

CERTIFICATE

PRESENTED TO

JANKI DEVI MEMORIAL COLLEGE

Sir Ganga Ram Hospital Marg, Old Rajinder Nagar, Rajinder Nagar,
New Delhi, Delhi 110060

Has been assessed by EHS Alliance Services for the comprehensive study of environmental impacts on institutional working framework to fulfill the requirement of

ENVIRONMENT AUDIT

ACADEMIC YEAR 2022-23

The environment legal compliances and initiatives carried out by the institution have been verified on the report submitted and were found to be satisfactory.

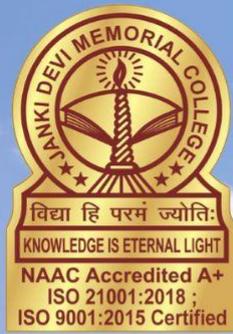
The efforts taken by management and faculty towards environment and sustainability are highly appreciated and noteworthy.



SIGNATURE



31.05.2023
DATE OF AUDIT



JANKI DEVI MEMORIAL COLLEGE

ENVIRONMENT AUDIT REPORT

2022-2023

PREPARED BY
EHS ALLIANCE SERVICES



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ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Janki Devi Memorial College for assigning this important work of Environment Audit. We appreciate the co-operation to the teams for completion of assessment.

We would like to specially thank **Professor Swati Pal** - *Principal, Janki Devi Memorial College* for giving us an opportunity to evaluate the environmental performance of the campus.

We would also like to thank **Dr Deepak Rawat** - *Audit Coordinator, Janki Devi Memorial College*, for his continuous support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Ms Vandana Madan	Convener, AVANI- The Environment Club, JDMC
Dr Sana Rehman	Department of Environmental Studies, JDMC
Mr Ravinder Meena	Member, AVANI- The Environment Club, JDMC
Dr Kaushal Kishore	Administrative Officer, JDMC
Mr Surendra Kumar	Administrative Officer, JDMC
Mr Avinash	Assistant - Admin, JDMC
Mr Vijay Pratap	Junior Assistant - Admin, JDMC



DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Janki Devi Memorial College based on input data submitted by the representatives of College complemented with the best judgment capacity of the expert team.

While all sensible care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

If you wish to distribute copies of this report external to your organisation, then all pages must be included.

EHS Alliance, its staff and agents shall keep confidential all information relating to your organisation and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies.

EHS Alliance staff, agents and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.

Signature

LEAD AUDITOR



CONCEPT AND CONTEXT

In India, the process for environmental audit was first mentioned under the Environment Protection Act, 1986 by the Ministry of Environment of forests on 13th march, 1992. As per this act, every person owning an industry or performing an operation or process needs a legal consent and must submit an environmental report or statement.

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the sustainable environment.

In view of the NAAC circular regarding environment auditing, the College management decided to conduct an external environment assessment study by a competent external professional auditor.

The term ‘Environmental audit’ means differently to different people. Terms like ‘assessment’, ‘survey’ and ‘review’ are also used to describe similar activities. Furthermore, some organizations believe that an ‘environmental audit’ addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environment Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

“A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects.”

This audit focuses on the environment legal compliances and implementation of rules defined by MoEFCC or state pollution control board. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit are discussed below.

INTRODUCTION

Nature is very precious gift for all life forms. Disturbance in the nature causes environmental Problems. These are increasing day by day as a result of development of urbanization and industrialization on earth. Because of unplanned utilization of resources, our planet is facing tremendous pressure results a sharp rise in temperature. Therefore, there is an urgent need to plan the consumption of the resources in sustainable manner in order to conserve natural resources for future generation.

Sustainable development is becoming popular in the world for saving the earth. Utilizing resources judiciously can save the earth's precious resources. Measurement of environmental components is the most effective step to conserve and protect natural resources.

Environmental auditing had begun in the early 1970s with provision of civil lawsuits for non-compliance with environmental regulations. Environment auditing involves on site visit, collection of samples, performing analyses, and report results to competent authorities.

Industry, the corporate world is initiating auditing for saving natural resources. Academic institutions also can contribute to the preservation and conservation of resources within their premises.

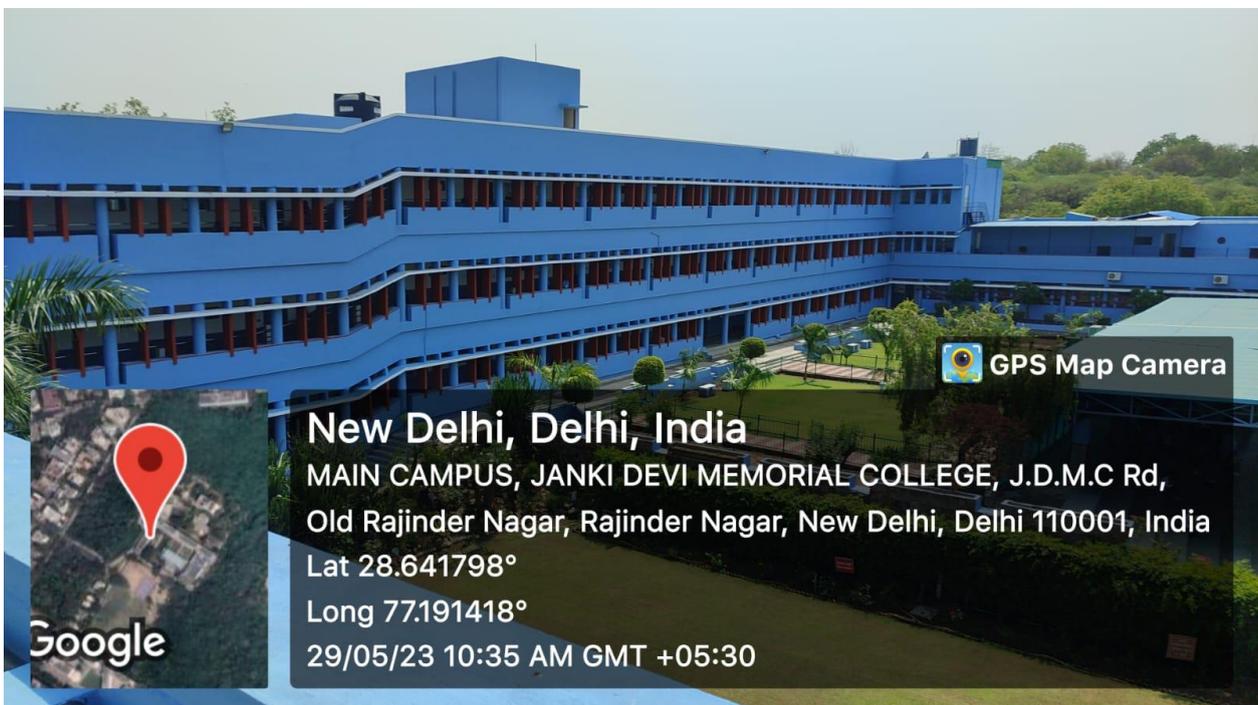
In this, "Environment Audit" report would help everyone to think about preserving resources, show willingness to learn their importance, adopt steps to minimize resource use and set an example for others to follow the path of eco-friendly practices to achieve the goal of sustainable development. Effective implementation of environmental auditing helps in minimization of environmental risks at low cost.





OVERVIEW OF THE COLLEGE

Janki Devi Memorial College, a premier women's college of University of Delhi was founded in 1959 by the famous Gandhian Shri Brij Krishan Chandiwala in memory of his mother Smt. Janki Devi. JDMC aims to provide quality education to young women and empower them to become economically self-reliant, have the confidence to face the vicissitudes of a challenging society, contribute meaningfully to the society at large and acquire the capability to think, lead and change the world.

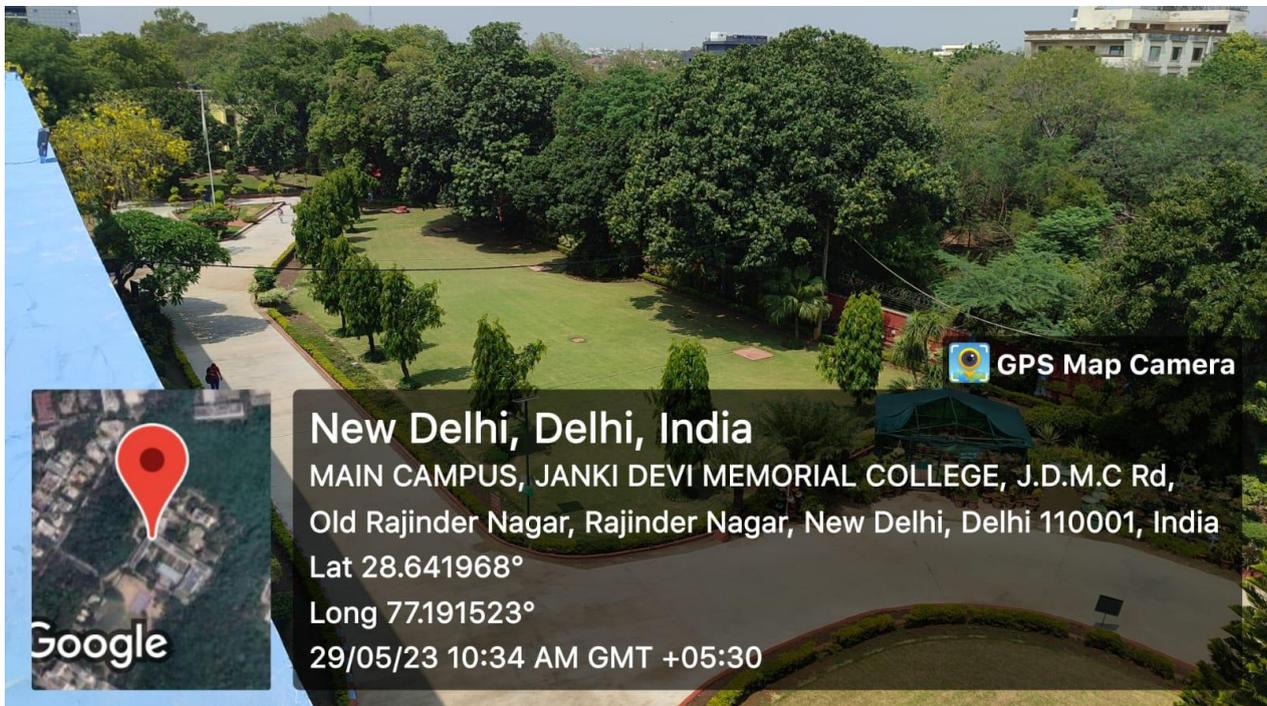


Situated in New Delhi Ridge in idyllic surroundings with its lush green lawns and imposing building, the college offers twelve under-graduate courses in Liberal Arts, Social Sciences, Mathematics and Commerce and eight post graduate courses. JDMC is the Centre for Non-Collegiate Women's Education Board (NCWEB) as well as School of Open Learning (SOL), University of Delhi. The college runs several Add-on courses/Certificate courses for students to enhance their skills. JDMC has MOUs with national and international agencies to provide the much-needed real world exposure to its students. It has more than thirty Societies/Clubs/Cells to give its students sufficient platforms to excel in various domains. The college has an extremely dedicated, committed and motivated faculty and staff.



The college offers facilities and infrastructure to create a holistic atmosphere for the pursuit of academic and extracurricular activities. JDMC has recently completed its 60-year journey in pursuit of excellence. The college has provided a nurturing environment to students from all parts of India. It has the distinction of having a disabled-friendly infrastructure along with a strong assistance system in place for the students and faculty with visual disability.

The JDMC-IQAC works in its mandated direction of internalizing and institutionalizing the quality enhancement initiatives. These initiatives encompass various stakeholders, namely students (with the aim of their integrated development), teaching staff and non-teaching staff (enhancing their capabilities and empowering them) and students' parents and Alumnae (strengthening mutually beneficial relationships).



CAMPUS

The college has an impressive building with lush green lawns, an eco-friendly campus with solar lighting and a rain-water harvesting system. The classrooms are clean, comfortable and well ventilated; the premises contain a common room and a medical room with a sanitary napkin vending machine, an open air auditorium; a bank, a multi-cuisine and attractive cafeteria, computer laboratories; an audio-visual room; a photocopying centre as well as a Mother Dairy booth.



Library: JDMC library is a repository of over 1 lakh books and over 100 journals, both academic and general. It is among the first fully automated libraries in Delhi University and provides photocopying and free internet access facilities.



Labs: JDMC has 4 computer labs, 2 Research Rooms, and an A/V room. With 200+ systems and ICT facilities, these rooms provide a state-of-the-art teaching/learning environment to the students and faculty.



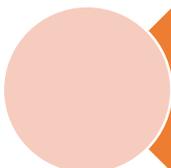
Canteen: The college has a spacious cafeteria that offers a wide variety of snacks to students and staff at reasonable rates.



Garden: The college Gardens are a source of pride for JDMC. The gardens have won many awards in different categories in the university flower show.



Smart Classroom: The college has 3-5 smart Classrooms which are ICT enabled with interactive smart boards to facilitate the teaching-learning process.



Seminar room: The Seminar Room has a seating capacity of more than 200 with a state-of-the-art audio-visual system which is updated on a regular basis. The Seminar Room functions as a multi-purpose space used to hold conferences, seminars, workshops, meetings etc.



VISION | MISSION | CORE VALUES

JDMC, a premier women's college of University of Delhi, endeavours to promote enduring knowledge which is global in its perspective and yet local in its relevance. Students are challenged & inspired to pursue excellence in liberal and performing arts, humanities, commerce and sports, in an environment which is vibrant & constantly evolving. Founded with a vision to empower women, JDMC continues to strive to help its students to develop a capacity to think, lead and change the world.

MISSION STATEMENT AND CORE VALUES

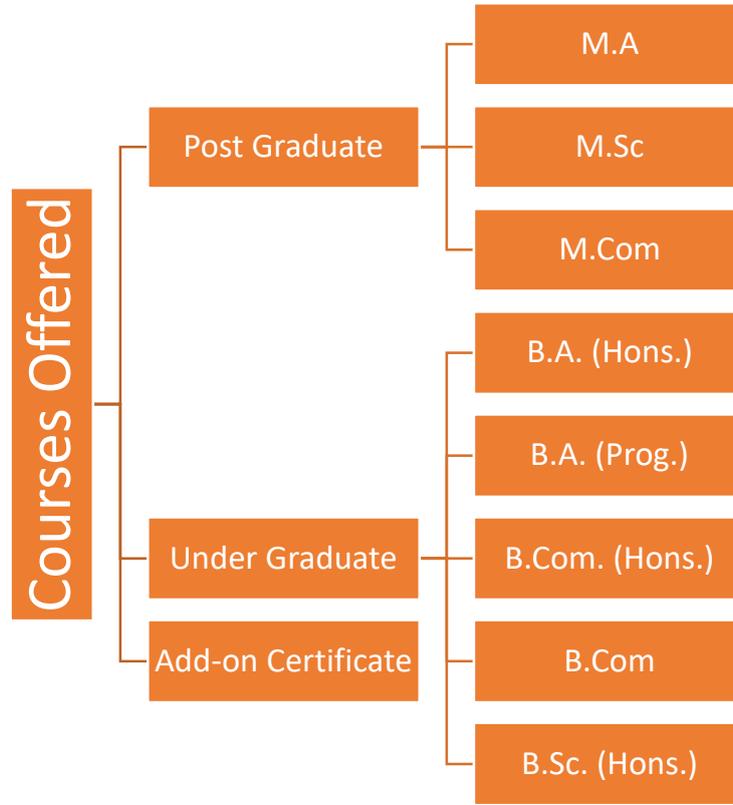
The egalitarian approach of the institution promotes the inclusion of all sections of the society. The institution is equally inclusive of all its constituencies, with their respective duties, responsibilities and achievements. The students and staff, belonging to diverse classes, castes, ethnic and religious groups cooperate in a democratic environment to take the college to newer heights of excellence. The institution besides providing education, also serves as a platform for cultural expression and excellence, constantly reminding students of the primary importance of cultural diversity, national integration and tolerance, along with the need to be in harmony with the environment

Janki Devi Memorial College is committed to the following core values:

- The foundational ideal is enshrined in the upanishadic motto of the college itself, 'Vidyahi paramam Jyoti'- Knowledge is Eternal Light
- Gandhian philosophy of responsible citizenship and empowerment of women through education
- Imparting knowledge based on traditional values, yet with modern and global significance in an evolving academic world
- Education, in combination with technological skills, empowers the students both academically and economically, and proactively contributes to their brighter future

Therefore, the college creates a motivational environment to provide holistic education and personality development of the students, resulting in a synthesis of their career growth and ethical and responsible citizenship

JDMC is providing education to undergraduates and graduates in following department.



Geo Location
Geo Coordinates from Google maps:
28.6418145, 77.190725





AUDIT PARTICIPANTS

On behalf of College

Name	Designation
Professor Swati Pal	<i>Principal, JDMC</i>
Ms Vandana Madan	<i>Convener, AVANI- The Environment Club, JDMC</i>
Dr Deepak Rawat	<i>Department of Environmental Studies, JDMC</i>
Dr Sana Rehman	<i>Department of Environmental Studies, JDMC</i>
Mr Ravinder Meena	<i>Member, AVANI- The Environment Club, JDMC</i>
Dr Kaushal Kishore	<i>Administrative Officer, JDMC</i>
Mr Avinash	<i>Assistant - Admin, JDMC</i>
Mr Vijay Pratap	<i>Junior Assistant - Admin, JDMC</i>

On behalf of EHS Alliance Services

Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	<i>Ph.D. , PDIS, QCI – WASH, Lead Auditor ISO 14001:2015</i>
Ms. Pooja Kaushik	Co-Auditor	<i>M.Sc., Field Expert, QCI – WASH</i>

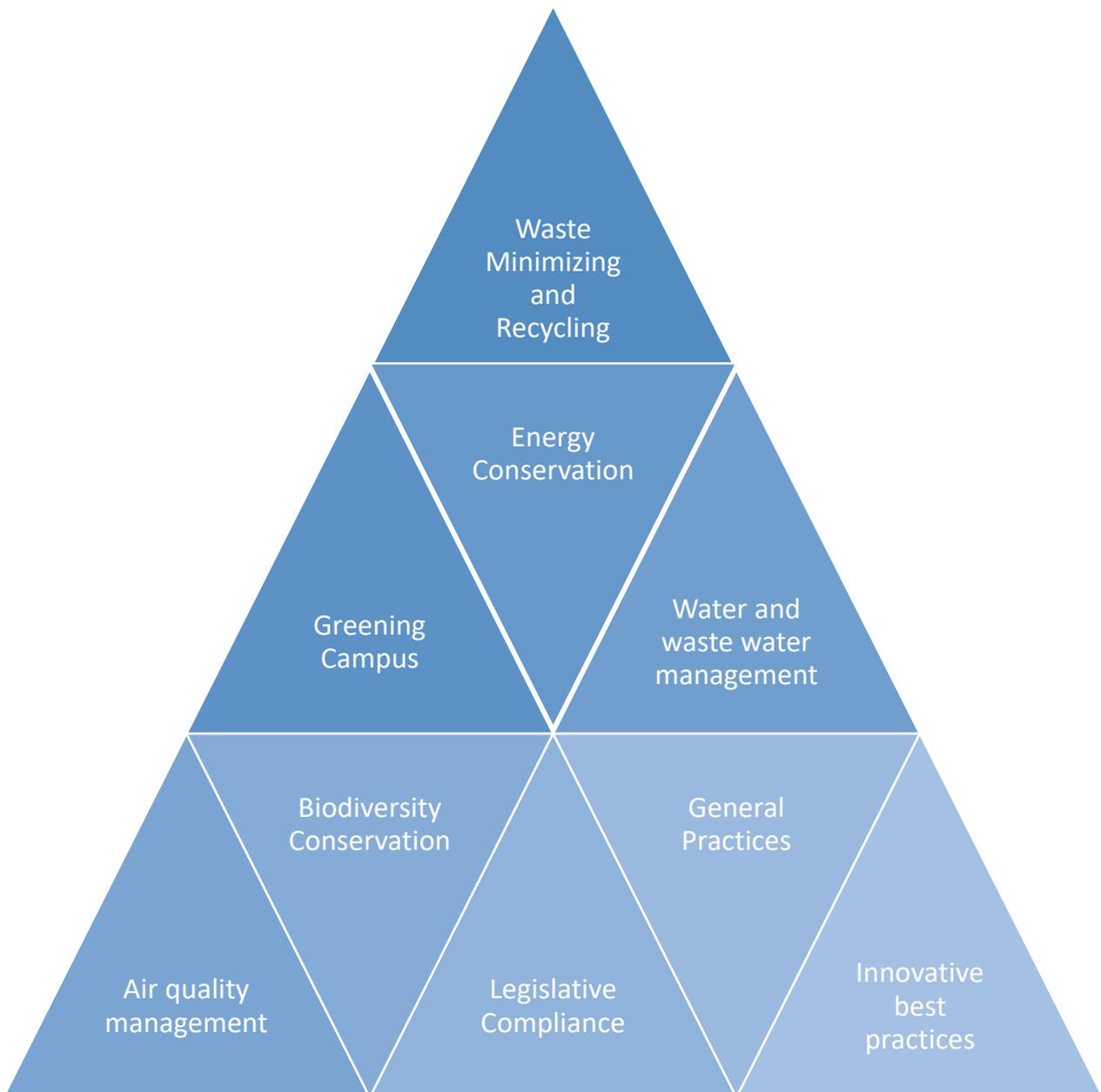
EXECUTIVE SUMMARY

The environment audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes out-dated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. Our approach to promote a Green Campus to inculcate the sustainable value systems among the students, so that they carry the learning and practices them in their future endeavours. This will ensure that Sustainability and Environmental practices get embedded in all the institutions and organizations in the country.

A Green Campus is a place where environmentally friendly practices and education combine to promote sustainability in the campus which ultimately offers an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind.



This is the first environment audit of college for doing their bit towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.





WASTE MANAGEMENT

TYPE OF WASTE ON COLLEGE CAMPUS

To create effective waste management plans, college first need to know the type of waste being generated at the campus. Below, we have compiled a list of various kinds of waste commonly generated on institutional campus:

1. **FOOD WASTE** - College campus generates food waste. The average mess and canteen generate approximately 20 kg of food waste a day. The reasons for food waste on an educational campus may be over purchasing food to ensure a sufficient supply and then throwing it away, especially in all hostel messes where plentiful stores are essential. And in the cafeteria or hostel mess, students may pile food onto their trays, find it unappealing once they sit down and dutifully scrape it into the garbage. Immediate attention is given to the food waste minimization techniques.
2. **RECYCLABLE PAPER, CARDBOARD, PLASTIC, GLASS AND CANS** - Campus tends to produce vast quantities of these recyclables. Even in the digital age, many students, professors and staff members still prefer handwritten notes and end up with piles of unwanted paper once their courses and projects are complete. And shipments of necessary items throughout the year are likely to arrive in recyclable plastic and cardboard packaging. The same is sold/auctioned to the scrap vendors time to time.
3. **STUDENT CLOTHES AND HOUSEWARES** - As we have mentioned above, many students find it more convenient to throw away their clothes and dorm furnishings at the end of the year than donate or recycle them.
4. **E-WASTE** - Student and facility electronics often form a large portion of a campus's waste — As campus continually upgrade their computing facilities and office computers to keep up with the latest technology, the old computers have to go somewhere. So do old printers, phones, copy machines and other electronics that receive upgrades over the years. Discarded student electronics often become part of a campus's waste stream as well. Students may throw away old phones, TVs, tablets, laptops and printers, along with cords and other accessories. Recycling is a much more eco-friendly option — the metals in old electronics often have a high reuse value. College has tie-up with external authorised agency details mentioned in legislation compliances.
5. **CHEMICAL WASTE** - Chemical waste on a college campus may come from numerous sources. Campus laboratories generate waste chemicals, as do cleaning services. The detergents used in campus laundry rooms eventually become waste as well. Much of these chemical substances are hazardous waste under Manufacture, Storage and Import of



Hazardous Chemicals Rules, 1989 and must undergo specific disposal processes according to state environmental rules and regulations.

6. **MAINTENANCE WASTE** - In the maintenance department, spent paints, solvents, adhesives and lubricants all form potentially hazardous waste. Because they are difficult to recycle, spent incandescent light bulbs usually become landfill waste. Spent fluorescent light bulbs, which contain small amounts of mercury, typically require special handling because of the environmental and health risks they pose.
7. **BIOLOGICAL WASTE** - Biological waste from laboratories will require special handling and disposal as per BMW Rules, 2016.
8. **FURNITURE** - Furniture waste on a college campus has a couple different sources. The campus itself may also get rid of old furniture as it modernizes its classrooms, cafeterias, computer labs and study spaces. Annually sold to junk dealer.
9. **BOOKS/MAGAZINES/NEWSPAPERS** - Books accounted for solid waste generation and institutions often generate tons of textbook waste. As courses upgrade to new editions, they may end up throwing their newly obsolete textbooks into the garbage if donation programs cannot use them.
10. **C & D WASTE** - Expansion of campus building and renovation works result significant amount of construction and demolition waste that should be either used for back filling or disposed off through authorised dumping site by CPCB/SPCB.
11. **SOLID WASTE** - The College is managing solid waste by providing it to the Municipal Corporation.
12. **HORTICULTURE WASTE** – College campus has lavished greenery and grounds that results significant horticulture waste which is managed by in-house composting system.

ENERGY CONSERVATION

1. List ten ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.

The architectural design of our building allows for natural light and good ventilation. The college uses electricity and LPG cylinders. However the college has implemented the following to reduce the use of energy.

- *Electricity saves by use of LED and CFL lights for illumination.*
- *Solar power Plant (Capacity 58.22 KW is being installed on the campus*
- *College is using Solar lights for street lights*
- *College is using solar water heaters in kitchens and hostels*
- *Pressure cooker is used in cooking to save energy.*
- *Notices with the message “Switch off lights” are pasted near switch boards.*
- *Automatic on-off sensor based solar lights.*
- *Switch off lights when not in use notices in entire campus.*
- *Minimize the use of Air conditioners in summers and room heaters in winters.*
- *Switch off laptops and computers when not in use.*

2. Are there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some

Yes, JDMC has adopted several energy saving techniques

- *Renewable source of energy through 58.22 KW solar panel is operational*
- *Solar heaters are installed for hostels and mess*
- *LED lights have been installed on campus*
- *Switch off fans and lights when not in use*
- *Switch off bulbs/LEDs in the well-lighted rooms during sunny afternoons*
- *Organise various energy conservation awareness programs for students and staff*
- *Keep the computers and ACs on power saving mode.*
- *Buy energy saving equipment*

3. How many CFL/LED bulbs has your institute installed?

JDMC has replaced all conventional bulbs and tube lights with 20W LED Lights.

4. Do you run “switch off” drills at institute?



Yes

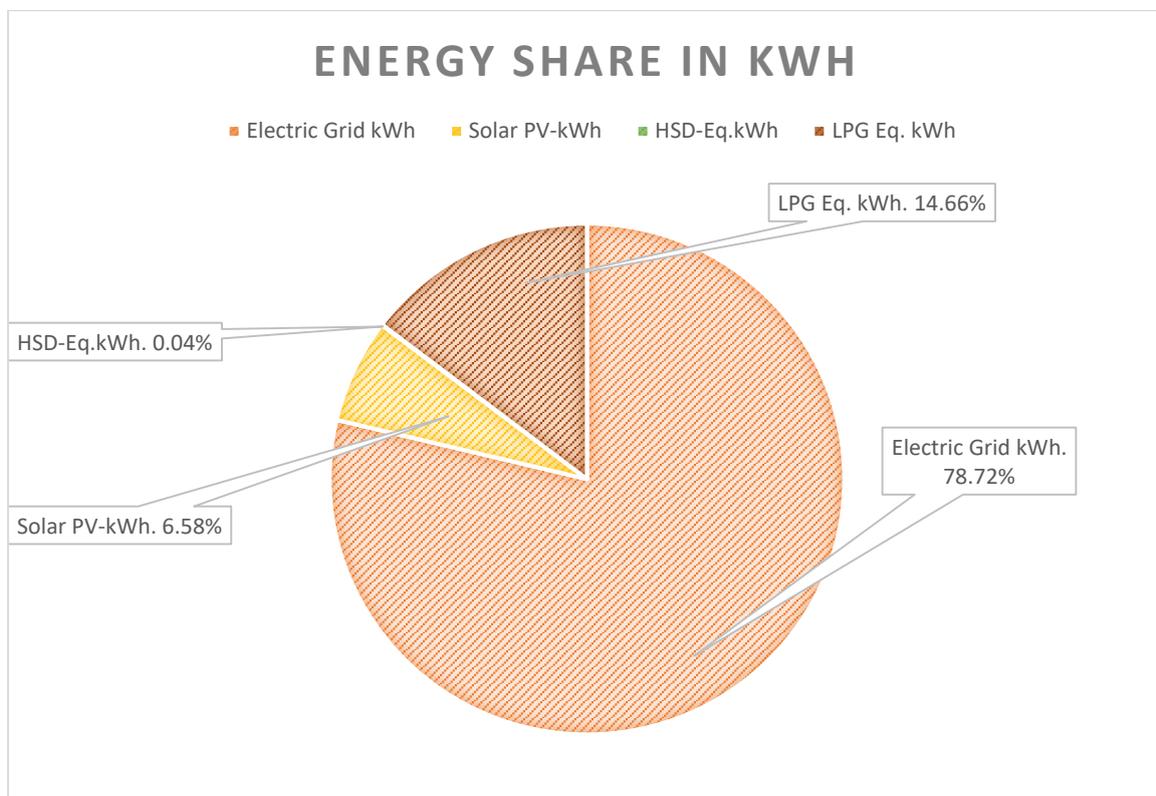
5. Are your computers and other equipment's put on power-saving mode?

Yes, When in use. Otherwise the equipment's are switched off from mains.

6. Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?

Standby mode is used for computers, approx. 6 hours

Energy Share	kWh	Percentage
Electric Grid kWh	468176	78.72%
Solar PV-kWh	39123	6.58%
HSD-Eq.kWh	235	0.04%
LPG Eq. kWh	87194	14.66%
Total -kWh	594728	100%



WATER AND WASTE-WATER MANAGEMENT

1. List uses of water in your institute

Basic use of water in campus:

Drinking – 112.22 KL/month

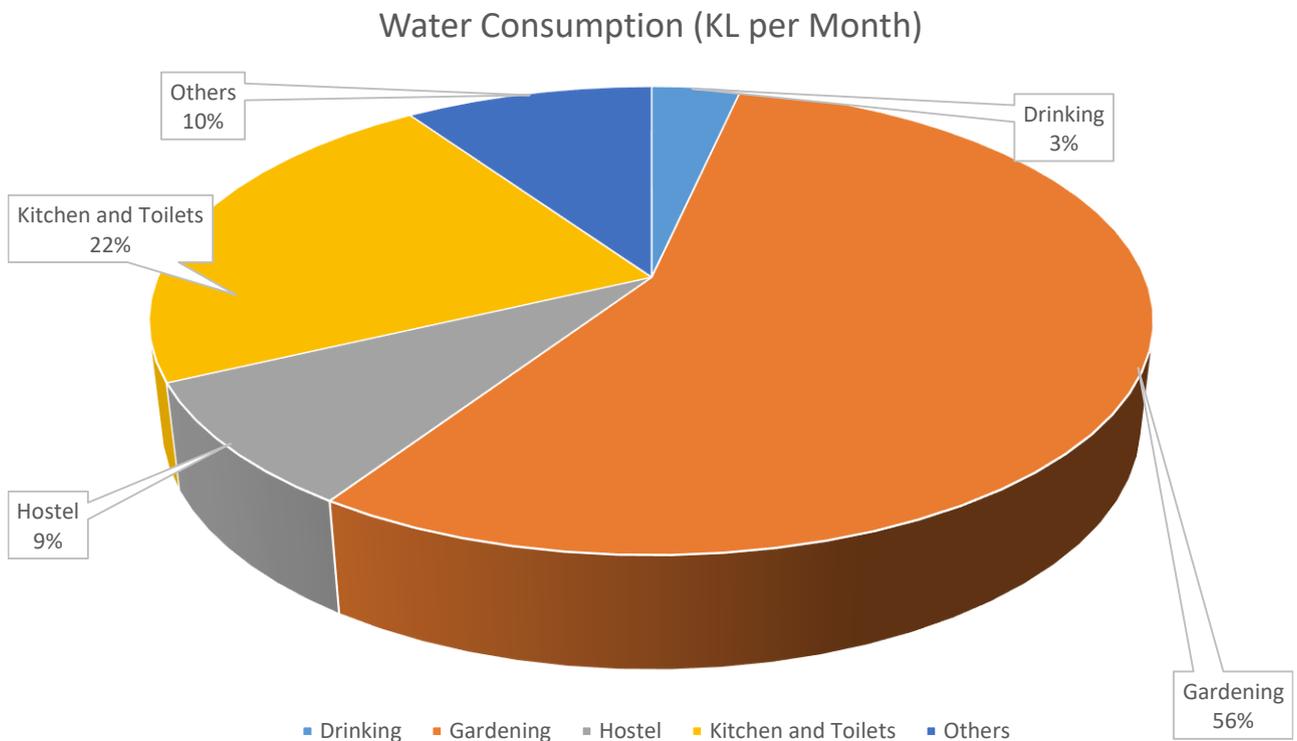
Gardening – 1830.60 KL/month

Kitchen and Toilets – 738.71 KL/month

Others – 312.63 KL/month

Hostel – 283.50 KL/Month

Total = 3277.66 KL/Month





2 How does your institute store water? Are there any water saving techniques followed in your institute?

JDMC college relies on municipal water as a primary source for academic blocks and teachers' houses and 3 bore wells as a secondary source. The campus has one main tank filled 2 times a day from the municipal supply, which then distributes water to 15 small overhead tanks in the academic block. The average time required to fill the tanks is 45-60 mins.

JDMC ensures regular maintenance of water tanks and checking of water quality standards on the campus. The water tanks and water coolers are checked every 3 months, and RO systems are regularly changed.

Main tank can store up to 20,000 litres and 15 overhead tanks of 500-1000 litres capacity.

Saving Techniques

- *Avoid overflow of water-controlled valves are provided in water supply system.*
- *Close supervision for water supply system.*
- *Push taps are installed*
- *Water Conservation awareness for new students*
- *Sprinklers usage for gardening and grass cover*

3. Locate the point of entry of water and point of exit of waste water in your institute. (Entry and Exit)

Entry - Primary source of water is Delhi Jal Board (MCD), and also from 3 bore wells as a secondary source.

Exit- From Canteen, Hostels, Toilets, Bathrooms and Labs through covered drainage which is connected to Sewer drainage

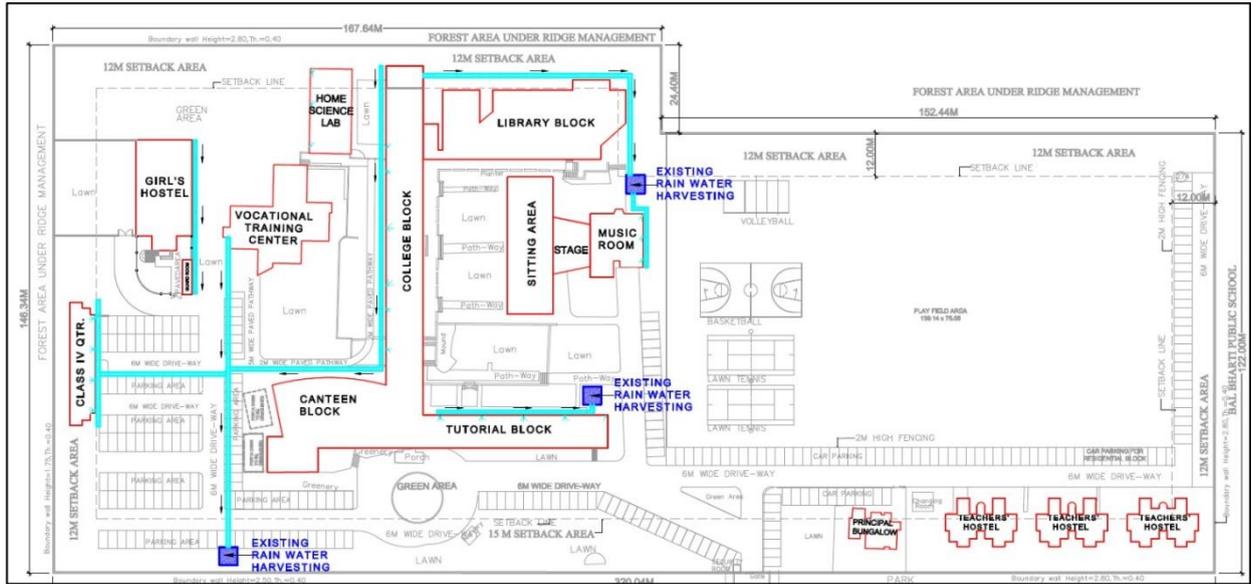
4. Write down ways that could reduce the amount of water used in your institute

Basic ways:

- *The college ensures that the faucets in the washrooms and water filtration units are checked regularly and do not have any leakages.*
- *College has initiated the installation of auto push taps to reduce water wastage.*
- *The campus has 48 double-level and 58 single-level systems flush in the academic blocks (36 single and 8 double), hostels (38 double), and teachers' houses (22 single and 2 double).*
- *Periodic Water Conservation awareness for new students*
- *College has initiated Use of sprinklers for gardening*

5. Does your institute harvest rainwater?

Yes, there are three unit for rain water harvesting Pits



Rooftop rainwater harvesting plan on campus



Recycling of RO wastewater. The RO reject water is first collected in a storage tank which is then pumped to an overhead tank

6. Is there any water recycling System?

No, but college stores and reuses the waste RO water.



AIR QUALITY MANAGEMENT

1. Are the Rooms in Campus Well Ventilated?

Yes, The college rooms are designed with good ventilation in mind. The doors and windows, in most of the rooms, are positioned opposite each other to promote cross-ventilation.

2. Window Floor ratio of the Rooms?

Very Good, The generous presence of large windows enables the college to make optimal use of natural daylight.

3. What is the ownership of the vehicles used by your campus?

JDMC has two cars which run on petrol and CNG.

4. Provide details of Institute-owned vehicles?

*1 Car – Petrol
1 Car - CNG*

5. PUC done?

Yes

6. Specify the type of fuel used by your campus's vehicles

1 Car runs on petrol, and the second runs on CNG

8. Air Quality Monitoring Program (If, Any)

JDMC uses AQI index to monitor the air quality. College also maintain greenery on campus to improve air quality



ENVIRONMENT LEGISLATIVE COMPLAIANCE

1. Are you aware of any environmental Laws Pertaining to different aspects of environmental management?

Yes, To promote environment management on the campus, JDMC follows these laws:

- 1) Protection of trees on campus (Delhi Preservation of Tree Act, 1994, National Green Tribunal Act, 2010)*
- 2) De-concretization of trees (National Green Tribunal Act, 2010)*
- 3) Segregation and recycling of Waste (Solid Waste Management Rules 2016)*
- 4) Reduce Noise on campus (Noise pollution (regulation and control) rule, 2000)*
- 5) Reduce single use of plastic, and recycling of plastic (Plastic Waste Management Rules, 2016)*
- 6) Recycling of electronic waste (e-waste Management and Handling Rules 2011)*

Yes, the college has environmental Policy, energy usage policy and plastic free campus policy (attached in annexure I)

Name of Environmental Club: AVANI-The Environment Club

Name of Garden Committee: Upavan

2. Does your institute have any rules to protect the environment? List possible rules you could include.

Yes, Janki Devi Memorial College's- environment society is conscious about the environment protection and takes proper measures in terms of awareness campaigns, activities, webinar, seminars, etc.

3. Does Environmental Ambient Air Quality Monitoring conducted by the Institute?

No

4. Does Environmental Water and Waste water Quality monitoring conducted by the Institute?

No

5. Does stack monitoring of DG sets conducted by the Institute?

No

6. Is any warning notice, letter issued by state government bodies?

No

7. Does any Hazardous waste generated by the Institute?

No





GENERAL INFORMATION

1. Does your institute have any rules to protect the environment? List possible rules you could include.

- *Periodic Plantation drive*
- *Ban on single use plastic*
- *Water and energy conservation through posters*
- *Applies reduce reuse recycle principle to protect the environment*

2. Are students and faculties aware of environmental cleanliness ways? If Yes Explain

Yes. Janki Devi Memorial College creates awareness through activities, Webinars, cleanliness drives in the community.

3. Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?

Yes, World Environment Day, Ozone Day, Earth Day, World water day, World wetland Day, Earth hour and more are celebrated by campus.

4. Does Institute participate in National and Local Environmental Protection Movement?

Yes, college participates in UBA programs.

5. Does Institute have any Recognition or certification for environment friendliness?

Certificate is attached in annexure I

7. Does Institution conduct a green or environmental audit of its campus?

This is the second external audit carried out by the college.



INITIATIVES CARRIED OUT BY COLLEGE

Janki Devi Memorial College has an environment club – Avani. Below are the highlights of their work on environment cautiousness. 50 Volunteers have been enrolled under this society, who actively participated in the various events throughout the year.

- Department of Environment studies in collaboration with AVANI offered an add on certificate course of Understanding allergies - Department of Environment Studies
- Facilitated the doctors of Sir Gangaram hospital to conduct an aerobiology walk to identify allergenic plants on campus
- The Principal of the JDMC, Prof. Swati Pal inaugurated the Hostel Kitchen Garden, Krishna's Kitchen set up by Avani, the Environment Club of the college on January 12, 2023 by being the first to purchase from its harvest. The harvest consisted of vegetables like tatsoi, bokchoy and red lettuce.
- On November 2, 2022 AVANI, the Environment Club, JDMC, University of Delhi conducted an E- waste training and collection Drive session in collaboration with Clean to Green - a not- for-profit organization with focus on creating better awareness among people regarding the environmental concerns that affect the world today, and initiating action to create a safer and cleaner environment.
- Students made bags using old and discarded clothes. AVANI's 'aao bag banao' is an annual event (organised on 19th & 20th Oct 2022) which encourages students to reuse and upcycle old material by making higher valued products like bags. The students were able to raise Rs 2220 by selling bags and other materials in the Diwali mela as a part of 'National Entrepreneurship Month.'
- Creators offered different articles like madhubani painting, handmade jewelry, bookmarks, Hair accessories, dress, spotify plaque, chocolates and decoration items for Diwali, Resin Products & cards under project - Anupam. The two day event helped the students raise Rs 24,427 by selling the items in the Diwali mela. Project Anupam helped to make a difference in the lives of the people associated with small businesses. The program empowered the students to establish a successful enterprise in a fully functional manner.
- The Swachh faculty members and student team have identified a barren area near the hostel which can be utilized to make a kitchen garden. The team has also identified the barren land near the college ground which can be used to conduct plantation drives. The NSS, NCC students and the members of AVANI-the environment club conducted a plantation drive on June 4, 2022 to utilize the barren area.
- The students of AVANI and NCC participated in the E-waste training and collection drive organized by AVANI- the Environmental club, in collaboration with Reverse Logistic Group –



Clean to Green Campaign on 2nd Nov 2022. The students learned about the importance of recycling e-waste and participated in the entrepreneurship service of collecting e-waste for recycling.

- The students of AVANI and NCC participated in the Swachhta Entrepreneurship Services to take responsibility to help the cleanliness workers on campus on 12th and 19th Nov 2022. The objective of the activity was to lend a helping hand to the cleanliness/ gardening workers.
- The college has won several awards for its clean and green practices, including the District Green Champion Award 2021-22.
- Avani, the Environment Club, JDMC in collaboration with the NGO, GOONJ organised a winter collection drive from January 23, 2023 to February 17, 2023 under the theme 'Odha Do Zindagi'.
- Avani, the Environment Club, JDMC organised an online 'Bio enzyme workshop' for its members on February 14, 2023 and conducted an online 'Handmade Paper Workshop' on February 11, 2023
- Avani, the Environment Club, JDMC, University of Delhi conducted an online 'Handmade Paper Workshop' on February 11, 2023
- Avani, the Environment Club in collaboration with IQAC of JDMC, University of Delhi organised an interactive session on 'HOW TO LIVE A ZERO WASTE LIFE' on February 8, 2023.
- Avani, the Environment Club of Janki Devi Memorial College organized 'Create from Waste' Inter- College Competition under the Annual Festival 'Symphony' on January 12, 2023.
- Avani, the Environment Club, Janki Devi Memorial College entered into collaboration with ScrapUncle on January 3, 2022 for picking up recyclable scrap items in the college. The scrap collected by ScrapUncle from the college included 515.2 kilograms of paper, 22.5 kilograms of cardboard, 2.5 kilograms of plastic waste and 1.5 kilograms of aluminum waste.
- Avani, the Environment club of JDMC celebrated the World Toilet Day on November 19, 2022 by inaugurating a new toilet unit and felicitating 14 sulabh workers who keep the college building clean.
- The Environment Club, Avani, Janki Devi Memorial College, University of Delhi, organised a National Webinar on the International Climate Action Day on October 27, 2022 in collaboration with Econscious, a social impact startup. As a part of the outreach and extension activity the students of team Avani made paper bags and presented to a faculty member of JDMC as per her requirement on September 28, 2022.
- An interactive workshop on Bathroom Hygiene and Use was held on September 14, 2022 as an initiative taken by Avani, the Environment Club, JDMC in collaboration with the Building and



Maintenance Committee under the aegis of IQAC-JDMC to celebrate the Swachhta Pakhwada, 2022.

- On August 8, 2022, Avani the Environment club, JDMC organised a national webinar on Tiger Conservation as a part of extended celebrations of the World Tiger Day. The speaker for the Dr. Abhishek Harihar, who is an eminent conservation biologist

RECOMMENDATIONS

- Eco-friendly parameters should be included in the purchase of articles and goods for the campus.
- The periodic maintenance schedule for AC and DG to achieve optimised efficiencies.
- Environmental Monitoring i.e. (Stack Monitoring of DG sets, Water monitoring need to be conducted periodically (as per SPCB).
- Water metering records should be in practice for water auditing and balancing.
- Reduce carbon emission by reducing the power consumption along with the optimum power generation from the solar PV installed in college.

CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on a wide range of issues related to environmental aspects. Overall, 60% of college campus is for landscaping. Janki Devi Memorial College is dedicated to promote the environment management and conservation in the campus and community. The audit has identified some suggestions for making the campus premise more environment friendly. The recommendations and suggestions are mentioned for campus to initiate actions.

The audit team opines that the overall site is well-maintained from environmental perspective. The recommendations in this report highlight many ways in which the college can work to improve its actions and become a more sustainable institution.



REFERENCES

- **The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)**
- **The Petroleum Act: 1934 – The Petroleum Rules: 2002**
- **The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)**
- **Energy Conservation Act 2010.**
- **The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975**
- **The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982**
- **The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981**
- **E-waste management rules 2016**
- **Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)**
- **The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)**
- **The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)**
- **The Batteries (Management and Handling) rules, 2001 (Amended 2010)**
- **Relevant Indian Standard Code practices.**

ANNEXURE I – ENVIRONMENTAL RECOGNITION AND COMPLIANCE

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JANKI DEVI MEMORIAL COLLEGE
 (University Of Delhi)
 Sir Ganga Ram Hospital Marg, New Delhi-110060
 टेल : 25787754, फ़ैक्स : 25710832
 E-mail : jankicollege@rediffmail.com, http://jdm.ac.in

ENVIRONMENT POLICY

Scope of the Policy

The Green Campus and Environment Conservation Policy encourage students and staff to take the lead in creating positive change toward the conservation of the Environment. These initiatives call for a thorough review of all infrastructural, and administrative functions from the standpoints of energy efficiency, sustainability and the environment.

The focus areas of this policy are:

- 1) Alternative sources of Energy and Conservation Measures**
 - Solar Power
 - Installation of Energy Efficient Equipment
- 2) Management of Degradable and Non-degradable Waste**
 - o Solid Waste Management
 - o Liquid Waste Management
 - o E-Waste Management
- 3) Water conservation**
 - Rainwater/Rooftop harvesting system
 - Open Well recharge/Borewells
 - Construction of tanks and Bunds
 - Waste water recycling
 - Drainage channel to collect rainwater
 - Water-saving equipment in the washrooms/water coolers
- 4) Green campus initiatives**

Environment Policy

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Policy Document on Environment and Energy Usage

Janki Devi Memorial College regularly undertakes Quality audits on environment and energy. The institutional confirms its commitment to environment and energy initiatives through the following practices:

1. Green audit / Environment audit
2. Energy audit
3. Clean and green campus initiatives
4. Beyond the campus environmental promotion activities

1. Green Audit/Environment Audit

The college conducts Green/Environment Audits annually to assess our strengths and weaknesses to further our goals of long-term sustainability. A green audit is a useful tool to determine how and where most energy or water or resources are being used. The college can then consider how to implement changes and make savings. It can determine the type and volume of waste. Recycling projects or waste minimization plans can be adopted. It will create health consciousness and promote environmental values and ethics. It provides a better understanding of the impact of eco-friendly practices on campus. Green auditing will promote financial savings through the reduction of resource use. It is imperative that the college evaluates its own contributions toward a sustainable future.

The internal audits are conducted by the faculty members of the Environment Department and AVANI- The Environment Club of the college. The college also invites an ISO-certified external auditing agency to conduct our annual Green/Environment audits.

Energy Usage policy

JANKI DEVI MEMORIAL COLLEGE
Working Towards A Plastic Free Campus

The college is committed to the cause of environment. A pivotal role in this regard is played by AVANI, The Environment Club of the college from its inception in 2004. The aim of the Environment Club is to create awareness at the institutional level and also sensitize students to the importance of reducing their carbon-footprint.

One of the important campaigns of AVANI has been to work towards creating a Plastic free campus.

Annually students are sensitized about the importance of reducing plastic usage by slogan and poster campaigns, webinars and other similar academic activities

There have been both short term and long term campaigns that continue to work to sustain a plastic free campus.

LONG TERM PROJECTS

1. **Since 2010 onwards** in an attempt to motivate youth to understand what waste and plastic are, AVANI started an annual event called "Create from Waste". This event encourages students to recognise the importance of waste and the need for a minimal garbage footprint. Students are given different forms of waste and asked to create from waste so that they learn the value of "reusing and recycling". This is an annual event that the college has been hosting now for 11 years.
2. At the turn of the decade, **2018 onwards**, AVANI started a student campaign called **AO BAG BANAO** which round the year encourages students to make cloth bags from recycled old cloth which are then distributed in the neighbourhoods to vendors as well as citizens

The aim of this long term project is to create awareness about how plastic can be replaced with cloth

Plastic free campus policy

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 E-mail : jankicollege@rediffmail.com, http://jdm.ac.in

वर्क शीट/Ref. No. _____ दिनांक/Date: 6/02/2023

The Principal
 Janki Devi Memorial College
 Old Nagroze Nagar
 New Delhi -110060

6th February 2023
 Subject- To seek permission for Nuna Mazra village adoption

Respected ma'am

On 21st January 2023, the NSS unit of JDMC visited Nuna Mazra village in Bahadurgarh. After observing the current condition of the village and the enormous amount of trash/ garbage and kindra shown to us, we have decided to adopt the village.

The Sarpanch has given us permission for the same. Therefore, we request your permission for this social cause and we forward with the village adoption.

Yours sincerely
 NSS JDMC

Permitted
 Dr. Jayanti P. Satoo
 Prof. Anjali Pal
 (Principal JDMC)

Mr. Jai Bhagwan
 (Sarpanch)
 SARPANCH
 GRAM PANCHAYAT
 NUNA MAZRA (HHAJJAR)

Mr. Rajinder Kumar
 (NSS Programme coordinator)

Mr. Mandeep Kaur
 (Former Sarpanch)

Village adoption document








Ministry of Education
 Government of India

Mahatma Gandhi National Council of Rural Education, Department of Higher Education
 Ministry of Education Government of India

Certificate of Recognition

This is to recognize **Janki Devi Memorial College, Delhi** as the Sustainable Campus. The Institution has done the best work for making the campus sustainable in the areas of **Sanitation, Hygiene, Waste Management, Water Management, Energy Management, and Greenery Management**. This program is organized by Mahatma Gandhi National Council of Rural Education, Department of Higher Education Ministry of Education Government of India.


 Dr. W G Prasanna Kumar
 Chairman
 MGNCRE, Ministry of Education
 Government of India

Date of Issue: 02.04.2022
 Certificate no: MGNCRE/MHRD/GOI/184







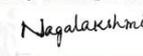
Ministry of Education
 Government of India

Certificate of Accreditation

This is to certify that
Janki Devi Memorial College, Delhi
 graded as

Parameters	Green Cover on campus	Surface Water Harvesting	Roof top Water Harvesting	Roof top Solar System	Waste Management
Grades	A+	A+	A	A+	A+

for the academic year of 2022-23 in Phase I of the
 National Rural Institutions Sustainability Grading (NRISG)


 Member Secretary

Date: 15/5/2023

Mahatma Gandhi National Council of Rural Education
 Department of Higher Education Ministry of Education
 Government of India

Certificate NO- MGNCRE/NRISG/0004






Ministry of Education
 Government of India

Certificate

CertSAP/MGNCRE/MHRD/2022

This is to certify that **Janki Devi Memorial College Delhi** is now Recognized as **Swachhta Action Plan Institution**. The Institution has successfully formed the Swachhta Action Plan Committee and constituted the working groups Post COVID-19 for **Sanitation & Hygiene, Waste Management, Water Management, Energy Management and Greenery** along with the observation of two environment related days to inculcate in faculty, students and community, the practices of Swachhta and Reduction, Reuse and Recycling of Resources.


 Dr. W G Prasanna Kumar
 Chairman
 MGNCRE, Ministry of Education
 Government of India

Mahatma Gandhi National Council of Rural Education
 Department of Higher Education, Ministry of Education
 Government of India






भारत सरकार / Government of India
 महामाता गांधी राष्ट्रीय ग्रामीण शिक्षा परिषद / Mahatma Gandhi National Council of Rural Education
 उच्च शिक्षा विभाग / Department of Higher Education
 शिक्षा मंत्रालय / Ministry of Education

District Green Champion Certificate

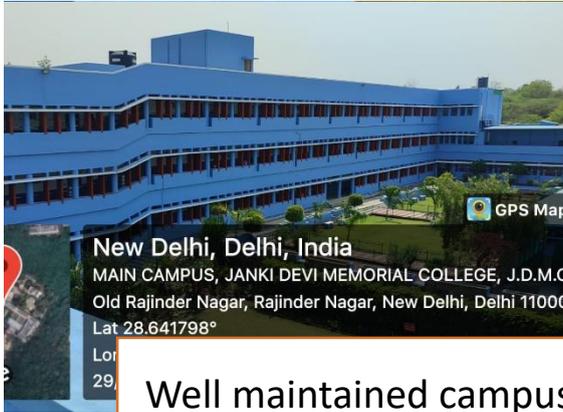
This is to certify that **JANKI DEVI MEMORIAL COLLEGE** is hereby recognized as District Green Champion for New Delhi District, Delhi for the Academic Year 2021-22. The institution has successfully elevated the Swachhta Action Plan, adopted and implemented best practices in the areas of Sanitation, Hygiene, Waste Management, Water Management, Energy Management and Greenery Management.

तारीख / Date: 29.03.2022
 सापनसंख्या / Memo no: MGNCRE/SAP22/202

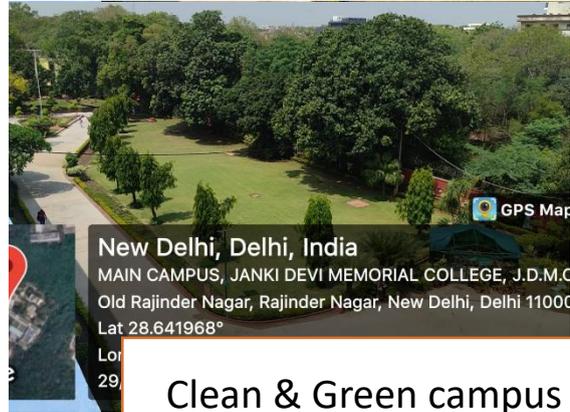

 Dr. W G Prasanna Kumar
 Chairman
 MGNCRE, Ministry of Education
 Government of India

Recognition Certificates

ANNEXURE II – PHOTOGRAPHS OF ENVIRONMENTAL INITIATIVES



Well maintained campus



Clean & Green campus



Indoor Plants



Color coded dustbins



Soundproof silent generators



Solar PV installed



Recycling of RO wastewater

water storage tanks



Reuse activity



Plant ownership program



Composting Pit



e-waste collection drive



e-waste collection drive



New Delhi, DL, In
Central Ridge Forest /
Lat 28.641711, Long
77.077033

Open well recharge



New Delhi, DL, In

water bdrainage & rainwater harvesting



E-Waste management training



World environment day celebration



Awareness campaigns



Cloth bag making activity

***** END OF THE REPORT *****