Green Audit / Environmental Inspection

CIL Ref. No.:	**CIL/20232416**
Name of organization:	**Kashi Institute of Pharmacy**
Address of premises:	**Mirzamurad, Varanasi Prayagraj Road, Varanasi Uttar Pradesh**
Name of Inspector:	**Ashutosh Tiwari**
Date of Inspection:	**21-10-2023**
Type of Inspection:	**Green Audit**

Organization Details	
Total Campus Area	2 Acre
Total Built-up Area	5338 sq. meter
Covered Parking	NA
Total Air-Conditioned Area	600 sq. meter
Non-Airconditioned Area	XXXXX
Cross Floor Area	XXXXX
Forest / Planted Area	2700 Sq. meter
Age of the building	14 Years

DETAILS OF INFRASTRUCTURE

Classrooms	08 (600 Sq. meter)
Laboratory	12(900 Sq. meter)
Library	01 (150 Sq. meter)
Seminar hall and auditorium	01(300 Sq. meter)
Sports room	01
Gymnasium	01
Staff and student parking area	01
Canteen	01(400 Sq. meter)
Playground	01
Green Area / Plantation	2700 Sq. meter

LIST OF BUILDINGS

Name of Building	Number of Floors	Area (m2)
KIP Block	4	5338 Sq. meter

DEPARTMENTS

1	Bachelors in pharmacy
2	Diploma in Pharmacy

DETAILS OF STUDENTS AND STAFF

Total Number of Students	491 (M-390, F-101)
Teaching Staff	31
Technical Staff	5
Non-Technical Staff	7
Outsourced Staff	4

GREEN AUDIT PARTICIPANTS

Name	Designation
Dr. Ashutosh Mishra	Director
Dr. Vivek Keshri	Head of the Department
Mr. Deepak Kumar	Assistant Professor
Mr. Anurag Vishwakarma	Lab. Assistant
Mr. Anil Maurya	Lab. Assistant
Mr. Shakti Chand	Lab. Assistant
Mr. Shashi Bhusan Tripathi	Lab. Assistant
Mr. Kumar Alok	Assistant Professor
Mr. Manoj Prajapati	Registrar

LEGAL COMPLIANCES

Description	Registration Details
Consent to operate (CTO) from SPCB	NA
Fire NOC	UPFS/2023/74133/VRN/VARANASI/2304/CFO
Water Boring permission	NA
DG Set Permission	22VSNOC05007879

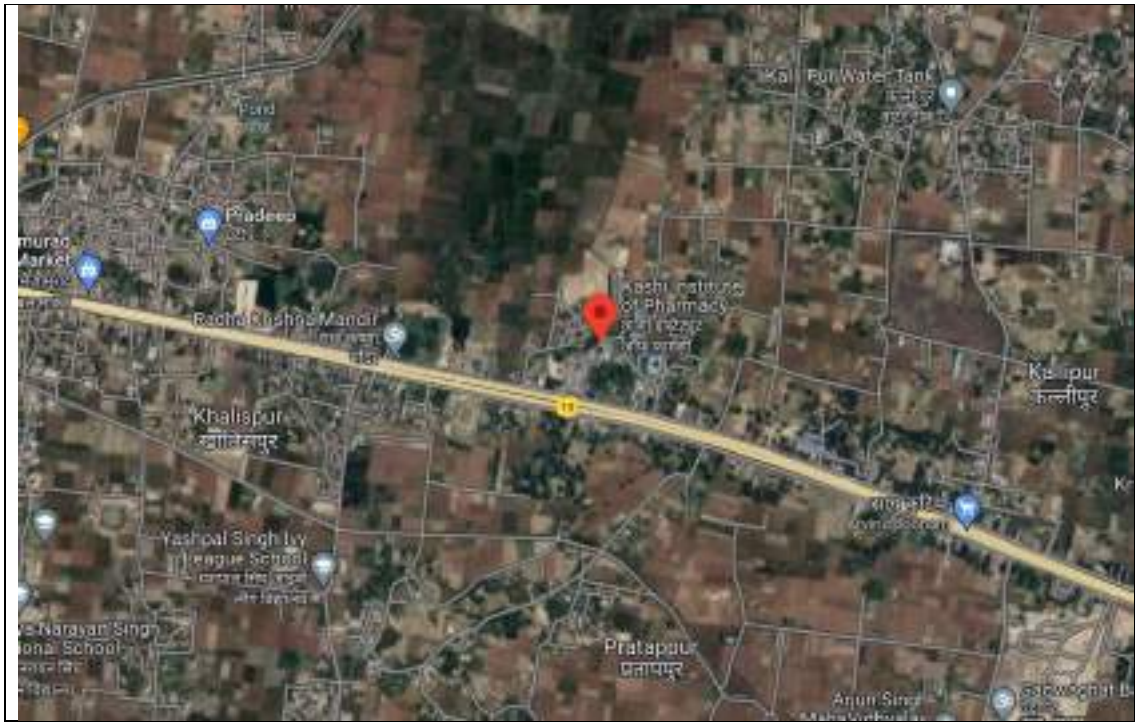
About Organization
Kashi Institute of Pharmacy (KIP) got its existence in 2009 with the vibrant vision of Jain Education Society to give an outstanding ambience of technical education in the entire Uttar Pradesh and especially in Purvanchal, it is approved by Pharmacy Council of India (PCI) and is affiliated to Dr. A.P.J. Abdul Kalam Technical University (AKTU) Lucknow

(formerly U.P.T.U Lucknow)

KIP is maintaining its leading position amongst all private Pharmacy Institutes in Eastern Uttar Pradesh. It is run by a team of visionary and motivated IIT Alumni with the strong dedication to provide best technical education and world class qualitative environment to the students of Uttar Pradesh.

Kashi Institute of Pharmacy (KIP) is one of the topmost Pharmacy colleges in Varanasi providing technical education in B. Pharm & D. Pharm at graduation level.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE



LAND USE DATA

Categories of Land Use	Area (M2)
PLANTATION AREA	2700 Sq. meter
BUILT UP AREA (INCLUDE ROADS)	5338 Sq. meter
TOTAL AREA	5093 Sq. meter

CLIMATIC PARAMETERS

1. **Climate:** Kashi, also known as Varanasi, experiences a humid subtropical climate. It has distinct seasons, with hot summers and cool winters. The city is known for its extreme temperatures and can get very hot in the summer.

2. **Rainfall:** Summers in Varanasi are quite hot, with temperatures often exceeding 40°C (104°F) in May and June. Winters are milder, with temperatures ranging from 5°C to 15°C (41°F to 59°F) from December to February.

3. **Temperature:** Kashi receives most of its rainfall during the monsoon season, which typically lasts from June to September. The annual rainfall in Varanasi is approximately 1,100 mm (43 inches), with most of it occurring during these months. The rest of the year experiences relatively low rainfall.

BIO-DIVERSITY

Physical Count of Flora in Campus

S. No.	Particulars	Units
1	**Trees**	2097
2	**Plants**	2097
3	**Gardens**	04

List of Tree/Shrubs/Herbs species found in the campus.

S. No.	Botanical Name	Common Name	Units
Trees/Plant/Shrubs/Herbs			
1	Epipremnum aureum	Money plant	30
2	Codiaeum variegatum	Karotan	10
3	Codiaeum variegatum	Laal Karotan	10
4	Livistona chinensis	China Palm	15
5	Calotropis procera	Lalin	10
6	Dioscorea bulbifera	Bulb	20
7	Lilium	Lily	40
8	Amaranthus dubius	Laal saag	30
9	Calendula officinalis	Candula	15
10	Bougainvillea glabra	Begum Baheliya	30
11	Cytisus scoparius	Laaltena	30
12	Schleichera oleosa	kasmas	4
13	Prosopis cineraria	Keshantiya	10
14	Petunia xatkinsiana	Petuniya	20
15	Chrysanthemum morifolium	Guldawari	40
16	Chrysanthemum morifolium	Guldawari Hybrid	10

17	Tagetes	Genda	50
18	Tagetes erecta	Inka Genda	40
19	Kochia scoparia	Kochia	2
20	Crassula ovata	Zed	10
21	Luffa aegyptiaca	Spongi	5
22	Piper betel.	Paan Patta	30
23	Helianthus annuus	SurajMukhi	10
24	Antirrhinum majus	Dog flower	7
25	Ocimum sanctum Linn	Tulsi	10
26	Bryophyllum pinnatum	pattar churn	15
27	Melia azedarach	Flask	10
28	Cestrum nocturnum	Raat rani	5
29	Morinda coreia	Mann patta	4
30	Pandanus amaryllifolius	Pandan	40
31	Ficus Repens	Chipkali Bel	1000
32	Combretum indicum	MadhuMalti	5
33	Jasminum auriculatum	Juhi	4
34	Palyalthia longifolia var. pendula	Ashok pandula	72
35	Saraca asoca	Ashok pandubbi	8
36	Ficus benjamina	Ficus	20
37	Tabernaemontana divaricata	Chandni	60
38	Lantana camara	Lantana	250
39	Hyophorbe lagenicaulis	Bottle palm	60
40	Dypsis lutescens	Erika palm	30
41	Murraya paniculata	Manokamini	800
42	Duranta erecta	Duranta	1000
43	Kajorina tapori	Tapori	4
44	Platycladus orientalis	Morpankhi	15
45	Thuja orientalis	China Morpankhi	8
46	Magnolia champaca	Sonam champa	30
47	Bougainvillea spectabilis	Bougainvillea	30
48	Citrus reticulata	Narangi	100
49	Plumeria rubra L	Gulchin	15
50	Jasminum officinale	Chameli	1
51	Delonix regia	Gulmohar	4
52	Tectona grandis	Sagwan	50
53	Carica papaya	Papita	6
54	Rosa moschata	Desi gulab	25
55	Rosa rubiginosa	English gulab	5
56	Alstonia scholaris	Chitwan	5
57	Cassia fistula	Amaltas	4
58	Cascabela thevetia	Kaner	2
59	Nymphaea nouchali	Neelkamal	30
60	Gardenia jasminoides	Gandhraj	3

61	Hibiscus rosa-sinensis	Gudhal	10
62	Nyctanthes arbor-tristis	Parijat	5
63	Dracaena reflexa	Song of India	20
64	Lilium	Lily	100
65	Coleus scutellarioides	Coleus	50
66	Ficus repens	Chipkali bel	100
67	Combretum indicum	Madhumalti	5
68	Jasminum sambac	Bela	25
69	Aegle marmelos	Bel	1
70	Elaeocarpus ganitrus	Rudraksh	1
71	Nelumbo nucifera	Jal me ka kamal	10
72	Jasminum sambac	Indonesia	8
72	Jasminum auriculatum	Juhi	4
74	Livistona chinensis	China palm	25
75	Artocarpus heterophyllus	Kathal	1
76	Dracaena trifasciata	Snake	100
77	Mussaenda erythrophylla	Musanda	1
78	Litchi chinensis	Litchi	1
79	Phyllanthus emblica	Amla	1
80	Mangifera indica	Aam	6
81	Aloe barbadensis miller	Aloevera	4
82	Musa paradisiaca L.	Kela	7
83	Murraya koenigii	Kadi patta	4
84	Azadirachta indica	Jungle neem	2
85	Cestrum nocturnum	Raatrani	4
86	Syzygium cumini L.	Jamun	5

Pics of Tree/Shrubs/Herbs species found in campus.





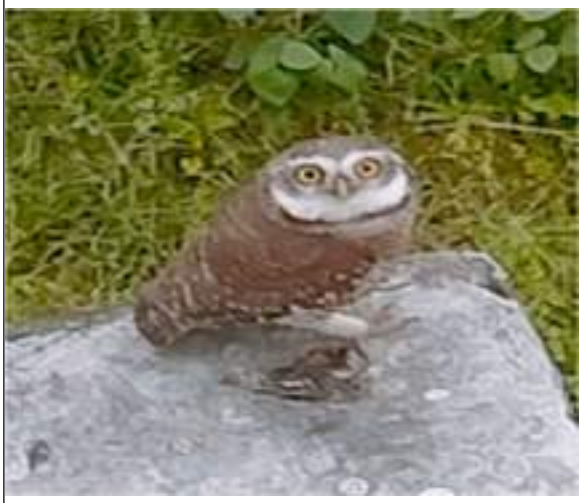

List of birds and animals

S. No.	Zoological Name	Common Name
1.	Corvus	Crow
2.	Columba livia	Pigeon
3.	Canis lupus familiaris	Dog
4.	Felis catus	Cat
6.	Apis	Honeybee
7.	Rodentia Sciurus	Squirrel
8.	Pavo cristatus	Peacock
9.	Strigiformes	Owl

List of Reptiles found in and around the campus.

S. No.	Zoological Name	Common Name
1.	**Lacertilia**	Lizard

2.	**Chamaeleonidae**	Chameleons

Reference Image	
	
	

LEGEAL REQUIREMENTS

Description	**Registration Details**
Consent to operate (CTO) from SPCB	Not available
Fire NOC	UPFS/2023/74133/VRN/VARANASI/2304/CFO
Water Boring permission	Not available
DG Set Permission	22VSN0C05007879

GENERAL

General Requirements: Environmental Policies / Environmental Objectives, etc.	
Is there an environmental policy? Is it publicly communicated?	Yes, there is written environmental policy developed by the institute. The organization creates awareness among students, and staff regarding the efficient utilization of available resources, and environment-conscious programs surrounding people also many seminars, workshops awareness programs are being conducted for the same. Reference doc/pic no.- A1
Is there a defined waste management policy in the organization?	No, there is no defined waste management policy in the organization.
Are there any quantifiable environmental objectives decided by the organization?	There are no defined quantifiable environmental objectives decided by organization.
Is the organization aware of all environmental Laws pertaining to different aspects of the organization's activities? Mention laws & compliance status.	There is no evident document/record that ensures that the organization is aware of all environmental laws concern to different aspect of the organization's activities.
Does the organization have any Recognition/certification for the environment friendliness? Provide details.	No, there is no documented or recorded evidence of any recognition or certification for environmental friendliness within the organization.
Has the organization established any committee to decide, implement & monitor environmental initiatives?	Yes, the organization have green committee to decide, implement & monitor environmental initiatives. Institution have conducted plantation drive and celebrate environment day to spread awareness among staff and student. Reference doc/pic no.: - A4, A9, A10 (see below)
Has the institution ever received any notice/warning from the pollution control board or any other concerned environmental authorities? If yes, then what corrective & preventive measures have been taken?	No, the institution never received any notice or warning from the pollution control board or any other concerned environmental authorities. Reference doc/pic no.: -A5
Related images / documents	

INSTITUTIONAL POLICY
ON
ENVIRONMENT AND GREEN
INITIATIVES

A1. Environmental Policy of the institute

A2. Fire NOC

A3.DG Set Permission

KASHI INSTITUTE OF PHARMACY

GREEN COMMITTEE 2023-24

A4. Green Committee of the institute

KASHI INSTITUTE OF PHARMACY

TO WHOMSOEVER IT MAY CONCERN

A5. Self declaration

A6. Environment Day at KIP

	
A7. Plantation drive at KIP	

Observations:
1. There are no quantifiable environmental objectives decided by the institute. 2. The organization does not have any certification for environmental friendliness. 3. The organization does not aware of any environmental Laws pertaining to different aspects of the organization's activities. 4. There is no evident document/record that ensures that the organization is aware of all environmental laws concern to different aspect of the organization's activities.

POLLUTION

Air Pollution Management (objective, practices / methods to minimize air pollution)	
Identify the major sources of air pollution within the organization & the actions taken to either eliminate or minimize the pollution.	The major source of air pollution within the organization are air conditioner smoke from lab exhaust and kitchen exhaust. Following are some remedial measures adopted by the campus to minimize air pollution: • Plantation in & around campus • 3-Star air conditioner is all installed in the

	Institute. • PUC (Pollution Under Control) testing has been completed for each vehicle on campus. Reference doc/pic no.: - B1, B2, B6, B7, B8 (see below)
HVAC maintenance and calibration records, testing and balancing reports. When was the duct system tested for leakage last?	The institute does not maintain the maintenance and testing record of its air conditioning unit.
DG set stack emission test as per CPCB norms.	The institute has three DG Sets for in-house for power generation, in case of grid supply failure. Three DG Sets of capacity **320 kVA, 125 kVA, & 62.5 kVA** are installed in KIP Varanasi. DG Set Air Pollution Level, TVOC, and Noise Pollution Checks were conducted by CDG Inspection Ltd. at the time of the audit. Following are the outcomes of the check conducted. **DG Set Air Pollution Level:** 0.26 **PM2.5:** 0.17 ug/m3 **Noise Pollution Level:** Max: 99.1dBA, Min:71.3Dba Reference doc/pic no: - B3,B4, B5
Related documents / images	
	
B1.Campus Plantation	B2.Campus Garden

	
B3.DG Set Air Pollution Level	B4. DC Set Noise Pollution Level
	
B5.DG-Set	B6.5 Star Air conditioner

	
B7.Pollution Under Control Certificate	B8.Vehicles free campus

Observations:	
1. It is recommended that the institute conduct DG set stack emission test in accordance with CPCB. 2. The organization needs to maintain a HVAC maintenance plan and it should also maintain the Periodic record of the same.	
In-Door Air Quality (Checks, methods, tests & practices to ensure indoor air quality)	
Does the organization test indoor air quality? Details of last indoor air quality test done.	There were no records to verify that the college conducted tests to check indoor air quality. Indoor Air Quality check of the campus was conducted by CDG Inspection Ltd. at the time of audit. Following are the outcomes of the check conducted: I**ndoor Air Pollution Level:** 0.06 **PM2.5-** 0.17 ug/m3 Reference doc/pic no.: - C1
Is there a proper system of exhaust of indoor air?	Every classroom, staff room, corridor, etc. comprises windows for proper ventilation. The staff room, library, and lab in the campus's basement all have ventilation system. The indoor air flow rate was checked at the time of the audit, and the outcome was **0.2 m/s.**

	Reference doc/pic no.: -C2, C3 &C4
Supplies: • Are 'Material Safety Data Sheets (MSDS)' available for different types of supplies (Ex: solvent, wax, adhesives, paints, flammables etc.)? • Are storage areas separate & ventilated properly? • Are less or nonhazardous materials used when possible? • Does the organization have a defined system to evaluate & find out safer alternatives? • Is there a defined procedure available for disposal of used substances?	• Yes, Material Safety Data Sheets (MSDS) available for different types of supplies. Reference doc/pic no.: - C7 & C8 • Yes, storage areas are separate, and those storage areas have enough ventilation. • There is no clear evidence that the institute uses non-hazardous materials. • No, the organization does not have a defined system to evaluate & find out safer alternatives. • No, there is not a defined procedure available for disposal of used substances.
General Cleanliness: • Are rooms dusted and vacuumed thoroughly and regularly? What are related checks & controls? • Does the organization ensure to use of environment-friendly, non-scented cleaning products?	• Yes, the classrooms, library, staff room, and other area were found to be clean and tidy at the time of the audit. • The organization does not ensure the use of only environment-friendly, non- scented cleaning product.
Pest control methods & products used (check & control).	The institute does not conduct pest control on its campus.
Does the organization ensure use of low emitting paints, coatings, furniture etc.? What are related checks & controls?	No record found at the time of audit.
Is there any sign of mold infestation?	No sign of mold infestation in the institute.
Does the organization eliminate any bird or animal nests or droppings near outdoor air intakes?	No, the organization does not eliminate any bird or animal nests.
What are the methods adopted by the organization to control/prevent dust within the buildings?	The methods adopted by the organization to control/prevent dust within the buildings are as follows: • There are large number of trees and greenery all around the campus.

	• The organization cleans or mops the area 3-4 times a day to prevent dust. Reference doc/pic no.: - C5 &C6
Related records / images	
	
C1.Indoor Air Quality Level	C2. Ventilation
	
C3. Exhaust fan	C4. Indoor air flow rate

C5.Large number of trees all around campus

C6.Campus surrounded by Greenery


SAFETY DATA SHEET

Honeywell

Ethanol

E7024-4X2.5L

SECTION 1. IDENTIFICATION

SECTION 2. HAZARDS IDENTIFICATION

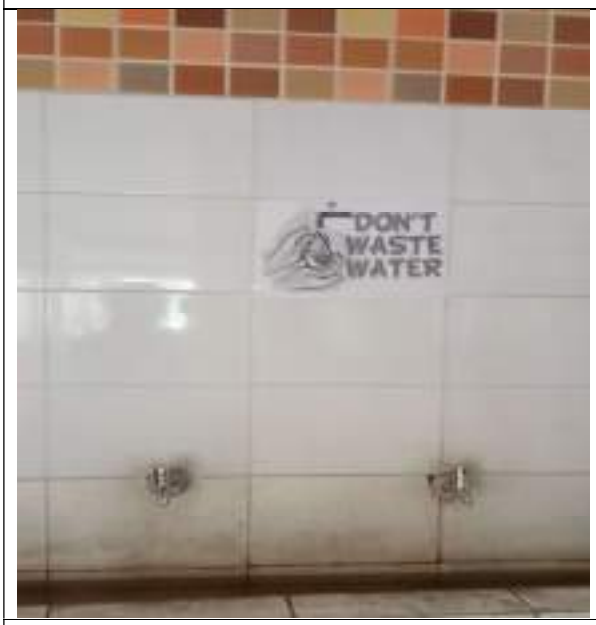
C7.MSDS Document

Observations:

1. The organization does not use of environment-friendly, non-scented cleaning products.
2. The organisation does not ensure use of low emitting paints, coatings, furniture etc.
3. The organization does not ensure about the pest control methods and product.
4. The organization does not have a defined system to evaluate and identify safer alternatives and promote the use of less or non-hazardous materials when possible.

WATER POLLUTION

Water Pollution Management (objective, practices / methods to minimize water pollution)	
Source of water pollution within the premises.	No there is no source of water pollution within the premises.
Measures taken to prevent / stop water wastage.	• To reduce water wastage the signboard is mounted on the wall with the aim of conserving water. • The institute also celebrate world water day to raise awareness about water conservation among the students and staff. Reference doc/pic no.: - D1 &D2
Does the institute harvest rainwater? Give details.	Yes, the institute practices rainwater harvesting, with a rainwater harvesting system installed on the campus. However, the institute has not provided details about its rainwater harvesting system. Reference doc/pic no.: -D3 &D4
Is there any water recycling system? Give details.	Not Available
Is there any effluent treatment plant in premises? No. of outlets for discharge of effluent?	Not Available
What is the quality of effluent in KLD?	Not Available
Whether operating STP/ETP satisfactorily?	Not Available
Whether provided flow meters on outlet & inlet of ETP/STP?	Not Available
Whether provided separate electricity meter on ETP/STP?	Not Available
Whether maintained Logbook for consumption of Electricity/ Chemicals/Quantity of effluent?	Not Available
Detail of land in case effluent is discharged for percolation/ irrigation purpose with justification for its 100% utilization.	Not Available
Status of ZLD (Zero Liquid Discharge) as per CPCB	Not Available

Locate the point of entry of water and point of exit of wastewater in the organization.	The campus has a well-functioning water supply system and a closed sewer system. Reference doc/pic no.: - D6
Related records / images	
	
D1.Save water signboard	D2.World Water Day
	
D3.Rainwater Harvesting System	D4.Rainwater Harvesting System

	
D5. Inlet of water supply	
Observation:	
1. There needs to be a well-structured process for water and wastewater management systems on the campus.	

Water Consumption & Water Efficiency Use of water (indoor and outdoor water) & practices related to efficient /reduced use of water.)	
Sources of water supply	1 borewell
Number of water storage tanks and their storage capacity. Total water storage capacity.	2 Tanks each 5000 lts capacity
Water used in irrigation.	100 Liter per week
Water used in cleaning.	100 Liter per week

Details	**No. of persons**	**Domestic (liter/ day)**	**Flushing (liter / day)**	**Total (liter / day)**
Students	381	70	100	170
Teaching Staff	17	30	10	40
Technical Staff	7	5	10	15
Non-technical Staff	1	4	3	7
Outsourced Staff	7	10	20	30
Total	413	119	143	262

Description	**Requirement***	**Actual consumption**

Water consumption per head /day	Without boarding facility: 45 liter per head / day With boarding facility: 135 liter per head / day	16.21 ltr/ day
*As per Central Ground Water Authority Guidelines water requirements (Ref. NBC 2016, BIS) of an educational institute for drinking and domestic use.		
Observation: 1. The data for water conservation per person per day is not accurately recorded.		

SANITARY CONVENIENCE TO BE PROVIDED

Fitments	**Educational Institutes (non-Residential)**				**Educational Institutes (Residential)**			
	Boys		**Girls**		**Boys**		**Girls**	
	Req.*	**Actual**	**Req. ***	**Actual**	**Req. ***	**Actual**	**Req.**	**Actual**
Water closets	1 per 40 pupils or part thereof	2	1 per 25 pupils or part thereof	2	1 for every 8 pupils or part thereof	NA	1 for every 6 pupils or part thereof	NA
Ablution taps	1 in each water closet	2	1 in each water closet	2	1 in each water closet	NA	1 in each water closet	NA
Urinals	1 per 20 pupils	3	-	2	1 for every 25 pupils or part thereof	NA	-	NA
Wash basins	1 per 60 pupils, Min 2	4	1 per 40 pupils, Min 2	4	1 for every 8 pupils or part thereof	NA	1 for every 6 pupils or part thereof	NA
Bath	-		-		1 for every 8 pupils or part thereof	NA	1 for every 6 pupils or part thereof	NA
Drinking water fountains or taps	1 for every 50 pupils	4	1 for every 50 pupils	4	1 for every 50 pupils or part thereof	NA	1 for every 50 pupils or part thereof	NA

	or part thereof		or part thereof					
Cleaner's sinks	1 per floor, minimum							

*As per IS 1172:1993

Observations:

- It is recommended to install a greater number of urinals, wash basins, and drinking water taps to meet the requirements of IS 1172:1993.

NOISE POLLUTION

Noise Pollution Management (objective, practices / methods to minimize noise pollution)

Noise level in dB(A) Leq	Standard Level*	Actual Level
Day Time	50	Max-68.6 Min-72.52

*As per The Noise Pollution (Regulation and Control) Rules, 2000; rule 3(1) and 4(1)
Day time from 6:00am to 10:00pm
Nighttime from 10:00pm to 6:00am

Related records / images

E1. Outdoor Noise Pollution Level (Max.)

E2. Outdoor Noise pollution Level (Min.)

	
E3. Indoor Noise Pollution Level (Max.)	E4. Indoor Noise pollution Level (Min.)

Building Sustainability	
Ensure that walls, floors, roofs, and windows are as energy efficient as possible.	The walls, floors, roofs, and windows of the institute are designed to be energy efficient. Glass is used as a building material to enhance energy efficiency by allowing in natural light and reducing the need for artificial lighting, resulting in lower electricity consumption. To promote a sustainable environment, the institute has implemented several "Green Campus" initiatives, restricted entry of vehicles, and landscaping with trees and plants. Reference doc/pic no.: - F1 &F2,F3
Design for good indoor air quality	Yes, every classroom, staff room, corridor, etc. comprise window for proper ventilation. Reference doc/pic no.: -F3 & F4
Use of natural daylight in building interiors as a source of ambient light.	Yes, Use of natural daylight in building interiors as a source of ambient light. Reference doc/pic no.: - F3 &F4
Use of low emitting materials for building modifications, maintenance, and cleaning.	Yes, the organization ensure use of low emitting paints.
Related records/images	

	
F1- Campus Building	F2- LUX meter reading
	
F3-Natural Daylight	F4- Natural Daylight

Lighting	
Use of energy efficient lighting system (bulb & other products)	Yes, the college has installed an LED light connected to solar panels in its campus. Reference doc/pic no.: - G1
Use of natural day light	Yes, there is a use of natural daylight in every classroom, library, garden, and lab. Reference doc/pic no.: G2

Related records/images	
	
G1.LED Lights	G2. Natural Daylight

ILLUMINATION LEVELS AND GLARE INDEX

Sr. No.	Area	Standard Illumination (Lux)*	Actual Illumination (Lux)
a)	Classrooms	300	170
b)	Lecture rooms (including demonstration areas)	300	432
c)	Reading rooms	150 to 300	447
d)	Laboratories	300	289
e)	Corridors	70	520
f)	Libraries	300	165
g)	Auditorium I. Hall II. Foyer III. Stage area	 70 70 300	 81
h)	Gymnasiums	150	59
j)	Cafeterias	100	291
K)	Staff rooms	150	125

* Recommended illumination Levels and Glare index as per National Lighting Code 2010 [ETD 24: Illumination Engineering and Luminaries] Part 5 Section 3

Related records / images

	
H1-Lux meter reading of Lecture room	H2-Lux meter reading of classroom
	
H3. Lux meter reading of reading rooms	H3. Lux meter reading of Corridors
Electrical Equipment's	
Details of electrical equipment, its energy efficiency & practices	The organization uses energy-efficient electrical equipment such as Star rating AC and LED bulbs and has replaced CFL bulbs.

ELECTRICITY CONSUMPTION

Month	Electricity Consumption (Last 6 months) (unit)
April	17060
May	28314
June	46404
July	45918
August	24216
September	27558

Related records/images:

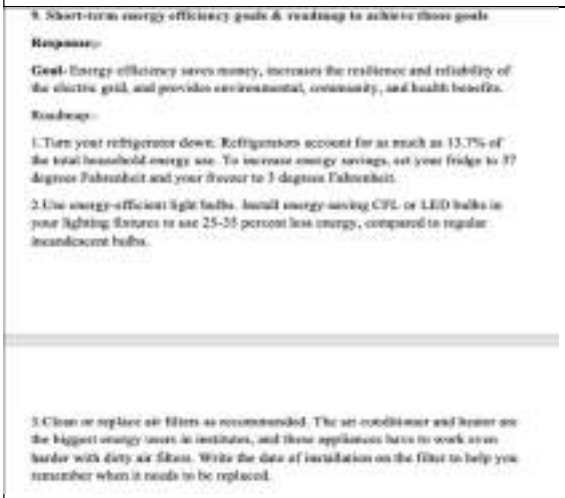
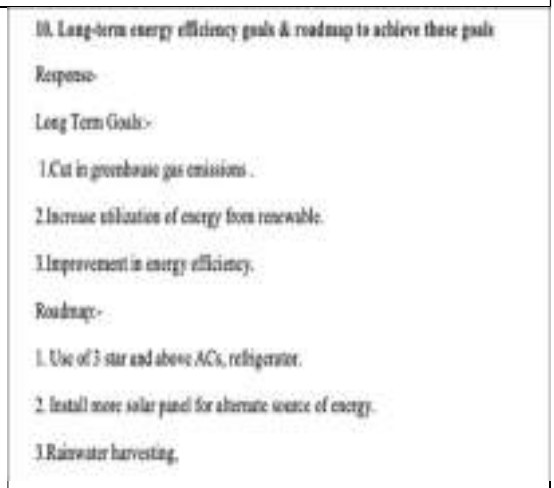





I.6-month Electricity bill of 2023

Energy Efficiency
(consumption, objective, practices / methods to achieve energy efficiency objectives)

Current energy uses.	**Energy Sources** / **Consumption (Unit)** Electricity / 189470 unit (6month) Fuel oil / 280 ltr.
Short-term energy efficiency goals & roadmap to achieve those goals.	The institute short-term energy efficiency goals are as follows: • Solar panel installation

	• Natural Lights Reference doc/pic no.: -J1
Long-term energy efficiency goals & roadmap to achieve those goals.	Long-term energy efficiency goals include reducing greenhouse gas emissions, utilization of renewable energy, use of energy efficient equipment. However, there is no defined roadmap developed by the organization that will help them achieve these goals. Reference doc/pic no.: - J2
Related records/images	
	
J1. Short term goal	J2. Long term goal
Observations: 1.The organization needs to define a quantifiable road map for long-term and short-term energy efficiency.	

On-Site Energy Generation (Details of renewable energy generation projects on organization's property for organization's use)
The institute has total generation capacity of 200 kilo watts which can provide electricity to the institute as well as the grid. Reference doc/pic no: K1
Related records / images

	
K1. Solar panel	
Observations: 1. The maintenance register for the solar energy plant needs to be regularly recorded and updated.	

DRINKING WATER

Drinking Water Quality (As per IS 10500: 2012)	No records of drinking water quality test conducted by the institute. Water pH level is measure by CDG inspection at the time of audit. The pH of the water measured during the inspection is 6.7 which is safe for use. Reference pic/doc no. L1
Related records / images	

L1. pH test

Observations:

1. It is recommended that the institute should conduct water test from an NABL accredited laboratory.

WASTE MANAGEMENT

Type of waste - **Plastic waste**

Approximate annual quantity- No record found at the time of audit.

Source of waste – Plastic bottle, Medicine, Plastic cap.

Handling methods: No record found at the time of audit.

Measures to reduce the waste quantity- No record found at the time of audit.

Type of waste – **Paper waste**

Approximate annual quantity- 3780 kg per annum (as per the data provide by the institute)

Source of waste – Books, exams sheets, assignment, notepads etc.

Handling methods- No record found at the time of audit.

Measures to reduce the waste quantity- Emphasis on the online/electronic communication, ERP system, reuse and recycle of paper.

Type of waste – **Electronic waste**

Approximate annual quantity- 540 kg per annum (as per the data provided by the institute)

Source of waste – Computer, Mouse, Keyboard.

Handling methods- No record found at the time of audit.

Measures to reduce the waste quantity- Electronic waste is employed in certain educational projects carried out by students.

Type of waste – Hazardous waste

Approximate annual quantity- No record found at the time of audit.

Source of waste – No record found at the time of audit.

Handling methods- No record found at the time of audit.

Measures to reduce the waste quantity- NA

Type of waste – **Garden waste**

Approximate annual quantity- 3360 Kg per annum (as per the data provided by the institute)

Source of waste – Tree/Plants

Handling methods- The disposal of tree or plant waste is managed through methods such as burial or burn.
Measures to reduce the waste quantity- Decomposed and use as a natural fertilizer for plant

Type of waste – **Food waste**

Approximate annual quantity- 3840 Kg per annum (as per the data provided by the institute)

Source of waste – Canteen mess

Handling methods- Reused for animal feeds/ sell to the vender

Measures to reduce the waste quantity-

- Institute has taken initiative to improve food quality.
- The institute conducts awareness programs for both students and staff to promote food

conservation.

Observations:

1. There are no records found for hazardous waste, Plastic waste, electronics waste management.
2. Plastic waste and E-WASTE should not be mixed with other municipal waste. Instead, it should be collected separately and handed over to a recycler for proper processing and recycling. By keeping plastic waste segregated, we can enhance the recycling process and minimize environmental impacts.

COMPOSTING PLANT

How much organic waste is generated in a day? What type of organic waste is generated?	7200 kg per annum (as per data provided by the institute)
Details & capacity of compost plan installed in the organization.	Not available
Details of composting method used	Not available
Compost facility maintenance & inspection plan	Not available

Related image:

M1. Compost Pit

Observations:

1.It is recommended to adopt a proper composting method for complete decomposition and can consider installing a composting machine on campus for safe and sustainable

composting.

RAINWATER HARVESTING

Provide details of the rainwater harvesting facility.	In the KIP, rainwater harvesting system has been installed inside the campus. Reference doc/pic no.: - M1, M2
Rainwater harvesting system maintenance plan	The organization has a written procedure for maintenance planning, but there are no written records available.
Related records / images	
	
N1. Rainwater harvesting system	
Observations: 1. The organisation does not maintain any record regarding rainwater harvesting maintenance & inspection.	

Training	
Has the organization provided waste management/handling training to concerned employees. Give details.	No record found at the time of audit.
Has the organization provided training for energy saving?	No record found at the time of audit.
Has the organization conducted training for solid waste management?	No record found at the time of audit.
Has the organization conducted awareness training for water saving?	Yes, the institute has conducted awareness training for water saving. The last solid waste management training was done on 22/3/2023. Reference doc/pic no.: - O1 & O2

Related records / images

	
O1.Worlds Water Day	O2.Worlds Water Day

Observations:

1. The organization does not maintain any record regarding waste management/handling, energy saving and solid waste management training program.

Environmental Practices	
Waste recycling	Yes, garden waste is decomposed and used as a fertilizer for plant and tree.
Waste Decomposition	Yes, the institute has placed the waste in an open area pit, but it has not been designed according to the required dimensions.
Rainwater harvesting	Yes, the rainwater harvesting system is installed in the campus.
Environmentally Preferable Purchasing (EPP) or Green Purchasing	The organization use LED bulbs for energy conservation, different color of dustbin for segregation of waste in EPP.
Distinct receptacles for trash and recycling	No records found at the time of audit.
Low-emission transportation	No records found at the time of audit.
maximum use of clean energy	Yes, Organization also have installed solar panel.
Preference to electronics over the paper	Yes, they conduct exams and accept project and assignment submissions through online mode.

Campus garden	Yes, there is a beautiful campus garden that not only provides an aesthetic view of the campus but also helps improve air quality, reduce carbon footprint, and create a habitat for wildlife.

Environmental Initiatives / Green Initiatives

There are various green initiatives taken by the organization: -

- The organization has ban vehicle use inside campuses.
- The organization is going for the star-rated AC and motor fans.
- They have started using of the LED bulb instead of the CFL bulb and tube lights.
- The organization use renewal sources over non-renewal sources.
- The organization maintain greenery for better environment inside the campus.

Green Belt/ Landscaping


Khalispur, Uttar Pradesh, India

Name of auditor: **Ashutosh Tiwari**

Signature: