reduce the rate at which the College contributes to the depletion and degradation of natural resources	The college uses energy efficient lights and air conditioners as well as modern sanitation to minimize consumption of resources.
	Create awareness of environmental sustainability and take actions to ensure environmental sustainability.	Seminars and awareness programmers are conducted periodically on nature and natural resources.
	Review architecture of existing buildings and reviews ways, in consultation with experts, to reduce usage of energy for such buildings, offering greatest efficiency for energy and water usage.	New constructions are in compliance with green standard.
	Display environmental awareness posters	Yes, the college places several posters and placards in the campus to ensure that environmental awareness is conducted. Also, seminars are organized on environmental theme in the college.

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FLORA AND CARBON FOOTPRINT REDUCTION

Carbon Footprint is historically defined as the total set of greenhouse gas emissions caused by an individual, event, organization or product, expressed as Carbon dioxide equivalent.

FLORISTIC STATUS OF THE INSTITUTION

The Bhawanipur Education Society College is located in about 2.6 bigha of land (1.04 acre or 45302.4 square feet) in the heart of the city of Kolkata.

After deducting the built up area of ground floor (25,551 sqft) and the playground (3200sq ft) the projected area available for various types of flora is 16551.4 square feet (0.45 acre) of land.

However with the normal spacing of 6x10 feet, the total number of trees shall be taken up as 600/acre. This is a theoretical assumption.

The college has the following number of plants

Sl.No	Particulars of Flora	Number/area
1	Full-grown trees	45
2	Semi-grown trees	30
3	Bushes	32
4	Lawn	4980 sq.ft.

CARBON ABSORPTION BY FLORA IN THE INSTITUTION

Carbon absorption capacity of one full grown tree = 6.8 kg CO₂ l. Therefore the carbon absorption capacity of 45 full grown trees in the campus of the college is 45x6.8kg CO₂= 306 Kg or 0.306 tones of CO₂.

2. The carbon absorption capacity of 30 semi-grown trees is 50% of that of full grown trees. Hence the carbon absorption is 30x3.4 kg CO₂=102 kg of CO₂ or 0.102 tones of CO₂.

3. There are 32 bushes of various species being raised in the gardens of the college. In the absence of a detail scientific study and botanical survey, the per plant carbon absorption was assumed to be 200 g.

Based on this the total carbon absorption of 32 plants was calculated to be 32*200 g= 6.4 kg or 0.0064 tones of CO₂.

4. Total area of the lawn is 4980 sq.ft. The carbon absorption capacity 10 sq.ft. area of lawn is 1g carbon dioxide. Hence 4980 sq.ft. of lawn absorbs 498 g or 0.498 kg of carbon dioxide per day. At this rate total carbon absorption per year (0.498 kg*365) = 181.77 kg or **0.182 tonnes per year.**

5. The grand total of carbon absorption by the flora in the campus of The Bhawanipur Education Society College is (0.306+0.102+0.0064 + 0.182)=**0.5964 tonnes.**

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CALCULATION OF OXYGEN EMISSION BY FLORA

The number of liters in 1 kilogram depends on the density of the substance being measured. Litre is a unit of volume, and kilogram a unit of mass. Litres and kilograms are approximately equivalent when the substance measured has a density of close to 1 kilogram per litre.

On average, one full-grown tree produces nearly 260 pounds or 117.6 kg of oxygen each year. Two mature trees can provide enough oxygen for a family of four.

1. Total oxygen emitted by 45 full-grown trees per year $(117.6 \text{ kg} \times 45) = 5292 \text{ kg} = \text{or } 5.292 \text{ tonnes}$
2. Total oxygen emitted by 30 semi-grown trees $(58.8 \times 30) = 1764 \text{ kg}$ or 1.764 tones (oxygen emission is 50% of that of the full-grown).
3. Total oxygen emitted by 32 bushes is calculated based on the following oxygen-inhaling requirement per person per day. A normal human being requires 550 litres of oxygen per day 400 bushes produce enough oxygen per day to enable a person to breathe adequate quantity of oxygen of 550 litres. Total quantum of oxygen produced by 400 plants per day is 550 litres of oxygen.
Taking 400 plants as one unit, the number of units of bushes in the campus $(32/400) = 0.08$.
Total quantity of oxygen produced by 0.08 units is $(0.08 \times 550 \text{ litres}) = 44 \text{ litres}$ of oxygen per day.
The annual production of oxygen at this rate $(44 \times 365) = 16060 \text{ liters or kg}$ of oxygen, which is approximately 16.06 tones of oxygen.

A Lawn is incredible oxygen –making machine. A plot of 4980 sq.ft. area is capable of generating enough oxygen to support one person for a whole day . Quantitatively speaking, this area of greenery produces 550 litres of oxygen per day.

The total area of lawn in the campus is 4980 sq.ft. In units, the value $(4980/25) = 199.2 \text{ units}$, which produce $(199.2 \times 550 \text{ liters of oxygen}) = 109560 \text{ liters of oxygen per day}$. Total quantity of oxygen produced by the 4980 sq.ft. of lawn per year $(109560 \text{ liters/ day} \times 365) = 39989400 \text{ liters}$ or approximately 39989.4 tonnes.

CARBON FOOTPRINT REDUCTION TABLE

Carbon dioxide absorption

Sl. No.	Flora	Quantity of CO ₂ (tonnes)
1	45 Full-grown trees	0.306
2	30 Semi-grown trees	0.102
3	32 Bushes	0.0064
4	4980 Sq.ft. of lawn	0.182
Total		0.5964

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Oxygen emission by flora

Sl. No.	Flora	Quantity of O ₂ (tonnes)
1	45 Full-grown trees	5.292
2	30 Semi-grown trees	1.764
3	32 Bushes	16.06
4	4980 Sq.ft. of lawn	39989.4
Total		40,012.516

I. ENERGY-SAVING MEASURES AND CARBON FOOTPRINT REDUCTION

CESC bills of the college show that total consumption of electricity for the period 2017-2018 was 706989 kwh. This includes air-conditioners which consume about 20% of electricity.

0.538 kg or approximately $\frac{1}{2}$ kg of coal produce 1 unit of electricity i.e 1 KW hour (1000 watts).

The total quantity of coal required to produce 706989 kwh of electricity (706989×0.538 kg coal) = 380360.082 kg or 380.360082 tonnes.

CO₂ emission by coal

One kilogram of coal emits 2.86 kg of CO₂ thereby increasing the carbon footprint which in turn contributes to global warming.

Therefore, 380.360082 tonnes of coal consumed indirectly by the Institution through consumption of 706989 units of electricity led to the emission of (380360.082 kg of coal $\times 2.86$ kg of CO₂) 1087829.834 kg or 1087.829 tonnes of CO₂ into atmosphere.

The management of The Bhawanipur Education Society College is conscious of this damage to the environment and has been implementing various programs/ activities to reduce energy consumption on the one hand and increase green energy sources on the other.

They are

- Replacing high energy-consuming lighting system with energy-efficient lighting system.
- Installing a 100 kw pilot solar PV power system through placing 10 solar panels.

ANALYSIS OF CO₂ REDUCTION THROUGH THE ABOVE MEASURES

1. Installing energy-efficient lighting system

The Institution has reduced CO₂ emissions indirectly by replacing high energy-consuming tube lights with energy efficient LED tube lights system. To understand the carbon emission reduction, it is appropriate to compare the units of electricity consumed between tube lights and LED tube lights.

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The following table illustrates this

Sl. No.	Contents	Value
1.	Total no. of tube lights used earlier	2000
2.	Average energy consumption by a tube lights	36W
3.	Energy consumed by 2000 tube lights for 5 hr/day	360KW hr or 360 units
4.	Energy consumption of 2000 tube lights for 300 days/ year	1010800 kW hr or 10800 units

2000 tube lights are replaced with 2000 LED tube lights

Sl. No.	Contents	Value
1.	Energy consumed by 2000 LED tube lights for 5 hr/ day	180 kW hr or 180 units
2.	Energy consumption of 2000 LED tube lights for 300 days/year	54000 kW hr or 54000 units
3.	Energy saved by LED tube lights for 5 hr/day	180 kW hr
4.	Energy saved by LED tube lights for 300days/year	54000 kW hr or 54000 units

CARBON FOOTPRINT REDUCTION ANALYSIS

First, it is appropriate to analyse the carbon emission due to consumption of 10,800 units of electricity by 2000 tube lights per year. The standard tool of analysis employed in this Green Audit is coal equivalent of electricity.

0.538 kg of coal is required to produced 1 unit of electricity.

Total units of electricity consumed by 2000 Tube lights =10,800 units.

Coal equivalent of 10,800 units (10800*0.538 kg coal)= 5810.4 kg or **5.8104 tonnes**.

1 kg coal emits 2.86 kg of CO₂ into the atmosphere.

At this rate, 5810.4 kg coal emits (5810.4*2.86) = 16617.744 kg or **16.617744 tonnes of CO₂**.

The following are the CO₂ reduction measures adopted in the Institution.

1. LED tube lights

2000 Tube lights which consume 180 units of electricity were replaced with 2000 LED tube lights. At this rate the coal equivalent (180*0.538 kg)=96.84 kg or 0.09684 tonnes.

Carbon emission reduction achieved through use of LED tube lights (16.617744-0.09684) =**16.520904 tonnes**

The positive impact of energy efficiency in this section on Carbon Footprint is **16.520904 tonnes of CO₂**.

[Signatures]

S. Chakravarty

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RECOMMENDATIONS

Crite ria	Recommendation
Maximise the use of renewable energy to initiate healthy and sustainable practices.	Install solar cell/panels as sources of continuous renewable energy to run both hardware and software labs to minimise thermal power consumption. Install environment friendly generators.
To channelize water resource	Space should be found for Reservoirs for collecting rainwater flowing from the roof tops.
Maximize the proportion of waste that is recycled & minimize the quantity of non- recyclable refuse	<p>Chemistry laboratory:</p> <ul style="list-style-type: none">• Repeated distillation of used solvent may be done to reduce the solvent waste, thereby minimising pollution.• Solid chemical waste like organic dye and inorganic complexes should be kept in closed containers and handed over to be the Calcutta Municipal Corporation following norms of the Pollution Control Board.• Chemical waste not recyclable should be kept in controlled waste-bins.• All organic solvents should be collected in controlled waste-bin through a process of incineration. <p>Concentrated acids and alkalis to be washed down drains with sufficient water.</p> <p>Software & Hardware Labs:</p> <ul style="list-style-type: none">• E-waste, other than batteries, which are not returned to the vendors, should be disposed of at collection centres authorised by the Pollution Control Board. <p>Canteen:</p> <ul style="list-style-type: none">• Use of non bio-degradable plates for serving lunch should be stopped.• Composting of organic waste may be started. <p>Campus in general:</p> <ul style="list-style-type: none">• Rainwater harvesting should be seriously considered.• Move towards a plastic free campus, and take measures to recycle existing plastic that is discarded.



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Reduce energy consumption, especially of energy derived from fossil fuels	At least common areas should be served by electricity from solar panel. Conduct switch off drills periodically.
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Environment consciousness

Environment has become a popular subject in the last three decades. Some of the problems faced by humankind directly or indirectly are due to ozone depletion, greenhouse effect, acid rain, global warming, air-water pollution and fossil fuel combustion. Chemicals and allied processes are the most important among these. Noticing the bad effects of chemicals and traditional energy sources on environment and human life, the Institution has been trying to find solutions for a better life. For this, creating awareness about environment issues and the conservation of the ecosystem have become increasingly important in the life skill education in the college.

The rationale behind the environmental education is based on three factors:

- If people are aware of the need for and the ways of protecting the environment they will act to preserve it,
- The student community should assume responsibility for educating others about the need for environment protection and
- Environmental education can be effective as a part of college curriculum. Hence the Management of the Institution prioritizes it.

Suggestions

- Available area of lawn should be raised through the involvement of Eco Club and students from NSS or NCC to enhance oxygen emission.
- Compostable solid waste shall be collected and deposited in solid waste collection tanks. These wastes shall be profitably converted into compost and applied to gardens and trees to reduce the application of chemical-based fertilizers and pesticides.
- Solar panels shall be installed immediately on the top of the buildings to enhance solar power productivity, aluminium foil-based reflectors shall be installed on the eastern and western sides of the solar panel.
- Students from the Computer Science Department shall be trained as e-waste managers to manage e-waste. These e-managers shall be in constant touch with schools, orphanages and parish houses through social media and inform them of the outdated computer systems that shall be used by them. They also shall dispose of the less efficient, damaged and non-functioning e-wastes to the vendors.
- All the water taps shall be fitted with self closing high-efficiency water taps to reduce wastage of water. All toilets shall be fitted with dual flush water closets, which will reduce water consumption by 40%.

[Handwritten signatures]

S. Chakravarty
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Certification by the Internal Audit Team

Sl. No.	Name of the Internal Audit Members	Signature with Date
1.	Mr. Tathagata Sen	
2.	Dr. Purba Roy Chowdhury	Purba Roy Chowdhury
3.	Dr. Samir Kanti Dutta	Samir
4.	Dr. Samir Kumar Siddhanta	Siddhanta
5.	Mr. Debarup Roy	
6.	Mr. Sanjib Halder	
7.	Ms. Paramita Chakravarty	Paramita Chakravarty
8.	Mr. Prasanta Chowdhury	Prasanta Chowdhury

DECLARATION

I agree with all the recommendations and observations mentioned in this report.

Original signature by the principal with Seal

Dr Suchandra Chakravarty
Teacher in Charge
The Bhawanipur Education Society College

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Vivekananda Institute of Environment & Management
AL 133, Salt Lake, Kolkata 700 091
Phone: +913323215593; e-mail: vivekanandaiem@yahoo.com

Certification of Green Audit Report

Certified that the Green Audit Report has been prepared by a panel of experts mentioned below in association with the Internal Audit members of the College.

Sl. No.	External Audit Members	Signature with Date
Expert1.	Prof. B. B. Paira Former Prof. and Head Department of Chemical Engineering, University of Calcutta	<i>B. B. Paira</i> 28.07.18
Expert 2.	Dr. Anup Kumar Sikdar Emeritus Prof. (Department Of Bio-Technology) Institute of Engineering & Management	<i>Anup Kumar Sikdar</i> 28/07/2018
Expert 3 Statutory Representative of VIEM.	Swami Vedajnananda, PhD (Engg.) Environment Expert & President (Honorary), Vivekananda Institute of Environment & Management, Kolkata	<i>Swami Vedajnananda</i> 28.7.2018 President (Honorary), Vivekananda Institute of Environment & Management, Kolkata 700091, India

DECLARATION

I agree with all the recommendations and observations mentioned in this report.

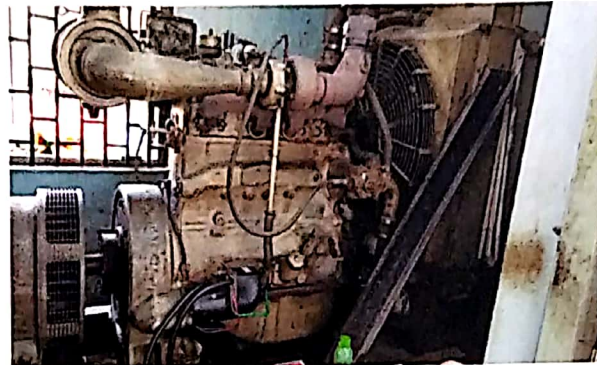
S. Chakravarty
Original signature by the principal with Seal
Dr Suchandra Chakravarty
Teacher in Charge 28.7.2018
The Bhawanipur Education Society College



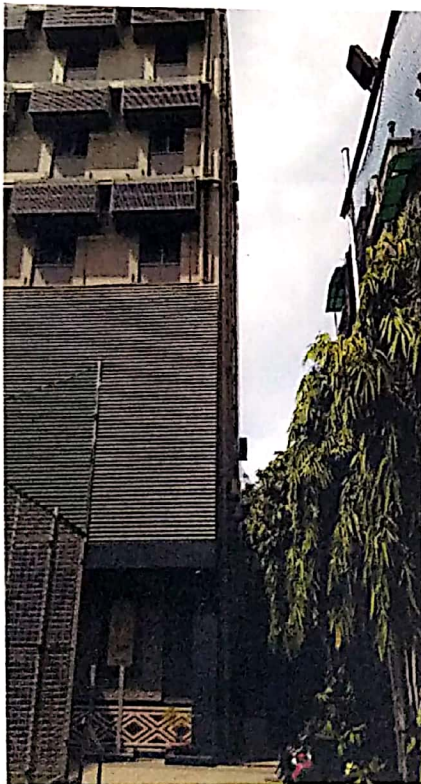
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AC AND GENERATOR



COLLEGE CAMPUS WITH GREENARY



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Dr Suchandra Chakravarty
Teacher in Charge
The Bhawanipur Education Society College

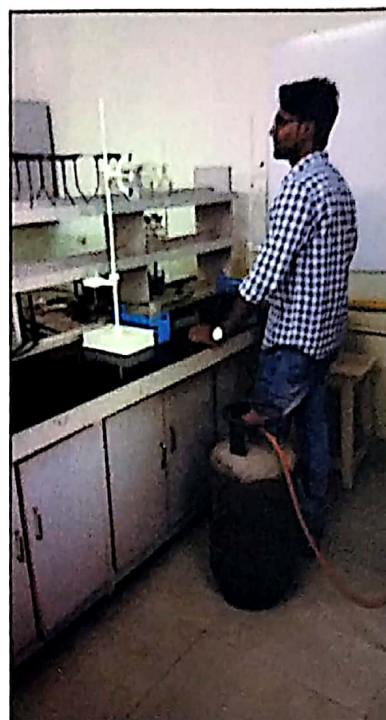
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CHEMISTRY LABORATORY



WATER FILTER



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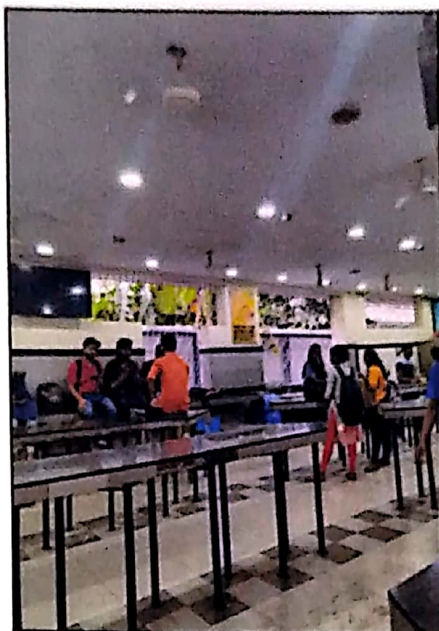
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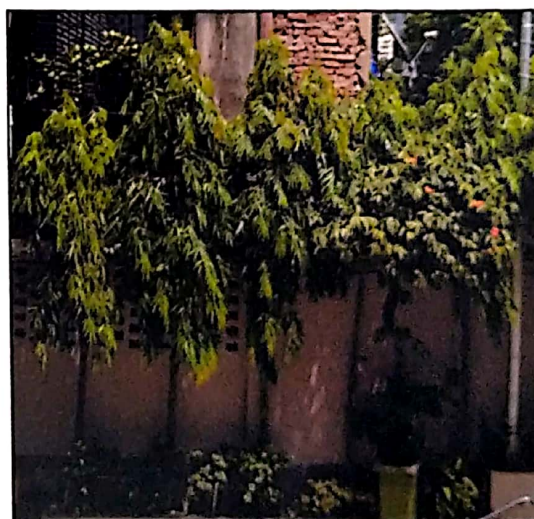
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CANTEEN



GREENERY



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Dr Suchandra Chakravarty
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Carbon Emission of The Bhawanipur Education Society College for the Academic Year 2017-2018 L: (In Litter) ; t: (in Ton)				
Sl No	Description	Type	Consumption	CO ₂ Emmission (t)
1	electricity	CESC	70,6989 KWH	659.31
2	Natural gas	LPG	658.56 L	1.11
3	Generator	Diesel	840 L	2.25
	Total			664.49
4	Overhead (10%)			66.4
	Grand Total			730.89

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Dr Suchandra Chakravarty
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Monthly Consumption Details				
Month/ Year	Diesel (Ltr)	Kerosine (Ltr)	Electricity (Kwh)	LPG (Cylinder)
	Generators			
July, 2017	210		82264	2
August, 2017	210		97572	2
Sept, 2017	210		83325	2
Oct, 2017	0		42782	2
Nov, 2017	0		57412	2
Dec, 2017	0		34044	3
Jan, 2018	0		22709	2
Feb, 2018	210		41457	3
March, 2018	0		62180	2
April, 2018	0		67319	1
May, 2018	0		57855	1
June, 2018	0		58070	2
Total	840		706989	24 cylinders = 658.56 lits

Use of Kerosine is ignored due to very limited use.

Note: 1 cylinder LPG = 14 Kg LPG = 1.96 Ltr LPG

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Electrical Appliances

Sl No	Floor	Location	Type of AC	Make	Capacity	No
N/1	Gr. Floor	University Exam Paper Room. (028)	Window	O General	1.5 TR	1
N/2	Gr. Floor	University Exam Paper Room. (028)	Window	LG	2 TR	1
N/3	Gr. Floor	Room No G1.(022)	Window	LG	2 TR	1
N/4	Gr. Floor	Room No G1.(022)	Window	LG	2 TR	1
N/5	Gr. Floor	Room No G1.(022)	Window	LG	2 TR	1
N/6	Gr. Floor	Office - I. (020)	Split	Daikin	1.8TR	1
N/7	Gr. Floor	Games & Sports Room	Split	Daikin	1.5 TR	12
N/8	Gr. Floor	Maintenance Store (016)	Window	O General	1.5 TR	1
N/9	1St Floor	Room No (125)	Window	O General	1.5 TR	1
N/10	1St Floor	Room No (125)	Window	O General	1.5 TR	1
N/11	1St Floor	Room No (125)	Window	LG	2TR	1
N/12	1St Floor	Room No. (126)	Window	O General	1.5 TR	1
N/13	1St Floor	Room No. (126)	Window	O General	1.5 TR	1
N/14	1St Floor	Room No. (126)	Window	LG	2TR	1
N/15	1St Floor	Room No. 111	Window	LG	2TR	1
N/16	1St Floor	Room No. 111	Window	O-General	1.5 TR	1
N/17	1St Floor	Room No. 112	Window	Hitachi	2TR	1
N/18	1St Floor	Room No. 112	Window	Hitachi	2TR	1
N/19	1St Floor	Room No. 113	Window	LG	2TR	1
N/20	1St Floor	Room No. 113	Window	LG	2TR	1
N/21	1St Floor	Room No. 115	Window	O-General	1.5 TR	1
N/22	1St Floor	Room No. 115	Window	Hitachi	2TR	1
N/23	1St Floor	Room No. 116	Window	Hitachi	2TR	1
N/24	1St Floor	Room No. 116	Window	LG	2TR	1
N/25	1St Floor	Room No. 117	Window	O-General	1.5 TR	1
N/26	1St Floor	Room No. 117	Window	O-General	1.5 TR	1
N/27	1St Floor	Rector Office Reception . 121	Split	Amtrex	1 TR	1
N/28	1St Floor	Staff Room. 118	Window	Hitachi	2TR	1
N/29	1St Floor	Staff Room. 118	Window	Hitachi	2TR	1
N/30	1St Floor	Staff Room. 118	Window	Hitachi	2TR	1
N/31	1St Floor	Staff Room. 118 Cabin	Split	Daikin	1 TR	1
N/32	1St Floor	Temporary ISC Dept. 127	Split	Daikin	1.5 TR	1
N/33	1St Floor	Temporary ISC Dept. 127	Split	Daikin	1.5 TR	1
N/34	1St Floor	President Office Room.120	Split	Daikin	1.5 TR	1
N/35	1St Floor	Rector office Room. 121	Window	O General	1 TR	1
N/36	1St Floor	University Zonal Office. 119	Window	Carrier	2TR	1
N/37	1St Floor	President Office - Reception. 120	Split	LG	1.5 TR	1

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N/38	1st Floor	English Staff Room (110)	Split	LG	1.5 TR	1
N/39	1st Floor	English Staff Room (110)	Split	LG	1 TR	1
N/40	1st Floor	Examination Controle Room. 114	Window	LG	1 TR	1
N/41	2 nd Floor	ISC Staff Room. (212)	Split	LG	2 TR	1
N/42	2 nd Floor	Room No - (210)	Window	O-General	1.5 TR	1
N/43	2 nd Floor	Room No - (210)	Window	Hitachi	2 TR	1
N/44	2 nd Floor	Room No - (211)	Window	LG	2 TR	1
N/45	2 nd Floor	Room No - (211)	Window	O-General	1.5 TR	1
N/46	2 nd Floor	Room No - (211)	Window	LG	2 TR	1
N/47	2 nd Floor	Room No - (211)	Window	O-General	1.5 TR	1
N/48	2 nd Floor	Room No - (213)	Window	O-General	1.5 TR	1
N/49	2 nd Floor	Room No - (213)	Window	LG	2 TR	1
N/50	2 nd Floor	Room No - (213)	Window	LG	2 TR	1
N/51	2 nd Floor	Room No - (213)	Window	O-General	1.5 TR	1
N/52	2 nd Floor	Room No - (214)	Window	O-General	1.5 TR	1
N/53	2 nd Floor	Room No - (214)	Window	O-General	1.5 TR	1
N/54	2 nd Floor	Room No - (216)	Window	O-General	1.5 TR	1
N/55	2 nd Floor	Room No - (216)	Window	LG	2 TR	1
N/56	2 nd Floor	Room No - (216)	Window	O-General	1.5 TR	1
N/57	2 nd Floor	Room No - (216)	Window	O-General	1.5 TR	1
N/58	2 nd Floor	Room No - (217)	Window	O-General	1.5 TR	1
N/59	2 nd Floor	Room No - (217)	Window	O-General	1.5 TR	1
N/60	2 nd Floor	Room No - (219)	Window	O-General	1.5 TR	1
N/61	2 nd Floor	Room No - (219)	Window	LG	2 TR	1
N/62	2 nd Floor	Room No - (219)	Window	LG	2 TR	1
N/63	2 nd Floor	Room No - (220)	Window	LG	2 TR	1
N/64	2 nd Floor	Room No - (221)	Window	O-General	1.5 TR	1
N/65	2 nd Floor	Room No - (221)	Window	LG	2 TR	1
N/66	2 nd Floor	Room No - (221)	Window	LG	2 TR	1
N/67	2 nd Floor	NSS Room (215)	Split	Daikin	1 TR	1
N/68	3 rd Floor	ISC Staff Room - Common Area.(315)	Cassette	Daikin	1.8TR	1
N/69	3 rd Floor	ISC Staff Room - Common Area.(315)	Cassette	Daikin	1.8TR	1
N/70	3 rd Floor	ISC Staff Room - Front Area.(315)	Cassette	Daikin	1.8TR	1
N/71	3 rd Floor	ISC Staff Room-Principal Chamber(315)	Split	Daikin	1 TR	1
N/72	3 rd Floor	ISC Staff Room - Printing Room(315)	Split	Daikin	1 TR	1
N/73	3 rd Floor	Room No - (310)	Window	O General	1.5 TR	1
N/74	3 rd Floor	Room No - (310)	Window	LG	2 TR	1

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P. S. Chandra Chakravarty
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N/75	3 rd Floor	Room No - (311)	Window	O General	1.5 TR	1
N/76	3 rd Floor	Room No - (311)	Window	LG	2 TR	1
N/77	3 rd Floor	Room No - (311)	Window	O General	1.5 TR	1
N/78	3 rd Floor	Room No - (311)	Window	O General	1.5 TR	1
N/79	3 rd Floor	Room No - (313)	Window	O General	1.5 TR	1
N/80	3 rd Floor	Room No - (313)	Window	O General	1.5 TR	1
N/81	3 rd Floor	Room No - (313)	Window	O General	1.5 TR	1
N/82	3 rd Floor	Room No - (313)	Window	LG	2 TR	1
N/83	3 rd Floor	Room No - (314)	Window	LG	2 TR	1
N/84	3 rd Floor	Room No - (314)	Window	LG	2 TR	1
N/85	3 rd Floor	Room No - (314)	Window	O General	1.5 TR	1
N/86	3 rd Floor	Room No -(316)	Window	LG	2 TR	1
N/87	3 rd Floor	Room No -(316)	Window	O General	1.5 TR	1
N/88	3 rd Floor	Room No -(316)	Window	Hitachi	2 TR	1
N/89	3 rd Floor	Room No - (318)	Window	O General	1.5 TR	1
N/90	3 rd Floor	Room No - (318)	Window	O General	1.5 TR	1
N/91	3 rd Floor	Room No - (318)	Window	LG	2 TR	1
N/92	3 rd Floor	Room No -(319)	Window	LG	2 TR	1
N/93	3 rd Floor	Room No -(319)	Window	O General	1.5 TR	1
N/94	3 rd Floor	Room No -(319)	Window	O General	1.5 TR	1
N/95	3 rd Floor	Room No -(320)	Window	LG	2 TR	1
N/96	3 rd Floor	Room No -(320)	Window	O-General	1.5 TR	1
N/97	4 rth Floor	Room No -(418)	Window	O-General	1.5 TR	1
N/98	4 th Floor	Room No -(418)	Window	O-General	1.5 TR	1
N/99	4 th Floor	Room No -(418-A)	Window	LG	2 TR	1
N/100	4 th Floor	Room No -(418-A)	Window	Hitachi	2 TR	1
N/101	4 th Floor	New Class Room - (410)	Window	O-General	1.5 TR	1
N/102	4 th Floor	New Class Room - (410)	Window	LG	1.5 TR	1
N/103	4 th Floor	Chemistry Lab Room No.416	Window	Acma	2 TR	1
N/104	4 th Floor	Chemistry Staff Room. (417)	Split	Daikin	2 TR	1
N/105	4 th Floor	Chemistry Staff Room. (417)	Split	Daikin	1.80 TR	1
N/106	4 th Floor	Economics Department. (411)	Window	Voltas	1.5 TR	1
N/107	4 th Floor	Computer Lab - 1. (420)	Window	LG	2 TR	1
N/108	4 th Floor	Computer Lab - 1. (420)	Window	LG	2 TR	1
N/109	4 th Floor	Computer Lab - 2. (422)	Window	LG	2 TR	1
N/110	4 th Floor	Computer Lab - 2. (422)	Window	LG	2 TR	1
N/111	4 th Floor	Room No. 423	Window	O-General	1.5 TR	1
N/112	4 th Floor	Room No. 423	Window	O-General	1.5 TR	1
N/113	4 th Floor	Room No. 423	Window	Hitachi	1.5 TR	1
N/114	4 th Floor	Room No. 423	Window	Hitachi	1.5 TR	1
N/115	4 th Floor	Server Room - II (Cabin). 421	Split	LG	1 TR	1
N/116	4 th Floor	Server Room - II (421)	Window	O General	1.5 TR	1
N/117	4 th Floor	Server Room - II (421)	Window	LG	1.5 TR	1

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N/118	5th Floor	Room No - (525)	Window	O General	1.5 TR	1
N/119	5th Floor	Room No - (526)	Window	O General	1.5 TR	1
N/120	5th Floor	Room No - 516	Window	LG	2 TR	1
N/121	5th Floor	Room No - 516	Window	LG	2 TR	1
N/122	5th Floor	Room No. 512	Window	Hitachi	2 TR	1
N/123	5th Floor	Room No. 512	Window	Hitachi	2 TR	1
N/124	5th Floor	Room No -(528)	Window	O General	1.5 TR	1
N/125	5th Floor	Room No -(528)	Window	O General	1.5 TR	1
N/126	5th Floor	Room No -(528)	Window	LG	2 TR	1
N/127	5th Floor	Room No -(529)	Window	LG	1.5	1
N/128	5th Floor	Room No -(527)	Window	O General	1.5 TR	1
N/129	5th Floor	Room No -(527)	Window	O General	1.5 TR	1
N/130	5th Floor	Room No -(527)	Window	LG	2 TR	1
N/131	5th Floor	Physics Staff Room. 517	Split	Daikin	2 TR	1
N/132	5th Floor	Physics Staff Room. 517	Split	Daikin	1.80 TR	1
N/133	5th Floor	Confidential Room 524	Window	Hitachi	2 TR	1
N/134	5th Floor	Old Computer Room	Window	Hitachi	2 TR	1
N/135	5th Floor	Old Computer Room	Window	Hitachi	2 TR	1
N/136	5th Floor	M. Com Dept.(518)	Split	Wirlpool	1 TR	1
N/137	1st Floor	Class Room No. (128)	Window	Panasonic	1.5 TR	1
C/138	1st Floor	Class Room No. (128)	Window	Panasonic	1.5 TR	1
C/139	2 nd Floor	College Account office (224)	Window	O General	2 TR	1
C/140	2 nd Floor	College Account office (224)	Window	O General	1.5 TR	1
C/141	2 nd Floor	CC TV Control Room. (223)	Split	Daikin	1.5 TR	1
C/142	2 nd Floor	Meeting Room (Mrs. Bhatt)	Split	LG	1.5 TR	1
C/143	2 nd Floor	President Room	Split	Daikin	1.5 TR	1
C/144	2 nd Floor	President Room - Waiting Lobby	Split	Daikin	2 TR	1
C/145	2 nd Floor	Trustee Room	Split	LG	1.5 TR	1
C/146	2 nd Floor	Board Room	Split	Blue Star	2 TR	1
C/147	2 nd Floor	Board Room	Split	Blue Star	2 TR	1
C/148	2 nd Floor	Board Room	Split	Blue Star	2 TR	1
C/149	2 nd Floor	New Office - Sr. Vice President/Hony Secretary	Split	Daikin	1.5 TR	1
C/150	2 nd Floor	New Office - Meeting Room	Split	Daikin	1 TR	1
C/151	2 nd Floor	New Office - (Cabin - 1)	Split	Wirlpool	1 TR	1
C/152	2 nd Floor	New Office - (Cabin - 2)	Split	Wirlpool	1 TR	1
C/153	2 nd Floor	New Office - (Cabin - 3)	Split	Wirlpool	1 TR	1
C/154	2 nd Floor	New Office - (Cabin - 4)	Split	Wirlpool	1 TR	1
C/155	2 nd Floor	Office Area	Window	O General	1.5 TR	1
C/156	2 nd Floor	Office Area	Cassette	O General	2 TR	1
C/157	2 nd Floor	Office Area	Cassette	O General	2 TR	1
C/158	2 nd Floor	Office Area	Cassette	O General	2 TR	1
C/159	2 nd Floor	Reception Area	Cassette	O General	2 TR	1

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C/160	2 nd Floor	Auditorium. (227)	Cassette	Daikin	4.5 TR	1
C/161	2 nd Floor	Auditorium. (227)	Cassette	Daikin	4.5 TR	1
C/162	2 nd Floor	Auditorium. (227)	Ceiling Suspended	Daikin	2 TR	1
C/163	2 nd Floor	Auditorium - Meeting Room. (227)	Split	Daikin	1.5 TR	1
C/164	2 nd Floor	Lunch Room. (226)	Window	LG	2 TR	1
C/165	2 nd Floor	Ex- Peerless Room no. 1	Split	Daikin	1.5 TR	1
C/166	2 nd Floor	Ex- Peerless Room no. 1	Split	Daikin	1.5 TR	1
C/167	2 nd Floor	Ex- Peerless Room no. 2	Split	Daikin	1.5 TR	1
C/168	2 nd Floor	Ex- Peerless Room no. 2	Split	Daikin	1.5 TR	1
C/169	2 nd Floor	Ex- Peerless Room no. 3	Split	Daikin	1.5 TR	1
C/170	2 nd Floor	Ex- Peerless Room no. 3	Split	Daikin	1.5 TR	1
C/171	2 nd Floor	Ex- Peerless Room no. 4	Split	Daikin	1.5 TR	1
C/172	2 nd Floor	Ex- Peerless Room no. 4	Split	Daikin	1.5 TR	1
C/173	2 nd Floor	Ex- Peerless Room no. 5	Split	Daikin	1.5 TR	1
C/174	2 nd Floor	Ex- Peerless Room no. 5	Split	Daikin	1.5 TR	1
C/175	2 nd Floor	Ex- Peerless Room no. 6	Split	Daikin	1.5 TR	1
C/176	2 nd Floor	Ex- Peerless Room no. 6	Split	Daikin	1.5 TR	1
C/177	2 nd Floor	Ex- Peerless Lobby area	Split	Daikin	1.8 TR	1
C/178	2 nd Floor	Ex- Peerless Lobby area	Split	Daikin	1.8 TR	1
C/179	2 nd Floor	Ex- Peerless Road side	Split	Daikin	1.5 TR	1
C/180	2 nd Floor	Ex- Peerless Road side	Split	Daikin	1.5 TR	1
C/181	2 nd Floor	Ex- Peerless hall area	Cassette	Daikin	2 TR	1
C/182	2 nd Floor	Ex- Peerless in front of lift area	Cassette	Daikin	2 TR	1
C/183	3 rd Floor	Room No . (321)	Window	O-General	1.5 TR	1
C/184	3 rd Floor	Room No . (321)	Window	LG	2 TR	1
C/185	3 rd Floor	Room No . (322)	Window	O-General	1.5 TR	1
C/186	3 rd Floor	Room No . (322)	Window	LG	2 TR	1
C/187	3 rd Floor	Room No . (322)	Window	O-General	1.5 TR	1
C/188	3 rd Floor	Room No . (323)	Window	O-General	1.5 TR	1
C/189	3 rd Floor	Room No . (323)	Window	LG	1.5 TR	1
C/190	3 rd Floor	Room No . (323)	Ceiling Suspended	Daikin	2 TR	1
C/191	3 rd Floor	Room No . (325)	Window	LG	1.5 TR	1
C/192	3 rd Floor	Room No . (325)	Window	LG	1.5 TR	1
C/193	3 rd Floor	Room No . (325)	Window	O-General	1.5 TR	1
C/194	4 rd Floor	Room No . (324)	Window	o-General	1.5 TR	1
C/195	3 rd Floor	Room No . (324)	Window	LG	1.5 TR	1
C/197	4 th Floor	Room No. 424 (SCR)	Split	Daikin	1.5 TR	1
C/198	4 th Floor	Room No. 424 (SCR)	Split	Daikin	2 TR	1
C/199	4 th Floor	Room No. (425)	Window	O-General	1.5 TR	1
C/200	4 th Floor	Room No. (425)	Window	O-General	1.5 TR	1

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C/201	4 th Floor	Room No. (425)	Window	LG	2 TR	1
C/202	4 th Floor	Room No. (426)	Window	LG	2 TR	1
C/203	4 th Floor	Room No. (426)	Window	National	2 TR	1
C/204	4 th Floor	Room No. (426)	Window	O-General	1.5 TR	1
C/205	4 th Floor	Room No. (430)	Window	O-General	1.5 TR	1
C/206	4 th Floor	Room No. (430)	Window	National	2 TR	1
C/207	4 th Floor	Room No. (430)	Window	LG	2 TR	1
C/208	4 th Floor	Room No. (429)	Window	O-General	1.5 TR	1
C/209	4 th Floor	Room No. (429)	Split	LG	2 TR	1
C/210	4 th Floor	Room No. (429)	Split	O General	2 TR	1
C/211	5th Floor	BDA - Main Lobby	Window	LG	2 TR	1
S/212	5th Floor	BDA - Main Lobby	Window	LG	2 TR	1
S/213	5th Floor	Audio Visual Room - 530	Window	O-General	1.5 TR	1
S/214	5th Floor	Audio Visual Room - 530	Window	O-General	1.5 TR	1
S/215	5th Floor	Patern Making Room - 533	Window	O-General	1.5 TR	1
S/216	5th Floor	Patern Making Room - 533	Window	O-General	1.5 TR	1
S/217	5th Floor	Machine Room - 534	Window	O-General	1.5 TR	1
S/218	5th Floor	Machine Room - 534	Window	O-General	1.5 TR	1
S/219	5th Floor	Fashion Advance Room - 536	Window	O-General	1.5 TR	1
S/220	5th Floor	Fashion Advance Room - 536	Window	O-General	1.5 TR	1
S/221	5th Floor	Creative Arts Room - 529	Window	LG	2 TR	1
S/222	5th Floor	Class Room - 532	Split	LG	1.5 TR	1
S/223	5th Floor	Class Room - 532	Split	LG	1.5 TR	1
S/224	5th Floor	Computer Lab Room-537	Split	LG	1.5 TR	1
S/225	5th Floor	Computer Lab Room-537	Split	LG	1.5 TR	1
S/226	5th Floor	Computer Lab Room-537	Split	LG	1.5 TR	1
S/227	6 th Floor	Girls Changing Room No- 617	Window	LG	1.5 TR	1
S/228	6 th Floor	Boys changing Room No- 618	Window	LG	1.5 TR	1
S/229	6 th Floor	Deans Office Room No. 615, cabin	Split	Daikin	1.0 TR	3
S/230	6 th Floor	Deans Office Room No. 615, Meeting cabin	Split	Daikin	1.5 TR	1
S/231	6 th Floor	Deans Office Room No. 615, Work Station Area	Split	Daikin	1.5 TR	2
S/232	4 th Floor	Computer Academy - Reception-431	Cassette	Daikin	1.5 TR	1
S/233	4 th Floor	Computer Academy - Lab-432	Split	Daikin	2 TR	1
S/234	4 th Floor	Computer Academy - Lab-432	Split	Daikin	2 TR	1
S/235	4 th Floor	Computer Academy - Lab-432	Split	Daikin	2 TR	1
S/236	4 th Floor	Computer Academy - Lab-438	Split	Daikin	2 TR	1
S/237	4 th Floor	Computer Academy - Lab-438	Split	Daikin	2 TR	1
S/238	4 th Floor	Computer Academy - Lab-439	Split	Daikin	2 TR	1
S/239	4 th Floor	Computer Academy - Lab-439	Split	Daikin	2 TR	1

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S/240	4 th Floor	Computer Academy - Lab-440	Split	Daikin	2 TR	1
S/241	4 th Floor	Computer Academy - Lab-440	Split	Daikin	2 TR	1
S/242	4 th Floor	Computer Academy - Lab-440	Split	Daikin	2 TR	1
S/243	4 th Floor	Computer Academy - Lab-441	Split	Daikin	2 TR	1
S/244	4 th Floor	Computer Academy - Hardware Lab-434	Split	Daikin	2 TR	1
S/245	4 th Floor	Computer Academy - Hardware Lab-434	Split	Daikin	2 TR	1
S/246	5 th Floor	Arts Staff Room No.(535)	Cassette	Daikin	1.80 TR	1
S/447	5 th Floor	Arts Staff Room No.(535)	Cassette	Daikin	1.80 TR	1
S/448	5 th Floor	Arts Staff Room No.(535)	Cassette	Daikin	1.80 TR	1
S/450	5th Floor	Class Room - 545	Split	Daikin	1.5 TR	1
S/451	5th Floor	Class Room - 545	Split	Daikin	1.5 TR	1
S/452	5th Floor	Class Room - 545	Split	Daikin	1.5 TR	1
S/453	5th Floor	Class Room - 547	Split	Daikin	1.5 TR	1
S/454	5th Floor	Class Room - 547	Split	Daikin	1.5 TR	1
S/455	5th Floor	Class Room - 548	Split	Daikin	1.5 TR	1
S/456	5th Floor	Class Room - 548	Split	Daikin	1.5 TR	1
S/457	5th Floor	Class Room - 544	Split	Daikin	1.5 TR	1
S/458	5th Floor	Class Room - 544	Split	Daikin	1.5 TR	1
S/459	5th Floor	Class Room - 544	Split	Daikin	1.5 TR	1
S/460	5th Floor	Class Room - 546	Split	Daikin	1.5 TR	1
S/461	5th Floor	Class Room - 549	Split	Daikin	1.5 TR	1
S/462	5th Floor	Class Room - 549	Split	Daikin	1.5 TR	1
S/463	5th Floor	At Security area	Cassette	Daikin	1.80 TR	1
S/464	5th Floor	Computer Lab Room 550	Cassette	Daikin	1.80 TR	1
S/465	5th Floor	Studio Room 551	Split	Daikin	1.5 TR	1

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Capacity Of Water Tank

Sl No	Perticulars	Type	Capacity (Ltr)
1	6th Floor RCC Water Tank North Side (College)	Overhead Water Tank	15,000.00
2	7th Floor PVC Water Tank North Side (College - Library Roof)	Overhead Water Tank	2,000.00
3	7th Floor RCC South Side New Tank (Front Block)	Overhead Water Tank	10,000.00
4	6th Floor RCC Water Tank Middle Side (Opposite Auditorium)	Overhead Water Tank	15,800.00
5	6th Floor PVC Water Tank Middle Side	Overhead Water Tank	1,000.00
6	Gr Floor Valia Hall Water Reservoir (From KMC Water)	Underground Water Reservoir	11,800.00
7	Gr Floor Valia Hall Water Reservoir (For Fire Protection)	Underground Water Reservoir	100,000.00
8	Gr Floor College (Maintenance Dept) water reservoir	Underground Water Reservoir	6,000.00

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Generators used in college campus

1. Generator at front block - 2 pcs kirloskar make 160kva capacity each
2. Generator at south block - 1 pc Cummins make 125kva capacity

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Monthly Consumption Details				
Sl No	For the Month	Diesel (Ltr)	Kerosine (Ltr)	Electricity (Kwh)
1	July, 2017	210		82264
2	August, 2017	210		97572
3	Sept, 2017	210		83325
4	Oct, 2017	0		42782
5	Nov, 2017	0		57412
6	Dec, 2017	0		34044
7	Jan, 2018	0		22709
8	Feb, 2018	210		41457
9	March, 2018	0		62180
10	April, 2018	0		67319
11	May, 2018	0		57855
12	June, 2018	0		58070
Total		840		706989

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