

CIL Ref. No.:	CIL/20242262
Name of organization:	Jagran College of Arts, Science & Commerce
Address of premises:	620,' W' Block, Saket Nagar, Kanpur-208014, U.P.
Name of Inspector:	Mr. Ashutosh Tiwari
Date of Inspection:	21 st and 22 nd March 2024
Type of Inspection:	Green Audit

Organization Details	
Total Campus Area	14727 sq. meter
Total Built-up Area	5000 sq. meter
Covered Parking	148 sq. meter
Total Air-Conditioned Area	871.63 sq. meter
Non-Airconditioned Area	3788.56 sq. meter
Cross Floor Area	2683 sq. meter
Forest / Planted Area	03 (655 sq. meter)
Age of the building	2006 to till (18 years)

DETAILS OF INFRASTRUCTURE

Classrooms	35 No.
Laboratory	08 No.
Library	02 No.
Seminar hall and auditorium	1+1=02 No.
Sports room	01 No. (31.57 sq. meter)
Gymnasium	NA



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Staff and student parking area	148 sq. meter
Canteen	1 No. (186.76 sq. meter)
Playground	2 No. (8038 sq. meter)
Green Area / Plantation	3 No. (655 sq. meter)

LIST OF BUILDINGS

Name of Building	Number of Floors	Area (m2)
Jagran College of Arts, Science & Commerce	5 Floors (including Basement)	5000 sq. meter

DEPARTMENTS

1	Commerce
2	Humanities, Arts and Languages
3	Science
4	Management
5	Computer Application

DETAILS OF STUDENTS AND STAFF

Total Number of Students	3119
Teaching Staff	60
Technical Staff	01
Non-Technical Staff	28
Outsourced Staff	14

GREEN AUDIT PARTICIPANTS

Name	Designation
Mr. Ashutosh Tiwari	Auditor
Dr. Asmita Dubey	Principal
Dr. Reshma Rajani	IQAC Co-ordinator, Asst. Prof. Dept. of Commerce
Dr. Hema Rohra	Chief Proctor, Asst. Prof, Dept. of Economics
Dr. Kamal Vinod Singh	Asst. Prof., Dept. of Commerce
Dr. Anshul Saxena	Asst. Prof., Dept. of Commerce

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Dr. Swati Dwivedi	Asst. Prof., Dept. of Management
Dr. Anju Sachan	Asst. Prof., Dept. of English
Mr. Prashant Khare	Asst. Prof, Dept. of Physics
Mrs. Neelanshi Awasthi	Asst. Prof, Dept. of Zoology
Ms. Kanika Bajaj	Asst. Prof, Dept. of Commerce
Mr. Vikas Dwivedi	Asst. Prof, Dept. of Chemistry
Dr. Varsha Rani Srivastava	Asst. Prof, Dept. of Botany

LEGAL COMPLIANCES

Description	Registration Details
Consent to operate (CTO) from SPCB	NA
Fire NOC	UPFS/2023/94163/KPN/KANPUR
	NAGAR/2497/CFO
Water Boring permission	766/POB/RAGNAK/2012-13
DG Set Permission	NA

About Organization

Jagran College of Arts, Science and Commerce, Kanpur, is a milestone in Jagran's increasing endeavour under the umbrella of Jagran Education Foundation, an Educational Initiative of Jagran Group is an extension of the Shri Puranchandra Gupta Smarak Trust which was established in the year 1987 in the sacred memory of Late Shri Puran Chandra Gupta ji, the founder of Dainik Jagran Newspaper. It is one of the best multidisciplinary institutions of higher education registered under section 2F and 12B of UGC Act 1956, established in the year 2006 under self-financing scheme of CSJM University.

The College started with a strength of around 50 students in BA and B. Com, which has grown today to 3100 students (Approx.) in seven enriching academic programs, namely B. A, B.Sc. B. Com, B.com (Hons.) BBA and BCA at undergraduate level and a post graduate program in commerce i.e. M.com.

The objective of the college is to provide the best educational pursuits and to groom the personalities of energetic youth destined to lead this country soon. It also aims at developing students as socially and globally responsible members of the society who will be able to contribute towards national and international development, transmitting the deep-rooted Indian





values to the rest of the world through knowledge, wisdom, and technological excellence. The College has well qualified experienced and dedicated faculty. The most unique feature of the college is the bond between the students and the teachers and the ability to provide the most conducive and supportive environment to them. The alumni credit the institution for imbibing values of hard work, time management, team spirit, professionalism, and ethics

Jagran College at its sprawling campus is the most modern in infrastructure extended over four floors with a lift facility, lecture theatres, auditoriums, well stocked library, games and sports facilities and Wi-Fi. Jagran College is engaged in the cutting-edge research and teaching that helps in understanding global challenges.

Apart from being an Institution of Higher Learning our college is a center for the development of human potential. Holistic approach to education is adopted which emphasizes on the development of an all-round and well-balanced personality of the students, and to develop all dimensions of the human intellect so that our students help make our nation more democratic, cohesive, socially responsible, culturally rich and intellectually competent nation.

Vision

Jagran College aims to set a benchmark through a comprehensive learning environment in which faculty, staff and students can explore, examine, preserve, and disseminate the values, knowledge and wisdom which are prerequisites to ensure the upliftment of current and future generations. Through an educational mission it aims:

To shape the vision of academic success for all students, one based on high standards.

To create a congenial environment to education in order that safety, a co-operative spirit, and healthy interaction prevail.

To nurture leadership in others so that teachers and other staff members assume their parts in realizing the vision.

To conduct faculty development programs to enable teachers to teach at their best and students to learn to their utmost.

To manage people, data, and processes to cultivate overall improvement of the college.

Mission

Jagran College progressing with one vision and shared mission through determined beliefs, tireless efforts, and improvements, has completed seventeen glorious years of excellence. Looking





back to this journey of more than a decade is quite ameliorating, rewarding and gratifying. Jagran College has come a long way from where it once was by providing the students a learning that aims to empower them in finding the best of both cultural and material achievements.

The college also aims to carry the torch of knowledge to the extreme edges where higher education is yet to blossom. With concerted efforts we are committed to awaken youth to "Learn, Discover, Share, and Create" and make the world a better place, to become thoughtful and help them discover their talent and abilities. Sharing knowledge and experiences, creating opportunities, and enabling them to realize their dream is our mission.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE



LAND USE DATA

Categories of Land Use	Area (M2)
PLANTATION AREA	6375+ 1663 Sq.mt.
BUILT UP AREA (INCLUDE ROADS)	5000+ 1008 Sq.mt.
TOTAL AREA	14727 Sq.mt.



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15 March 2022



CLIMATIC PARAMETERS

1. Climate: Kanpur, located in the northern Indian state of Uttar Pradesh, experiences a subtropical climate characterized by hot summers and mild winters, and a monsoon season from July to September. Summers are scorching, with temperatures exceeding 40°C, while winters are mild, averaging 15- 20°C during the day. Monsoons bring relief from the heat but also heavy rainfall. Humidity and rainfall beneficial for campus greenery, heavy rainfall may lead to water logging. Autumn offers pleasant weather, while winter nights can be cool, with occasional fog in January.

2. Rainfall: Average annual rainfall of 898 mm in approx. 43 rainy days. The rainy season starts during first week of July and ends in second week of October with duration of fourteen weeks. The average monsoon seasonal rainfall (June to September) is 782 mm. and can vary from 245 mm. to 939 mm./ 37 inch.

3. Temperature: The hot season from April 7 to June 27 with in average daily high temperature above 97°F (36.11°C). The hottest month of the air is June with an average high of 104°F (48.3 °C) and low 82 °F (27.7 °C). The cool season from December 7 to February 10 with an average daily high temperature below 77 °F (25 °C). The coldest month is January with a low of 48 °F (8.8 °C) and high of 71 °F (21.6 °C). The mean yearly temp. about 25.3 °C/ 77.5 °F.

BIO-DIVERSITY

Physical Count of Flora in Campus

S. No.	Particulars	Units
1	Trees	249
2	Plants	976
3	Gardens	2

List of Tree/Shrubs/Herbs Species found in the Campus

S. No	Botanical Names	Common names	Units
1	Anthoaphalus cadamba	(Pila Kaner)	8
2	Rosa indica (Variety)	(Kaner)	54
3	Maringa oleifera	(Chandan)	01
4	Callistemon splendens	(Kari Patta)	10
5	Tectona grandis	(Lal Tecoma)	04
6	Musa paradisiaca	(Ashwagandha)	01
7	Citrus limon	(Ratanjot)	02



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	Green Audit / Environmen	lai inspection	
8	Prosopis cineraria	(Agnishikha)	02
9	Mangifera indica	(Lal Poinsettia)	04
10	Punica granatum	(Guldhai)	01
11	Aegle marmelos (Bael)	Champa)	03
12	Araucaria columnaris (Christmas tree)	(Tulsi)	02
13	Delonix regia	(SadaBahar)	09
14	Cassia fistula (Golden shower plant)	(Ajwain)	20
15	Polyalthia longifolia	(Ruby)	47
16	Azadirachta indica	(Antmul)	13
17	Annona squamosa (sitafal) (Custard apple)	Custard apple	02
18	Nyctanthes arbor (Parijat tree)/ Rat ki rani	(Bakul)	07
19	Morus alba	(KadhaChirayata)	01
20	Saraca asoca	(Philodendron)	01
21	Ficus benghalensis (Banyan Tree)	(Spider Plant)	01
22	Ficus religiosa	(Supari Palm)	01
23	Ficus racemose	(Duranta)	01
24	Acacia catechu	(Bargad)	01
25	Terminalia arjuna	(Murraya)	01
26	Phyllanthus emblica	(Sansvieria)	15
27	Psidium guajava	(Sansvieria)	08
28	Calliandra haematocephala	(Dracaena)	05
29	Ficus Virence	(Golden Pothos)	05
30	Ficus elastica	(Jade Plant)	05
31	Pongamia pinnata	(Croton)	05
		(Syngonium)	
32	Palm Tree	(Aglaonema)	05
33	Senna siamea	(Aloe Vera)	2
34	Elaeocarpus ganitrus	(Fern)	1
35	Butea Monosperma	(Rhapis)	1
1	Thevetia peruviana	(Agave)	04
2	Nerium oleander	(Yucca)	03
3	Tabernaemontana divaricata (Crape jasmine)	(Palm)	25



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4	Tabernaemontana divaricata (Crape jasmine)	(Canna)	20
5	Murraya koenigii	Bargad)	12
6	Tecoma	(Tradescantia)	01
7	Withania somnifera	(Purple Heart)	01
8	Jatropha curcas	(Inchplant)	01
9	Hamelia patens (Firebush)	(Thuja)	05
10	Euphorbia pulcherrima	(Gudhal)	02
11	Adenium	(Bougainvillea)	02
12	Plumeria obtuse	(Enermi)	01
13	Ocimum sanctum	(Jangli)	10
14	Catharanthus roseum	(Akwan)	05
15	Trachyspermum	(Crown of Thorns)	02
16	Ixora	(Kalanchoe)	05
17	Tylophora indica	(Dragon Tail)	01
18		(Bargad)	01
19	Mimusops elengi	(Pila Kaner)	01
20	Andrographics paniculata	(Kaner)	01
21	Philodendron	(Chandan)	20
22	Chlorophytum comosum	(Kari Patta)	50
23	Areca palm	(Lal Tecoma)	16
24	Duranta (Hedge plant)	(Ashwagandha)	-
25	Ficus species (Hedge plant)	(Ratanjot)	-
26	Murraya paniculata (Hedge plant)	(Agnishikha)	-
27	Sansvieria cylindrica	(Lal Poinsettia)	10
28	Sansvieria zeylanica	(Guldhai)	50
29	Dracaena variety	(Champa)	25
30	Epipremnum aureum (Goldenpathos)	(Tulsi)	50
31	Jade plant	(SadaBahar)	06
32	Croton variety	(Ajwain)	06
33	Syngonium podophyllum	(Ruby)	50
33	Aglaonema	(Antmul)	10
34	Aloe barbadensis	(Aloe vera)	50



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35	Fern (Golden fern)	(Bakul)	10
36	Rhapis excels (Broadleaf lady palm)	(KadhaChirayata)	05
37	Agave vilmoriniana	(Philodendron)	20
38	Yucca variety	(Spider Plant)	10
39	Palm variety	(Supari Palm)	10
40	Canna	(Duranta)	50
41	Ficus variety	(Bargad)	04
42	Tradescantia spathacea (oyster plant)	(Murraya)	50
43	Tradescantia pallida (Purple heart)	(Sansvieria)	50
44	Tradescantia (inchplant variety)	(Sansvieria)	50
45	Thuja compacta	(Dracaena)	05
46	Hibiscus rosa-sinensis	(Golden Pothos)	63
47	Bougainvilea (Paperflower)	(Jade Plant)	06
48	Enermi (Hedge plant)	(Croton)	-
49	Prosopis cineria	(Syngonium)	3
50	Calotropis procera	अग्लोनेमा (Aglaonema)	2
51	Euphorbia milii	(Aloe Vera)	20
52	Kalanchoe blossfeldiana	(Fern)	6
53	Pedilanthus tithymaloides	(Rhapis)	100
54	Ficus benzamine	(Agave)	10

Images of Green Cover of the University Campus





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List of birds and animals

S.	Zoological Name	Common Name
No.		
1	Columba livia	Pigeon
2	Psittacula	Parrot
3	Corvus	Crow
4	Red- Whiskered Bulbul	Bulbul
5	Passer	Goriya (House sparrow)
6	Canis Familiaris	Common Dog
7	Funambulus	Squirrel
8	Felis Domesticus	Cat
9	Papilo Demoleous	Lime Butterfly
10	Dragon- Fly	Dragon- Fly



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11	Apis indica	Honey Bee
12	Wasp	Tattaiya
13	Polyommatus icarus	Blue Butterfly
1	Chameleon	Girgit
2	Hemidactycus	House Lizard
3	Centipede	Kankhajura
4	Lady Bug	Beetle
5	Pheretima	Earthworm



LEGEAL REQUIREMENTS

Description	Registration Details
Consent to operate (CTO) from SPCB	NA
Fire NOC	UPFS/2023/94163/KPN/KANPUR
	NAGAR/2497/CFO
Water Boring permission	766/POB/RAGNAK/2012-13
DG Set Permission	NA



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I.FIRE NOC	II. Water Boring permission

GENERAL

General Requirements: Environmental Policies / Environmental Objectives, etc	
Is there an environmental policy? Is it	Yes, there is an environmental policy available in
publicly communicated?	place and it is publicly communicated.
	Reference doc/pic no: A1
Is there a defined waste management policy	Yes, there is a waste management policy available. It
in the organization?	outlines how to manage e-waste, paper waste, and
	solid waste.
	Reference doc/pic no: A2
	Yes, there are quantifiable environmental objectives
Are there any quantifiable environmental	decided by the organization.
objectives decided by the organization?	Reference doc/pic no: A3
Is the organization aware of all environmental Laws pertaining to different aspects of the organization's activities ? Mention laws & compliance status. Does the organization have any Recognition/certification for the environment friendliness? Provide details	Yes, the organization is aware of all environmental laws pertaining to different aspects of the organization's activities. Reference doc/pic no: A4 No record found at the time of audit.
committee to decide, implement & monitor environmental initiatives?	"Environmental club" for environmental initiatives. The club typically engages in a variety of activities, such as organizing clean-up drives, planting trees, waste management practices, Air quality monitoring etc. to 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: A4, A5,A8
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? Related images / documents	NO, college has not received any notice/warning from the pollution control board or any other concerned environmental authorities. Reference doc/pic no: A7
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A1.Environmental policy	A2.Waste management policy
Quantifiable Environmental Objective: to be achieved by 2025 Market Munagemental Source of Waste Observed Value Targeted Value Targeted Reduction Source of Waste Observed Value Targeted Value Targeted Reduction Source of Waste Observed Value Targeted Value Targeted Reduction Source of Waste Targeted Value Targeted Value Market Source of Waste Source of Waste Targeted Value Targeted Reduction Source of Waste Targeted Value Targeted Reduction Source of Value Targeted Value Targeted Value	Environmental Laws Applicable: Environment Protection Act, 1986: Regular internal audits to ensure compliance. Proper waste disposal practices implemented. Conservation efforts in place. Sustainable practices adopted institution-wide. Air (Prevention and Control of Pollution) Act, 1981; Measures to prevent and control air pollution implemented. Regular training and awareness programs conducted to educate on air quality issues and mitigation strategies. Water (Prevention and Control of Pollution) Act, 1974; Proper waste disposal to prevent water pollution. Conservation efforts to minimize water usage and contamination. Educational programs emphasizing water conservation and pollution prevention. Specific Initiative: Memorandum of Understanding (MOU) with Scrap Vendor: Responsible disposal to fastic and paper waste through recycling initiatives. Fire No Objection Certificate (NOC); Fire safety measures implemented as per regulation. National Building Code (NSC) Compliance: Adherence to NBC; tandards for safety and structural integrity. DG Set Maintenance: Response line and the super uninternupted power supply with minimal articipate linear.
AQI 19-34 Optimin Winer 7.16 PK Level Optimin Nota 65 db to reduce if by 50 db A3. Ouantifiable environmental objectives	Accomiton and Certificates: Campus recognized for environmentally friendly initiatives. Certificates obtained for pollution-free practices. Ongoing Efforts: We have formally submitted an application seeding authorization for Groundwater boring operations. A4. Environmental laws



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observation

The organization does not have any certification for environmental friendliness. 1.

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.	Vehicles, DG stack, and HVAC system are a major source of air pollution, which is why they have taken the initiative to implement green campus policy as well as they properly maintain their HVAC and DG stack.	



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HVAC maintenance and calibration records,	HVAC maintenance for split AC units is
testing and balancing reports. When was the	performed by a local vendor, but calibration
duct system tested for leakage last?	records and testing and balancing reports are not
	available.
	Reference doc/pic no: B1
DG set stack emission test as per CPCB norms.	The institute has a DG set as a power backup of
	200kva that is used whenever there is a power
	cut-off due to load shading or maintenance of
	electricity on the college campus.
	The stack emission test for the DG set has been
	conducted; however, the noise and air pollution
	tests were not carried out.
	DG set air pollution level and noise pollution
	level conducted by CDG Inspection LTD. at the
	time of
	the Audit.
	Reference doc/pic no: B2
Related documents / images	
12	SAGAR ELECTRIC WORKS
(Prin AVA A517)	



Observations:

- It is recommended that the institute conduct DG set stack emission test in accordance with CPCB.
- The organization needs to maintain a HVAC calibration records and testing and balancing reports and it should also maintain the Periodic record of the same.

In-Door Air Quality

(Checks, methods, tests & practices to ensure indoor air quality)



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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 the test to check indoor air quality test. An indoor air quality check of the campus was Conducted by CDG Inspection Ltd. At the time of the audit. Indoor air quality level: 08 PM2.5: 25 μ g/m ³ Reference doc/pic no: C4
	for proper ventilation. The indoor airflow was checked at the time of the audit and the outcome was 26.8 ft/mtr Reference doc/pic no: C5
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)' are available Reference doc/pic no.: - C1 Yes, the storage areas separate & ventilated properly. No related record found at the time of audit. No related record found at the time of audit. No related record found at the time of audit.
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 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 does not ensure the use of the environment-friendly, no scented cleaning product.
Pest control methods & products used (check & control).	The organisation does the pest control Procedure in daily basis. Reference doc/pic no: C2
Does the organization ensure use of low emitting paints, coatings, furniture etc.? What are related checks & controls?	Paints using by the institute does not ensure the low emitting.





	-
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	No, institute does not harm or eliminate any
or droppings near outdoor air	bird or animal nests.
intakes?	
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.: - C3

Related records / images



C2. Pest control policy





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Observations:

- Organization does not use of environment-friendly, non-scented cleaning products.
- 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.	The institute reuses RO waste water in cleaning and gardening purpose. Reference doc/pic no.: - D1
Does the institute harvest rainwater? Give details.	Yes, the institute harvests rainwater. Reference doc/pic no: D3
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



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	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. Reference doc/pic no.: - D2





D3.Rainwater harvesting

Observations:

• 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) & pra	actices related to efficient /reduced use of water.)
Sources of water supply	Ground Water through submersible
Number of water storage tanks and their	04 No. (5000 lit per tank)
storage capacity. Total water storage	

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capacity.	(two tanks are reserved for fire emergencies)
Water used in irrigation	20,00 lit per day
Water used in cleaning	150 lit per day
Water used in kitchen	50 lit per day

Details	No. of persons	Domestic (liter/ day)	Flushing (liter / day)	Total (liter / day)
Students	3119	3.2	2*10=20	23.2
Teaching Staff	60	3.2	10*3=30	33.2
Technical Staff	01	3.2	10*4=40	43.20
Non-technical Staff	13	3.2	10*4=40	43.20
Outsourced Staff	07	3.7	10*5=50	53.20
Total	3195	-	-	75330

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	23.57		
*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)			Education	al Institut	es (Resident	ial)	
	Boys		Girls		Boys		Girls	
	Req.*	Actual	Req. *	Actual	Req. *	Actual	Req.	Actual
Water closets	1 per 40 pupilsor part thereof	38	1 per 25 pupilsor part thereof	44	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	38	1 in each water closet	44	1 in each water closet	NA	1 in each water closet	NA
Urinals	1 per 20		-	-	1 for	NA	-	NA



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	pupils				every 25 pupils or part thereof			
Wash basins	1 per 60 pupils, Min 2	20	1 per 40 pupils, Min 2	17	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 or part thereof	40	1 for every 50 pupils or part thereof	40	1 for every 50 pupils or part thereof	NA	1 for every 50 pupils or part thereof	NA
Cleaner's sinks	1 p	er floor, n	ninimum					

*As per IS 1172:1993

NOISE POLLUTION

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

During the recent inspection carried out by CDG at the college premises, an assessment of the ambient sound levels was conducted. The measurements taken indicated varying levels of noise, with readings recorded at 75.5 dB, 70.0 dB, 70.3 dB, and 59.4 dB. Upon averaging these readings, the overall sound level was determined to be 69 dB.

The sources contributing to this ambient noise encompassed several factors. Firstly, the operational speed of fans installed within the college facilities likely played a significant role. The whirring of fan blades generates a constant hum, particularly noticeable in enclosed spaces like classrooms or corridors.

Furthermore, external factors, such as the proximity of the college to a road, introduced additional noise elements. Traffic passing by, including vehicular engines, horns, and general road noise, can permeate the college environment, especially during peak hours.

Additionally, other equipment like exhaust fans may have contributed to the overall noise levels. These mechanisms, crucial for ventilation and air circulation, also emit a certain level of sound during operation.

Understanding the sources and levels of ambient noise is imperative for creating a conducive learning and working environment within the college premises. Addressing these factors may involve



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strategies such as optimizing fan settings, implementing soundproofing measures, or considering landscaping interventions to mitigate external noise infiltration.

Noise level in dB(A) Leq	Standard Level*	Actual Level
Day Time	50	69
Nighttime	40	

*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



Building Sustainability

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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 usedas a building material to enhance energy efficiency by allowing in natural light and reducing the need for artificial lighting, resulting in lower electricity consumption. Reference doc/pic no.: - F1, F2
Design for good indoor air quality	Yes, every classroom, staff room, corridor, etc. comprises windows for proper ventilation. Reference doc/pic no.: - F3
Use of natural daylight in building interiors as a source of ambient light.	Yes, there is use of natural daylight in building interiors as a source of ambient light. Reference doc/pic no.: - F1, F3
Use of low emitting materials for building modifications, maintenance, and cleaning.	No record found at the time of audit.



F1. Natural light using inside campus for lighting

F2. landscaping with trees and plants



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F3. Windows for proper ventilation and natural light

F4. LUX meter reading

Observations:

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

Lighting

Use of energy efficient lighting system (bulb &	LED bulbs, tube lights, and solar lights are
other products)	installed on campus. By replacing conventional
	lighting systems with LEDs, the institute has
	managed to reduce its carbon emissions
	substantially.
	Reference doc/pic no: G1
Use of natural day light	Maximum utilisation Natural day light as college
	runs from 8 am to 5 pm. However, the office
	buildings and corridor lighting systems are
	managed using natural light
	Reference doc/pic no: G2







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G1. LED Light arrangement G2.

G2. Glass window for natural light

ILLUMINATION LEVELS AND GLARE INDEX

Sr.	Area	Standard	Standard	Actual	Actual
No.		95Illumination	Glare Index*	Illumination	Glare Index
		(Lux)*		(Lux)	
a)	Classrooms	300	16	280	
b)	Lecture rooms (including	300	16	210	
	demonstration areas)				
c)	Reading rooms	150 to 300	19	295	
d)	Laboratories	300	16	179	
e)	Corridors	70	-		
f)	Libraries	300	16	102	
g)	Auditorium			164	
	I. Hall	70	-		
	ll. Foyer	70	-		
	III. Stage area	300	16		
h)	Gymnasiums	150	-	xxx	
j)	Cafeterias	100	-	60	
К)	Staff rooms	150	-		

Related records / images



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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	The university utilizes energy-efficient electrical
efficiency& practices	equipment, including BEE star-rated Air conditioners systems and LED bulbs.

Reference doc/pic no.: - H1, H2



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ELECTRICITY CONSUMPTION

Month	El	ectricity	Consumption (L	ast 6 month	ıs)
September 23-October 23		5423.95			
October 23-November 23		4087.30			
November 23-December 23		1712 (Tv	vo Months of ele	ectricity bill	come together)
December 23-January 24					
January 24-Febuary 24			5	8.50	
February 24-March 24			1	8.43	
Related records / images					
The Contract of the Association of the Association		LEloct			
		1.1100			
Energy Efficiency (consumption, objective, practices / m	nethods to	achieve	energy efficiend	cy objective	s)
	Energy		Consumption (Unit)	
Current energy uses.	sources				
	Electricit	ty	18.43 kWh		
	Fuel Oil		131.75 Gallons		
	*From No with full c	ovember capacity.	, 2023 solar pan	els of 60 kV	Vp operating
	• In	troduce	innovative tech	nology to op	otimise the use
Short-term energy efficiency goals		of energy resources.			
& roadmap to achieve those goals.	 Optimise the cost and usage of energy. 				



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Green Aud	it / Environmental inspection
	 Recycling, Reusing, and Reducing. Eliminate waste of energy by using good practices. The Institution Energy Audit/Management Cell oversees routine monitoring and follow-up protocols for efficient departmental implementation. Provide instruction to academic staff, support staff, students, and housekeeping personnel to establish the Institute as a leader in energy conservation. Encourage different societal segments to learn about energy conservation. Encourage energy conservation goals in students and society through different energy drives in and off campus. Replacing old electrical appliances with energy efficient appliances.
	Reference doc/pic no.: -J
Long-term energy efficiency goals & roadmap to achieve those goals.	 Encourage the use of renewable energy sources. Replacement of conventional energy /power by solar energy and It's proper maintenance. Encourage academic staff members to become Certified Energy Managers and Auditors. Reduce use of diesel by 25% in five years.
	Reference doc/pic no.: -J
Related records / images	





ENERGY MANAGEMENT POLICY 2023 The Jagran College of Arts, Science, and Commerce's Energy Policy describes how to set up deliberate programmes to raise awareness about responsible energy management and conservation. These programmes serve as a model for a low-carbon, resource-efficient campus that exemplifies sustainable practices. The Cell has identified some short term and long-term objectives to achieve the efficiency goals through a well-defined policy: Short Term Goals Introduce innovative technology to optimise the use of energy resources Optimise the cost and usage of energy -Recycling, Reusing, and Reducing, Eliminate waste of energy by using good practices. The Institution Energy Audit/Management Cell oversees routine monitoring and follow-up protocols for efficient departmental implementation. Provide instruction to academic staff, support staff, students, and housekeeping personnel to establish the Institute as a leader in energy conservation. Encourage different societal segments to learn about energy conservation Encourage energy conservation goals in students and society through different energy drives in and off campus. Replacing old electrical appliances with energy efficient appliances ong Term Goals Encourage the use of renewable energy sources. Encourage academic staff members to become Certified Energy Managers and Auditors. Reduce use of diesel by 25% in five years. This policy is implemented w.e.f. July 1st 2023 and published on the college website i.e. www.jagrancollege.ac.in. nder the accis of Shri Puranchandra Gupta Smarak Trust J. Short term and long term goal

On-Site Energy Generation

(Details of renewable energy generation projects on organization's property for organization's use)

The college has taken a significant step towards sustainability by installing a rooftop solar power plant with a capacity of 60 KWp. This initiative aims to harness solar energy, thereby reducing the institution's carbon footprint and reliance on conventional energy sources. The solar modules installed on the rooftop efficiently capture sunlight and convert it into electricity, contributing to the green energy transition.

One notable feature of the system is its capability to generate surplus energy beyond the college's consumption requirements. This excess solar energy is seamlessly integrated into the grid of the local electricity distribution utility, the Kanpur Electricity Supply Company Ltd (KESCo). By exporting surplus electricity to the grid, the college not only maximizes the utilization of renewable resources but also contributes to the overall stability and sustainability of the local power infrastructure.

This initiative aligns with global efforts to mitigate climate change and promote sustainable development. Furthermore, it sets an inspiring example for other educational institutions and entities to adopt renewable energy solutions as part of their environmental stewardship and commitment to a greener future.

Reference doc/pic no: K1, K2

Related records / images



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DRINKING WATER

Drinking Water Quality

(As per IS 10500: 2012)

During the inspection conducted by CDG Inspection Ltd, a pH test was performed on the drinking water. The results confirmed that the water is safe for consumption, with a pH value of 7.15. This pH level falls within the acceptable range for drinking water, indicating neutrality. The assessment assures that the water meets the required quality standards, ensuring the health and safety of individuals consuming it. Regular monitoring of water quality parameters, including pH, is essential to uphold the integrity of drinking water sources and safeguard public health.

Reference doc/pic no: L1

Related records / images



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L1.Ph test

Observations:

The institute does not conduct drinking water quality test as per IS 10500:2012

WASTE MANAGEMENT

Type of waste – Plastic waste

Approximate annual quantity- 24 kg approx.

Source of waste – Disposable plastic items such as water bottles, food containers, utensils used in cafeterias, Office materials, and packaging materials of shipments.

Handling Methods – Implementing a comprehensive plastic recycling program by keeping designated bins for collecting plastic waste at several places. Recyclable plastic is sold to scrap merchants.

Measures to reduce the waste quantity -

Implement policies to reduce or eliminate the use of single-use plastics such as plastic straws, utensils, cups, and bottles on campus.

Encourage students, faculty, and staff to use reusable water bottles by providing refill stations across campus.

Organizing awareness campaigns by NSS to reduce plastic use.

Implement a comprehensive plastic recycling program on campus, with designated bins for collecting plastic waste.

Establish a sustainability committee or task force dedicated to reducing plastic waste on campus.

Type of waste – Paper waste

Approximate annual quantity- 320 kg approx.

Source of waste – Notes handouts, and printed materials distributed by professors during classes. Assignments, and projects submitted by students. Discarded printouts from computer labs and



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libraries. Printed books, journals, periodicals, newspapers and magazines, that are no longer in circulation or are damaged. Printed documents, reports, and correspondence generated by administrative staff.

Handling Methods – The college employs a multi-faceted approach to handle paper waste, with a focus on reducing consumption, promoting reuse and recycling, and fostering a culture of sustainability within the campus community. College has established recycling programs that include paper waste. Recycling bins for paper are strategically placed across campus and paper waste is given to scrap merchants or transported to recycling facilities.

Measures to reduce the waste quantity -

Encouraging the use of email, online portals, and messaging platforms for communication between faculty, staff, and students.

Providing electronic copies of documents, announcements, and newsletters instead of printing them.

Implementing electronic submission systems for Internal exams, assignments, reports, and forms to eliminate the need for printing and photocopying.

Utilizing online platforms for document sharing, collaboration, and feedback.

Type of waste – Electronic waste

Approximate annual quantity- 10kg approx

Source of waste – Computer labs and administrative block equipped with desktop computers, monitors, printers, and other peripherals. Audiovisual equipment, projectors, interactive whiteboards, Cameras and other electronic devices used in Lecture rooms, Seminar hall and Auditorium.

Handling Methods – E-waste generated is collected and stored in the store room. All collected waste has been sold to authorized vendor. For E-waste management, college has signed a MoU with an authorized vendor of Kanpur.

Measures to reduce the waste quantity –

Encourage students, faculty and staff about reuse of electronic devices.

Promote repair services to extend their lifespan instead of discarding them when they malfunction.

Implement effective recycling programs to ensure proper disposal of electronic waste, recovering valuable materials like metals and reducing environmental impact.

Proper monitoring of E waste by lab assistant.

Use of E waste in beautification of college as CDs are used for enhancing the iron structure at college gate.

Reference doc/pic no: M1

Type of waste – Hazardous waste

Approximate annual quantity- 1-2kg approx

Source of waste – Hazardous waste in college settings can originate from limited sources across campus including the chemistry department which conducts chemical demonstrations for educational purposes (in milligram scale). Zoology laboratory generate biological waste such as cultures, specimens, and contaminated materials. Cleaning agents, solvents, and pesticides used for janitorial purposes can generate hazardous waste. Maintenance activities such as painting and





surface coating can produce hazardous waste containing volatile organic compounds (VOCs). Renovation and construction projects on campus can generate demolition debris.

Handling Methods -

Hazardous waste is identified and proper handling is done for storage in containers and disposal procedures to ensure compliance with regulations and minimize environmental and health risks. All the campus hazardous wastes are disposed of responsibly by using proper waste segregation mechanisms at the source managed by government approved and registered waste management contractors. Building debris is used for landfilling in the campus.

Measures to reduce the waste quantity -

Reducing hazardous waste quantity in college settings involves implementing strategies to minimize the generation of hazardous materials,

Promote safer alternatives as the adoption of green chemistry principles in laboratory experiments and research projects to minimize the use of hazardous chemicals.

ostitute hazardous materials with safer alternatives, such as replacing toxic solvents with water-based or non-toxic alternatives, or using non-hazardous cleaning products.

Provide comprehensive training and education to laboratory personnel, faculty, and students on hazardous waste management practices, chemical safety, and spill prevention.

Improve waste management practices by creating awareness about the environmental and health impacts of hazardous waste and the importance of waste reduction efforts.

Collaborate with other academic institutions, industry partners, and regulatory agencies to share best practices, resources, and expertise in hazardous waste reduction and management.

Type of waste – Garden waste

Approximate annual quantity- 2100 kg approx.

Source of waste – Colleges often have landscaped areas, gardens, lawns, and green spaces that require regular maintenance. This maintenance generates garden waste when plants are pruned, thinned, or replaced such as grass clippings, fallen leaves, and branches.

Handling Methods – College has a green campus and gives priority to keep the campus clean and eco-friendly. For the degradable garden waste management, we have open composting and vermi-composting unit. The leaf litter, twigs of the plants are collected for practical in Botany Department and subjected to composting. Vermi-compost is harvested and used for plants as manure in campus garden.

Measures to reduce the waste quantity -

Provide education and training on sustainable gardening practices to students, faculty, and staff. Teach techniques such as composting, mulching, and plant selection to reduce garden waste generation and promote environmental stewardship.



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Type of waste – Food waste

Approximate annual quantity- 50 kg approx.

Source of waste – Food preparation areas where excess food is discarded during cooking or serving. Pre-packaged food items, such as sandwiches, pastries, and snacks, that may expire or remain unsold. Food not consumed by students in cafeterias.

Handling Methods – Food waste in college is typically handled through a combination of prevention, donation, composting, and recycling efforts. Food scraps and organic waste generated in campus dining facilities and kitchen are often collected for composting and donating to animals around the college campus.

Measures to reduce the waste quantity – Reducing food waste in college campus involves implementing various strategies to

Optimize food production and service,

Implement portion control measures

Setup on-campus composting facilities to divert food scraps and organic waste from landfills.

Educate students and staff about composting practices and provide bins for separating food waste from other waste streams.

Establishing food donation programs for humans as well as animals.

By implementing these measures, colleges can effectively handle all waste on campus while protecting human health, safety, and the environment.

Related records / images



COMPOSTING PLANT

How much organic waste is generated in a day? What type of organic waste is generated?	No records found at the time of audit.
Details & capacity of compost plan installed in the organization.	No records found at the time of audit.



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Details of composting method used	The organization use vermin composting method to recycle organic waste efficiently.	
Compost facility maintenance & inspection plan No records found at the time of audit.		
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 our college campus, rainwater harvesting system has been installed near the Gate No. 4, in the playground. Reference doc/pic no.: - O2
Rainwater harvesting system maintenance plan	The roof runoff water is collected through network of pipe lines and stored in tanks. There are two tanks in the campus where the roof runoff water is stored. The roof runoff water is allowed to infiltrate in the ground for recharge. There is proper plan for the maintenance of rainwater harvesting system. Reference doc/pic no.: - O1
Related records / images	
<image/> <text><text><text><text><text></text></text></text></text></text>	Image: Second and a second
O1. Rainwater harvesting system maintenance	O2. Rainwater harvesting recharge pit

Training



procedure

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Has the organization provided waste management/handling training to concerned employees. Give details.	No records found at the time of audit.
Has the organization provided training for energy saving?	Yes, the organization provided training for energy saving by awareness poster. Reference doc/pic no.: - P2
Has the organization conducted training for solid waste management?	No records found at the time of audit.
Has the organization conducted awareness training for water saving?	Yes, the organization provided training for water by saving awareness poster. Reference doc/pic no.: - P1

Related records / images



Observations:

The organisation does not maintain any record regarding waste management and solid waste management training program

Environmental Practices	
Waste recycling	Yes, food waste, canteen waste and garden waste are segregated and deposited into a compost pit. And RO water is used for cleaning and watering plants.
Waste Decomposition	Yes, food waste, canteen waste and garden waste are segregated and deposited into a compost pit. The compost is used
Rainwater harvesting	Yes, the rainwater harvesting system is installed in the campus.
Environmentally Preferable Purchasing (EPP) or Green Purchasing	The organisation uses energy efficient appliances such as LED tube-lights, bulbs and 3 star rated AC. It uses ecofriendly products for cleaning.
Distinct receptacles for trash and recycling	No records found at the time of audit.





Low-emission transportation	Yes, college encourages students to use bicycles and promote the use of battery powered vehicles.		
maximum use of clean energy	Yes, solar panels and rain water harvesting has		
	been installed for maximum use of clean energy.		
Preference to electronics over the paper	Yes, online exams are conducted and projects		
	and assignments are submitted online		
Campus garden	Yes, food waste, canteen waste and garden		
	waste are segregated and deposited into a		
	compost pit. And RO water is used for cleaning		
	and watering plants.		

Environmental Initiatives / Green Initiatives

The organization has implemented a range of green initiatives to promote environmental sustainability and reduce its ecological footprint.

Firstly, a proactive measure has been taken by banning the use of plastic within the campus premises. This step aims to curb plastic pollution and encourage eco-friendly alternatives.

Secondly, the organization prioritizes maintaining greenery within the campus to enhance the environment. Trees, plants, and green spaces not only improve air quality but also provide aesthetic and recreational benefits to the campus community.

Thirdly, the organization is committed to adopting energy-efficient instruments across its operations. By investing in energy-efficient technologies and practices, the organization minimizes energy consumption and reduces greenhouse gas emissions.

Furthermore, there has been a transition from CFL bulbs and tube lights to LED bulbs, which are more energy-efficient and have a longer lifespan. This switch not only lowers electricity usage but also decreases maintenance costs.

Moreover, the organization demonstrates a preference for renewable energy sources over nonrenewable ones, aligning with its commitment to sustainable practices. Utilizing renewable energy contributes to mitigating climate change and reducing dependence on fossil fuels.

Lastly, the organization has initiated e-waste management practices to responsibly handle electronic waste and reduce pollution. Proper disposal and recycling of e-waste prevent hazardous materials from contaminating the environment and harming human health.

Overall, these green initiatives showcase the organization's dedication to environmental stewardship and sustainable development, setting a commendable example for others to follow.







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