

Green Audit / Environmental Inspection

CIL Ref. No.:	CIL/20232341
Name of organization:	KANPUR INSTITUTE OF TECHNOLOGY AND PHARMACY (A UNIT OF INDUS TECHNICAL EDUCATION SOCIETY)
Address of premises:	A-1, UDSIDC, INDUSTRIAL AREA, ROOMA, KANPUR, 208001
Name of Inspector:	Mr. Ashutosh Tiwari
Date of Inspection:	08/08/2023
Type of Inspection:	Green Audit

Organization Details	
Total Campus Area	8093.89 sq.mtr
Total Built-up Area	6389.0 Sq mtr
Covered Parking	2340 Sq. mtr
Total Air-Conditioned Area	625.0 Sq.mtr
Non-Airconditioned Area	5764.0 Sq. mtr
Cross Floor Area	NA
Forest / Planted Area	1704 Sq mtr
Age of the building	14 years

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DETAILS OF INFRASTRUCTURE

Classrooms	05
Laboratory	12
Library	01
Seminar hall and auditorium	02
Sports room	01
Gymnasium	01
Staff and student parking area	2340 Sq.mt
Canteen	01
Playground	07
Green Area / Plantation	1704 Sq. mtr

LIST OF BUILDINGS

Name of Building	Number of Floors	Area (m2)
Pharmacy Block	04 (G+ 3)	6389.0 Sq. mtr

DEPARTMENTS

1	Pharmacy
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DETAILS OF STUDENTS AND STAFF

Total Number of Students	433 (Male- 294, Female- 139)
Teaching Staff	36
Technical Staff	08
Non-Technical Staff	10
Outsourced Staff	NA

GREEN AUDIT PARTICIPANTS

Green Audit / Environmental Inspection

Name	Designation
Dr. Prashant Kumar Katiyar	Director
Mr. Hari Krishana Yadav	Assistant Professor
Dr. Nidhi Tyagi	H.O.D, Associate professor

LEGAL COMPLIANCES

Description	Registration Details
Consent to operate (CTO) from SPCB	Not available
Fire NOC	UPFS/2023/84633/KPN/KANPUR NAGAR/ 2198/ CFO
Water Boring permission	Not available
DG Set Permission	Not available

About Organization
<p>Since its inception in 2009, Kanpur Institute of Technology & Pharmacy (KITP) has been successfully shouldering the monumental responsibility of producing capable health care professional and highly skilled with positive mind-set person. Run by a team of visionary and motivated IIT alumni, KITP is counted among the top-rated Pharmacy institutes of North India. Kanpur Institute of Technology & Pharmacy runs B. Pharma, M. Pharma and Diploma courses. The institute is affiliated to Dr. A.P.J. Abdul Kalam Technical University, Lucknow (formerly U.P.T.U., Lucknow) with College Code 550. The courses are approved by The Pharmacy Council of India (PCI) And affiliated to AKTU (550) & BTE (3380), Lucknow. The institute is very easily accessible; it is located in Rooma, on Kanpur – Allahabad Highway, 6 Kilometres away from Ramadevi round over.</p> <p>Kanpur Institute of Technology & Pharmacy proudly boasts of a sprawling and lush green campus with elegant buildings and state-of-the-art infrastructure, it has qualified, experienced and dedicated faculty for various courses, always ready to help the students in understanding the concepts related their area of study. KITP has a highly impressive</p>

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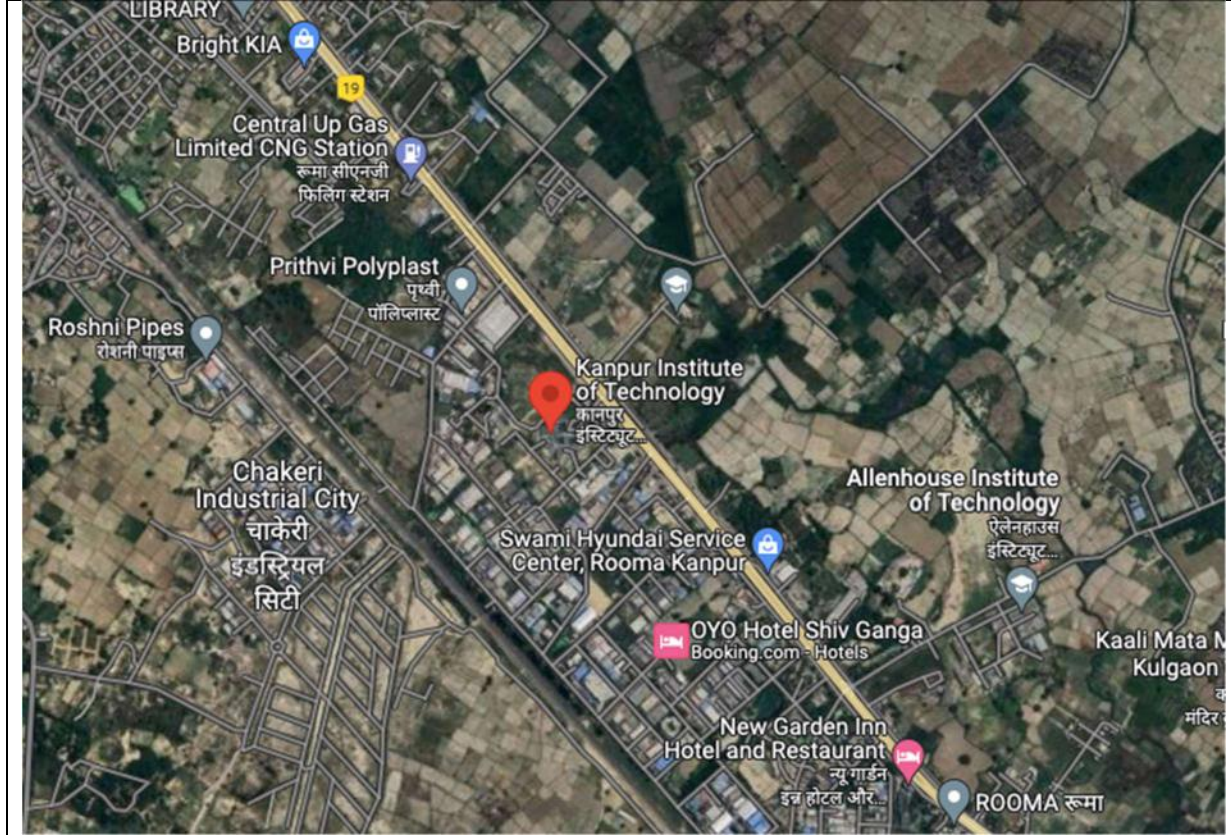
placement track record, with students getting placed in various MNCs at good annual packages.

The institute fulfils its promise of academic excellence. Every year, Kanpur Institute of Technology & Pharmacy produces university rank holders in various streams. The students are given exposure to various skills development programs during the course of their study at KITP. This helps them to gain an edge over others and prove themselves better for placement opportunities. The institute leaves no stone unturned to provide the best and conducive study environment to the students. Laboratories studded with modern equipment, computer centres, fully Wi-Fi campus, video lecture rooms, projector-based, air-conditioned classes, air-conditioned seminar halls are just a glimpse of the facilities that the students get at KITP, add to it the personal attention showered by the teachers to explain the intricate concepts to the students in the most lucid way.

Last but not the least; the institute shall continuously strive for maintaining excellence in higher technical and professional education, through a student centric approach, aiming to bring out the best in them and transforming the students into industry ready professionals.

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GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE



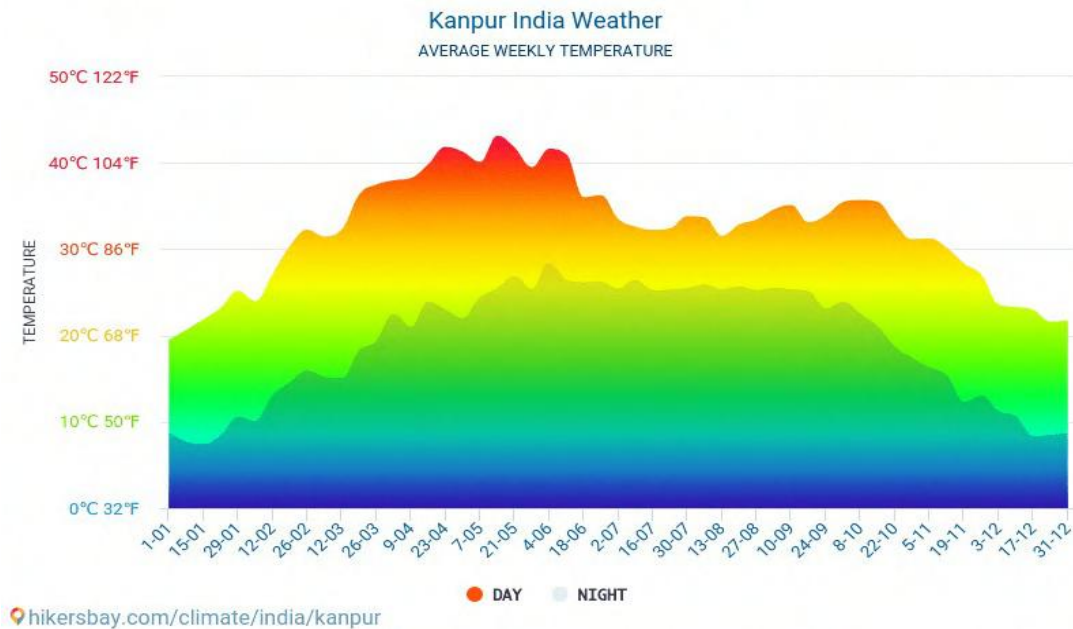
LAND USE DATA

Categories of Land Use	Area (M2)
PLANTATION AREA	1704 Sq mtr
BUILT UP AREA (INCLUDE ROADS)	6389.0 Sq. mtr
TOTAL AREA	8093.89 Sq mtr.

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CLIMATIC PARAMETERS

1. Climate: Kanpur has a monsoon-influenced humid subtropical climate (Cwa) bordering on a hot semi-arid climate (BSh) under the Köppen climate classification.
2. Rainfall: Kanpur typically receives about 65.53 millimeters (2.58 inches) of precipitation and has 70.72 rainy days (19.38% of the time) annually.
3. Temperature: The district's yearly temperature is 30.94°C (87.69°F) and it is 4.97% higher than India's averages.



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BIO-DIVERSITY

Physical Count of Flora in Campus

S. No.	Particulars	Units
1	Trees	30
2	Plants	50
3	Gardens	45

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

S. No.	Botanical Name	Common Name	Units
Trees			
1.	Alstonia scholaris	Chittwan	10
2.	Annona Squamosa	Sharifa	2
3.	Areca catechu	Supari palm	35
4.	Azadirachta indica	Neem	40
5.	Bougainvillea glabra	KAGAJ KE FOOL	35
6.	Calliandra haematocephala	Kulendr	15
7.	Callistemon	Cheel	2
8.	Canna Americanallis	Kaner varigater	6
9	Carissa carandas	Kuranda	1
10	Cascabela thevetia	KANER	295
11	Cascabela thevetia	Kaner desi	300
12	Cassia fistula Linn	Amiltaas	30

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13	Catharanthus Tricophyllus	SADABAHAR	110
14	Delonix regia	Godmohar	25
15	Euphorbia tithymaloides	Naagdon	1000
16	Ficus benghalensis	Banyan	1
17	Ficus benjamina	Ficus	1000
18	Hibiscus rosa-sinensis 'Double Red'	Gudhal double	1100
19	Ixora coccinea	Ixora double	40
20	Jacaranda mimosifolia	Neeli gulmohar	400
21	Jasminum sambac	Bela	5
22	Jatropha integerrima	JAGRUPA	15
23	Lagerstroemia Indica	Saoni	100
24	Livistona chinensis	China palm	38
25	Mangifera indica	Aam	7
26	Maranta leuconeura	Malanta	20
27	Mimosa pudica	CHUI MUI	2
28	Moras Alba	Shahtoot	4
29	Murraya paniculate	Manokamini	400
30	Neolamarckia cadamba	Kadam burflower	15
31	Phyllanthus emblica	Awala	2
32	PLUMERIA	GULACHIN	6

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33	Psidium guajava	Amrud	28
34	Punica granatum	Anaar	4
35	Saraca asoca	Ashok	490
36	Syzygium cumini	Jamun	10
37	Tabernaemontana	Double chandini	30
38	Tamarindus indica	Imli	1
39	Tecoma stans	CHAURI CHAURA	20
40	Tropical Hibiscus	DESI GUDHAL PINK	25
41	Zanthoxylum clava-herculis	Arkulas	10
Shrub			
1	Lawsonia inermis	Morpankh	4
2	Lawsonia inermis	Mehndi	3
3	Nyctanthes arbor-tristis	Harshringar	4
4	Ocimum basilicum	Basil	8
5	Withania somnifera	Ashwgandha	2
Grasses/Herbs			
1	Acalypha	Eklifa	8
2	Aloe barbadensis miller	Aleovera	12
3	Araucaria Araucana	Erokeria	7
4	Bassia scoparia	Kochiya	500
15	Beaucarnea recurvata	Lalina	7

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6	Cineraria deltoidei	Shaineria	8
7	Codiaeum Variegatum	Karotan	8
8	Cosmos bipinnatus	Kasmus	100
9	Datura stramonium	Dhtura	2
10	Dracaena marginata	Kloroma	7
11	Ficus benjamina	Star light	8
12	Ficus variegata	Ficus verigator	8
13	Gaillardia pulchella	Naurang	1000
14	Kalanchoe pinnata	Ajubi	48
15	Portulaca grandiflora	Naubijiya	10
16	Portulaca Pilosa	Fotoilaka	12
17	Schefflera arboricola	Saflora	8
18	Zinnia elegans	Giniya	40

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Images of Green Cover of the University Campus



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LEGAL REQUIREMENTS

Description	Registration Details
Consent to operate (CTO) from SPCB	Not available
Fire NOC	UPFS 2023 84633 KPN KANPUR NAGAR 2198 CFO
Water Boring permission	Not available
DG Set Permission	Not available

GENERAL

General Requirements: Environmental Policies / Environmental Objectives, etc	
Is there an environmental policy? Is it publicly communicated?	Yes, there is a defined environmental policy developed by the institute. Kanpur institute of technology and pharmacy, Kanpur college 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?	Yes, there are defined/written waste management policies. Reference doc/pic no.: - A2
Are there any quantifiable environmental objectives decided by the organization?	There are no defined quantifiable environmental objectives decided by the 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 pertaining to different aspects of the organization's activities.
Does the organization have any Recognition/certification for the environment friendliness? Provide details.	No, the organization does not have any recognition/certification for environmental friendliness.

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<p>Has the organization established any committee to decide, implement & monitor environmental initiatives?</p>	<p>Yes, the organization has established “Environmental-CLUB” for environmental initiatives. The club typically engages in a variety of activities, such as organizing clean-up drives, clean- E- drive, planting trees, creating compost, and advocating for eco-friendly practices in the community. The club also conducts awareness campaigns, workshops, and seminars to educate people about environmental issues, such as climate change, pollution, and deforestation. Reference doc/pic no: A3, A5</p>
<p>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?</p>	<p>No, the institution has never received any notice or warning from the pollution control board or any other concerned environmental authorities as per declaration from the college authorities. Reference doc/pic no: A4</p>
<p>Related images / documents</p>	
	
<p>A1. Environmental policy</p>	<p>A2. Waste management policy</p>

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KANPUR INSTITUTE OF TECHNOLOGY & PHARMACY
KANPUR COLLEGE CODE - 3360 | B.TE. COLLEGE CODE - 3380
REGISTRATION NO. 2017/2018/27102/2018

कॉलेज कोड - 3360 श्रेणियाँ - (14)

द्वितीयोपस्थापना - 2023

प्रशासक: डॉ. प्रशान्त कुमार कटियार (वैशेषिक शिक्षा, प्रशासनिक शिक्षा, पर्यावरणिक शिक्षा, उच्च शिक्षा) जलेश्वर कॉम्प्लेक्स परिसर।

1. विभाग का नाम - पर्यावरण प्रदूषण नियंत्रण बोर्ड (प्रादेशिक) का चेतावनी पत्र प्राप्त करने के लिए।
2. प्रशासक का पता - 2017/2018/27102/2018 (उपरोक्त सूची संदर्भित करें)
3. सूचना का साधन -

(अ) प्रशासक विभाग

प्रशासक का नाम (पूरा विवरण / संस्था की संस्था में)	पद/पद का विवरण	प्रादेशिक प्रशासक का नाम	प्रादेशिक प्रशासक का पता	प्रादेशिक प्रशासक का फोन नंबर
290	01	290	NA	06

(ब) भूमि के स्वामित्व के अनुसार विवरण

प्रशासक का नाम (पूरा विवरण / संस्था में)	प्लॉट का विवरण	प्लॉट का क्षेत्रफल	प्लॉट का मालिक	प्लॉट का पता	प्लॉट का फोन नंबर
290	290	NA	NA	NA	NA

4. पौधा लगाने का तरीका (पूरा विवरण सहित)

पौधा का नाम	पौधा का प्रकार	पौधा लगाने का तरीका	पौधा लगाने का क्षेत्र	पौधा लगाने का फोन नंबर
0	0	290	01	290

5. प्रशासक का कोई भी अन्य उपाय करके यह प्रतिष्ठान पर्यावरण प्रदूषण नियंत्रण बोर्ड (प्रादेशिक) को सूचित करने में सक्षम है।

(क) प्रशासक का नाम

(Dr. Prashant Kumar Katiyar)
Director
Kanpur Institute of Technology & Pharmacy
A-1, UPSIDC Industrial Area, Roza, Kanpur-208001 (U.P.) India
Ph: 7705011891 E-Mail-ID: info.kit@kit.ac.in, director.kit@kit.ac.in

KIT KANPUR INSTITUTE OF TECHNOLOGY AND PHARMACY
A-1, UPSIDC Industrial Area, Roza, Kanpur-208001 (U.P.) India
Ph: 7705011891 E-Mail-ID: info.kit@kit.ac.in, director.kit@kit.ac.in

Certificate for Clarification

It is certified that, The Institute Kanpur Institute of Technology and Pharmacy, has not received any notice or warning from the pollution control board (PCB) or any other concerned environmental authorities.

Every statements regarding this, true and correct on my behalf.

(Dr. Prashant Kumar Katiyar)
Director
Kanpur Institute of Technology & Pharmacy
A-1, UPSIDC Industrial Area, Roza, Kanpur-208001

A3. Plantation program details

A4: No warning certificate



A5. Plantation program by environment club

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.

POLLUTION

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Air Pollution Management (objective, practices / methods to minimize air pollution)	
<p>Identify the major sources of air pollution within the organization & the actions taken to either eliminate or minimize the pollution.</p>	<p>Vehicles and air conditioning are significant sources of air pollution. Consequently, the initiative to establish a vehicle-free zone on campus and incorporate landscaping with plants, along with the implementation of a green campus policy, has been undertaken. Reference doc/pic no: B3</p>
<p>HVAC maintenance and calibration records, testing and balancing reports. When was the duct system tested for leakage last?</p>	<p>HVAC maintenance and calibration records, testing and balancing reports are not being maintained.</p>
<p>DG set stack emission test as per CPCB norms.</p>	<p>The institute has a DG set as a power backup that is used whenever there is a power cut-off due to load shading or maintenance of electricity on the college campus. DG set air pollution level and noise pollution level conducted by CDG Inspection LTD. at the time of the Audit. The following are the outcomes of the check conducted: DG set air pollution level: PM2.5- 15 µg/m³ Noise pollution level: 106.4 dBA Reference doc/pic no: B1, B2</p>

Related documents / images

	
B1. Air pollution level	B2. DG set noise level

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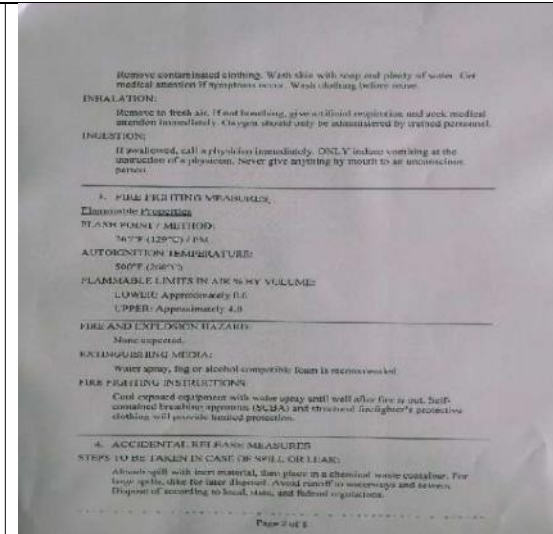


<p>Observations:</p> <ul style="list-style-type: none"> • It is recommended that the institute conduct DG set stack emission test in accordance with CPCB. • The organization needs to maintain a HVAC maintenance plan and it should also maintain the Periodic record of the same.

<p>In-Door Air Quality (Checks, methods, tests & practices to ensure indoor air quality)</p>	
<p>Does the organization test indoor air quality? Details of last indoor air quality test done.</p>	<p>There were no records to verify that the college conducted the test to check indoor air quality test.</p> <p>An indoor air quality check of the campus was conducted by CDG Inspection Ltd. At the time of the audit.</p> <p>Indoor air quality level: 1.5 m/sec PM2.5: 18 µg/m³ Reference doc/pic no: C1,C3</p>
<p>Is there a proper system of exhaust of indoor air?</p>	<p>Every classroom, staff room, corridor, etc. comprises windows for proper ventilation. The staff room, library, and IT lab on campus all have ventilation systems.</p> <p>The indoor airflow was checked at the time of the audit and the outcome was m/s Reference doc/pic no: C3</p>
<p>Supplies:</p> <ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • Yes, MSDS reports are available. Reference doc/pic no: C4 • Yes, the storage areas separate & ventilated properly. • Yes, less, or nonhazardous materials used when possible. • No related record found at the time of audit. • Yes, there is waste disposal policy for safe disposal of used substances.

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<p>General Cleanliness:</p> <ul style="list-style-type: none"> • 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? 	<ul style="list-style-type: none"> • Yes, the classroom, library, staff room, and other areas of the campus were found to be neat and clean at the time of the audit. • The organization doesn't ensure the use of the environment-friendly, non-scented cleaning product.
Pest control methods & products used (check & control).	The organization doesn't ensure the pest control procedure.
Does the organization ensure use of low emitting paints, coatings, furniture etc.? What are related checks & controls?	No, the Institute doesn't ensure the use of low-emitting paints, coatings etc.
Is there any sign of mold infestation?	No, there is no sign of mold infestation in the organization.
Does the organization eliminate any bird or animal nests or droppings near outdoor air intakes?	No, institute does not harm or eliminate any bird or animal nests.
What are the methods adopted by the organization to control/prevent dust within the buildings?	The buildings have glass windows and greenery around them that help to prevent dust entry and there is daily dusting activity done in the organization. Reference doc/pic no.: - C4, C5, C6
Related records / images	

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C1: Indoor air flow rate	C2: MSDS Report
	
C3: Indoor air quality level	C4: Ventilation

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C5. Windows for ventilation	C6: Large and continuous trees all around the campus
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Observations:
<ul style="list-style-type: none"> • Organization does not use of environment-friendly, non-scented cleaning products. • Organization does not ensure about the pest control methods and product. • Organisation does not use of low-emitting paints, coatings etc. • Organization should have a defined system to evaluate & find out safer alternatives and should use less or nonhazardous materials used 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.	They are taking steps to prevent / stop water wastage through an awareness program and signboard. Reference doc/pic no: D1
Does the institute harvest rainwater? Give details.	Yes, the institute harvests rainwater. Reference doc/pic no: D2
Is there any water recycling system? Give details.	Not Available

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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 waste water in the organisation.	The campus has a well-functioning water supply system and a closed sewer system.
Related records / images	
	
D1. Save water signboard	D2. Rainwater harvesting System
Observations: <ul style="list-style-type: none"> There should be a systematic procedure and implementation for water and wastewater management systems on campus. 	

Water Consumption & Water Efficiency	
Use of water (indoor and outdoor water) & practices related to efficient /reduced use of water.)	
Sources of water supply	2 Borewells

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Number of water storage tanks and their storage capacity. Total water storage capacity.	10,000 Liter. – 1 tank
Water used in irrigation	250 litre. / Day
Water used in cleaning	50 litre. / Day

Details	No. of persons	Domestic (liter/ day)	Flushing (liter / day)	Total (liter / day)
Students	433	600	900	1500
Teaching Staff	36	100	80	180
Technical Staff	08	20	20	40
Non-technical Staff	10	30	30	60
Outsourced Staff	N.A	0	0	0
Total	487	750	1030	1780

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	4ltr/day
*As per Central Ground Water Authority Guidelines water requirements (Ref. NBC 2016, BIS) of an educational institute for drinking and domestic use.		

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		1 per 25 pupils or part thereof		1 for every 8 pupils or part thereof	20	1 for every 6 pupils or part thereof	14
Ablution taps	1 in each water closet		1 in each water closet		1 in each water closet	20	1 in each water closet	14
Urinals	1 per 20 pupils		-	-	1 for every 25 pupils or part thereof	30	-	-

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Wash basins	1 per 60 pupils, Min 2		1 per 40 pupils, Min 2		1 for every 8 pupils or part thereof	16	1 for every 6 pupils or part thereof	14
Bath	-	-	-	-	1 for every 8 pupils or part thereof		1 for every 6 pupils or part thereof	
Drinking water fountains or taps	1 for every 50 pupils or part thereof		1 for every 50 pupils or part thereof		1 for every 50 pupils or part thereof		1 for every 50 pupils or part thereof	3 Water cooler
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	69.3 dB (A)
<p>*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</p>		
Related records / images		

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Building Sustainability

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<p>Ensure that walls, floors, roofs, and windows are as energy efficient as possible.</p>	<p>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.</p> <p>To promote a sustainable environment, the institute has implemented several "Green Campus" initiatives, restricted entry of vehicles, and landscaping with trees and plants.</p> <p>Reference doc/pic no.: - F1, F2</p>
<p>Design for good indoor air quality</p>	<p>Yes, every classroom, staff room, corridor, etc. comprises windows for proper ventilation.</p>
<p>Use of natural daylight in building interiors as a source of ambient light.</p>	<p>Yes, there is use of natural daylight in building interiors as a source of ambient light.</p>
<p>Use of low emitting materials for building modifications, maintenance, and cleaning.</p>	<p>The organisation doesn't ensure about the use of low emitting materials for building modifications, maintenance, and cleaning.</p>

Related records / images



<p>F1. LUX meter reading</p>	<p>F2. Windows for proper ventilation and natural light</p>
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Observations:

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- The organization does not use low-emitting materials for building modifications, maintenance, and cleaning.

Lighting	
Use of energy efficient lighting system (bulb & other products)	The college has installed an LED lights on its campus.
Use of natural day light	Yes, there is a use of natural daylight in every classroom, library, and lab.

ILLUMINATION LEVELS AND GLARE INDEX

Sr. No.	Area	Standard Illumination (Lux)*	Standard Glare Index*	Actual Illumination (Lux)
a)	Classrooms	300	16	141
b)	Lecture rooms (including demonstration areas)	300	16	284
c)	Reading rooms	150 to 300	19	153
d)	Laboratories	300	16	360
e)	Corridors	70	-	61
f)	Libraries	300	16	167
g)	Auditorium			362
	I. Hall	70	-	
	II. Foyer	70	-	
	III. Stage area	300	16	
h)	Gymnasiums	150	-	245
j)	Cafeterias	100	-	124
K)	Staff rooms	150	-	329
Related images:				

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G1: Auditorium's LUX METER READINGS



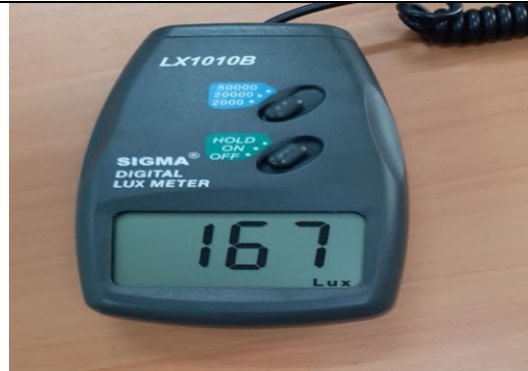
G2: Cafeteria's LUX METER READINGS



G3: Lecture room's LUX METER READINGS



G4: Gymnasiums' LUX METER READINGS





G5: Library's LUX METER READINGS



G6: Staff room's LUX METER READINGS

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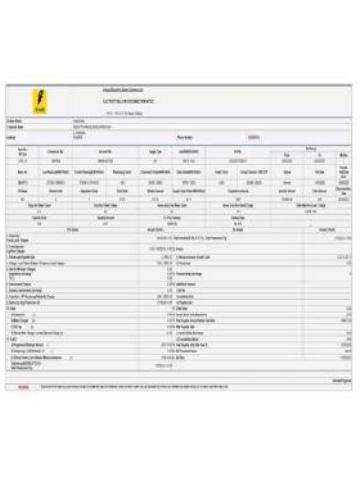


* Recommended illumination Levels and Glare index as per National Lighting Code 2010 [ETD 24: Illumination Engineering and Luminaries] Part 5 Section 3

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. Reference doc/pic no.: - H1, H2
Related images:	
	
H1. LED Bulbs	H2. 3 star AC

ELECTRICITY CONSUMPTION

Month	Electricity Consumption (Last 6 months)
July 2023	31,854
June 2023	60,930
May 2023	65,730
April 2023	17,478
March 2023	9,555
February 2023	4,974
Related records/images:	

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<p>I. Electric bill from February 2023- July 2023</p>		

<p>Energy Efficiency (consumption, objective, practices / methods to achieve energy efficiency objectives)</p>							
<p>Current energy uses.</p>	<table border="1" style="margin: auto;"> <tr> <th>Energy Sources</th> <th>Consumption (Unit)</th> </tr> <tr> <td>Electricity</td> <td>1046.86/ day</td> </tr> <tr> <td>Fuel oil</td> <td>15.72/ day</td> </tr> </table>	Energy Sources	Consumption (Unit)	Electricity	1046.86/ day	Fuel oil	15.72/ day
Energy Sources	Consumption (Unit)						
Electricity	1046.86/ day						
Fuel oil	15.72/ day						
<p>Short-term energy efficiency goals & roadmap to achieve those goals.</p>	<p>The institute short-term energy efficiency goals are as follows: * Solar panel installation</p>						

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	<p>*use of Natural Light *more ground recharge through rainwater harvesting.</p> <p>The institute is installing solar panels in their buildings for energy efficiency and using natural daylight as an alternative to light bulbs and use rain water for ground recharge.</p> <p>Replacement of traditional equipment by energy efficient equipment.</p> <p>Reference doc/pic no.: - J1</p>
<p>Long-term energy efficiency goals & roadmap to achieve those goals.</p>	<p>No record found at the time of audit.</p>

Related images:

 <p>KIPIT KANPUR INSTITUTE OF TECHNOLOGY AND PHARMACY A-1, UPSIDC Industrial Area, Raema, Kanpur-208001 (U.P.) India Ph: 7705011891 E-Mail: info_kitp@kit.ac.in, director_kitp@kit.ac.in</p> <p style="text-align: center;">Date: 22/08/2022</p> <p style="text-align: center;">Institute Energy Efficiency Policy</p> <p>The institute will follow the below mentioned policy to maximize energy efficiency with in next three years of period-</p> <ol style="list-style-type: none"> 1. Replacement of fluorescent & sodium lights by LED lights (70% replaced). 2. Replacement of normal air conditioner by star rated and smart inverter air conditioner (50% replaced). 3. Maintain power factor close to unity through power factor improvement plant (plant already installed). 4. Use of smart water pumps controller and sensors to avoid overrunning of motors. (In process). 5. Increasing and maintaining green campus with enormous tree plantation, and gardens to reduce environmental temperature of campus. (70% of the land area is maintained with gardens and tree plantation). <p style="text-align: right;">(Dr. Prashant Kumar Katiyar) Kanpur Institute of Technology & Pharmacy A-1, UPSIDC Industrial Area, Raema, Kanpur-208001</p>	
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<p>J1. Short term energy efficiency goals</p>	
<p>Observations:</p>	
<p>The organization needs to define a quantifiable road map for long-term a energy efficiency.</p>	

<p>On-Site Energy Generation (Details of renewable energy generation projects on organization’s property for organization’s use)</p>
<p>The institute has installed 160 solar plats with total generation capacity of 450 kilo watts which can provide electricity to the institute as well as the grid. Reference doc/pic no: K1</p>
<p>Related records / images</p>

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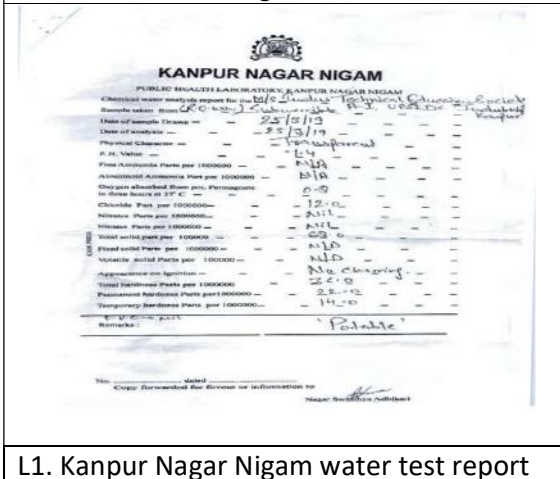
K1. Solar panel

DRINKING WATER


Drinking Water Quality (As per IS 10500: 2012)

The institute conducted drinking water quality tests according to the IS 10500:2012 standard from Kanpur Nagar nigam and confirmed that the water is safe for drinking.
Reference doc/pic no: L1, L2, L3

Related records / images-

	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <caption>TDS Reading of Drinking Water</caption> <thead> <tr> <th>Testing Date</th> <th>KIT</th> <th>KITP</th> <th>KIHE</th> <th>Boys Hostel</th> <th>Girls Hostel</th> <th>Mess</th> </tr> </thead> <tbody> <tr><td>03.01.2023</td><td>139</td><td>280</td><td>78</td><td>292</td><td>330</td><td>272</td></tr> <tr><td>19.01.2023</td><td>141</td><td>245</td><td>82</td><td>293</td><td>315</td><td>272</td></tr> <tr><td>01.02.2023</td><td>133</td><td>256</td><td>76</td><td>285</td><td>217</td><td>275</td></tr> <tr><td>17.02.2023</td><td>132</td><td>247</td><td>78</td><td>290</td><td>220</td><td>272</td></tr> <tr><td>02.03.2023</td><td>165</td><td>249</td><td>92</td><td>292</td><td>225</td><td>263</td></tr> <tr><td>16.03.2023</td><td>172</td><td>270</td><td>95</td><td>289</td><td>235</td><td>281</td></tr> <tr><td>05.04.2023</td><td>138</td><td>254</td><td>111</td><td>290</td><td>245</td><td>252</td></tr> <tr><td>19.04.2023</td><td>196</td><td>234</td><td>76</td><td>294</td><td>247</td><td>260</td></tr> <tr><td>02.05.2023</td><td>167</td><td>255</td><td>79</td><td>297</td><td>252</td><td>272</td></tr> <tr><td>18.05.2023</td><td>174</td><td>260</td><td>82</td><td>315</td><td>260</td><td>230</td></tr> <tr><td>01.06.2023</td><td>180</td><td>270</td><td>75</td><td>80</td><td>82</td><td>75</td></tr> <tr><td>16.06.2023</td><td>118</td><td>280</td><td>64</td><td>90</td><td>86</td><td>77</td></tr> <tr><td>03.07.2023</td><td>172</td><td>272</td><td>56</td><td>87</td><td>88</td><td>80</td></tr> <tr><td>20.07.2023</td><td>154</td><td>265</td><td>80</td><td>90</td><td>92</td><td>80</td></tr> <tr><td>04.08.2023</td><td>175</td><td>282</td><td>64</td><td>92</td><td>94</td><td>85</td></tr> </tbody> </table>	Testing Date	KIT	KITP	KIHE	Boys Hostel	Girls Hostel	Mess	03.01.2023	139	280	78	292	330	272	19.01.2023	141	245	82	293	315	272	01.02.2023	133	256	76	285	217	275	17.02.2023	132	247	78	290	220	272	02.03.2023	165	249	92	292	225	263	16.03.2023	172	270	95	289	235	281	05.04.2023	138	254	111	290	245	252	19.04.2023	196	234	76	294	247	260	02.05.2023	167	255	79	297	252	272	18.05.2023	174	260	82	315	260	230	01.06.2023	180	270	75	80	82	75	16.06.2023	118	280	64	90	86	77	03.07.2023	172	272	56	87	88	80	20.07.2023	154	265	80	90	92	80	04.08.2023	175	282	64	92	94	85
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L1. Kanpur Nagar Nigam water test report	L2. Regular TDS report																																																																																																																

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L3. pH test report by CDG	

WASTE MANAGEMENT

<p>Type of waste - Plastic waste</p> <p>Approximate annual quantity- 15 Kg</p> <p>Source of waste – water bottles, food packaging rap, Plastic Bags, Beverage Bottles, Takeout Containers, etc.</p> <p>Handling methods: Plastic waste is collected from different sources or dustbins and dumped into municipal solid waste collection vehicle.</p> <p>Measures to reduce the waste quantity- The institution promotes a plastic-free environment and raises awareness among students and staff members.</p>
<p>Type of waste – Paper waste</p> <p>Approximate annual quantity- 40 kg</p> <p>Source of waste – Hard copies of project reports, exam papers, Notes pads, assignments, tissue paper, craft use, laboratory records etc.</p> <p>Handling methods- The whole year paper waste is collected in a particular room then the waste is sold to the vendor.</p>

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<p>Measures to reduce the waste quantity- They conduct exams and accept projects and assignment submissions through online mode.</p>
<p>Type of waste – Electronic waste</p> <p>Approximate annual quantity- 6 kg</p> <p>Source of waste – computer, computer parts, mouse, keyboard, Tonner, etc.</p> <p>Handling methods- waste is collected from different sources or dustbins and dumped into municipal solid waste collection vehicle.</p> <p>Measures to reduce the waste quantity- The organisation has taken the initiative by replacing traditional peripherals with modern ones.</p>
<p>Type of waste – Hazardous waste</p> <p>Approximate annual quantity- 1-2Kg</p> <p>Source of waste – Laboratory waste, Sharp waste</p> <p>Handling methods- No information found at the time of audit.</p> <p>Measures to reduce the waste quantity- No information found at the time of audit.</p>
<p>Type of waste – Garden waste</p> <p>Approximate annual quantity- 80 kg</p> <p>Source of waste – Leaves, Grass, Tree/plants</p> <p>Handling methods- Leaves and grasses are used in the composting method, and the villagers collect them to use as animal feed.</p> <p>Measures to reduce the waste quantity- Garden waste is reused in the composting pit for future implementation in the garden as compost.</p>

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<p>Type of waste – Food waste</p> <p>Approximate annual quantity- 1800kg</p> <p>Source of waste – Day canteen food waste</p> <p>Handling methods- Reuse the food to feed needy animals.</p> <p>Measures to reduce the waste quantity- An awareness program conducted for reducing food loss and waste. Discussion with the canteen personnel/staff for the optimum use of the food.</p>
<p>Observations:</p> <ul style="list-style-type: none"> • There are no records found for hazardous waste management. • 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?	Organic waste generated amounts to 5 kg per day. This waste primarily comprises leaves, branches, and debris.
Details & capacity of compost plan installed in the organisation.	Not available.
Details of composting method used	Not available.
Compost facility maintenance & inspection plan	Not available.
<p>Observations:</p> <ul style="list-style-type: none"> • 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 KITP , rainwater harvesting system has been installed inside the campus.
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	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. Reference doc/pic no.: - M3
Related records / images-	
	
M1. Rainwater harvesting details	M2. Rainwater harvesting maintenances
	
M3. Rainwater harvesting recharge pit	
Observations:	
The organisation does not maintain any record regarding rainwater harvesting maintenance & inspection.	

Training

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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?	Yes, the organisation formed a team for solid waste management process. Reference doc/pic no.: N1
Has the organization conducted awareness training for water saving?	No record found at the time of audit.

	
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N1. Solid waste management training

Observations:

The organisation does not maintain any record regarding waste management/handling, energy saving, water saving training program.

Environmental Practices	
Waste recycling	Yes, food waste, canteen waste, and garden waste are segregated and deposited into a compost pit and RO waste water is used in irrigation purpose.
Waste Decomposition	Yes, food waste, canteen waste, and garden waste are segregated and deposited into a compost pit. The

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	compost is later used in the campus garden.
Rainwater harvesting	Yes, the rainwater harvesting system is installed on the campus.
Environmentally Preferable Purchasing (EPP) or Green Purchasing	The organisation use LED bulbs for energy conservation, different colour of dustbin for segregation of waste.
Distinct receptacles for trash and recycling	No records found at the time of audit.
Low-emission transportation	Yes, the institute use low emission transportation. Reference doc/pic no.: - O1
maximum use of clean energy	Yes, the organization installs solar panels and rainwater harvesting for maximum use of clean energy.
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.

Related records / images-

	
O1. Bus pollution free certificate	

Environmental Initiatives / Green Initiatives

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There are various green initiatives taken by the organization: -

- The organization has ban plastic 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.
- Organization constructs pedestrian friendly pathways.
- The organization maintain greenery for better environment inside the campus.

Green Belt/ Landscaping



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Inspector: Ashutosh Tiwari

Ashutosh tiwari



Signature