



# JANKI DEVI MEMORIAL COLLEGE

## GREEN AUDIT REPORT

2023-2024

PREPARED BY  
EHS ALLIANCE SERVICES



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**Janki Devi Memorial College**

(University of Delhi)

ACCREDITED BY NAAC WITH A+ GRADE  
ISO 21001:2018 AND ISO 9001:2015



# CERTIFICATE



## 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

## GREEN AUDIT

**ACADEMIC YEAR 2023-24**

The green initiatives carried out by the institution have been verified on the report  
submitted and was found to be satisfactory.

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

SIGNATURE



24.05.2024

DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001  
WWW.EHSALL.IN | BUSINESS@EHSALL.IN | EHSALLIANCE@GMAIL.COM



# ACKNOWLEDGEMENT

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

First of all, we would like to thank **Professor Swati Pal - Principal, JDMC** for giving us an opportunity to evaluate the environmental performance of the campus.

We are also thankful to **Dr Deepak Rawat - Department of Environmental Studies, JDMC – Audit Coordinator**, 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*

*Dr Sana Rehman*

*Mr Surendra Kumar*

*Dr Kaushal Kishore*

*Mr Avinash*

*Mr Vijay Pratap*

*Convener, AVANI- The Environment Club, JDMC*

*Department of Environmental Studies, JDMC*

*Administrative Officer, JDMC*

*Administrative Officer, JDMC*

*Assistant - Admin, JDMC*

*Junior Assistant - Admin, JDMC*





# DISCLAIMER

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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.

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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

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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. Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding green auditing, the College management decided to conduct an external environment assessment study by a competent external professional auditor. The green audit aims to examine environmental practices within and outside the college campus, which impact directly or indirectly on the atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of college environment. It was initiated with the intention of reviewing the efforts within the institutions whose exercises can cause risk to the health of inhabitants and the environment.

Through the green audit, a direction as how to improve the structure of environment and inclusion of several factors that can protect the environment can be commenced. This audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the institution. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit as below:



# INTRODUCTION

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Now a days, the educational institutions are becoming more thoughtful towards the environmental aspects and as a result new and innovative concepts are being introduced to make them sustainable and eco-friendly. To preserve the environment within the institution, a number of viewpoints are applied by the several educational institutes to solve their environmental problems such as promotion of the saving the energy, waste recycle, water consumption reduction, water harvesting and many more...

The activities carried out by the institution can also create adverse environmental impacts. Green audit is defined as an official inspection of the effects a college has on the environment. Green Audit is conducted to evaluate the actual scenario at the institution campus. Green audit can be a useful tool for a university /college to determine how and where they are using the most of the energy or water or resources; the institution can then decide how to implement changes and make savings. It can also be used to determine the nature and volume of waste, which can be used for a recycling project or to improve waste minimization plan.

Green auditing and the application of mitigation measures is a win-win situation for all the institutions, the learners and the mother earth. It can also result in health awareness and can promote the environmental awareness, values and beliefs. It provides a better understanding to staff and students about the Green impact on institution. Green auditing also upholds financial savings through reduction of resource usage. It gives an opportunity to the students and teachers for the development of ownership of the personal and social responsibility. The audit process involves primary data collection, site walk through with the team of university /college including the assessment of policies, activities, documents and records.





# OVERVIEW OF THE COLLEGE

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Janki Devi Memorial College, a premier women's college of University of Delhi was founded in 1959 by the famous Gandhian Shri Brij Krishan Chandiwalla 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.

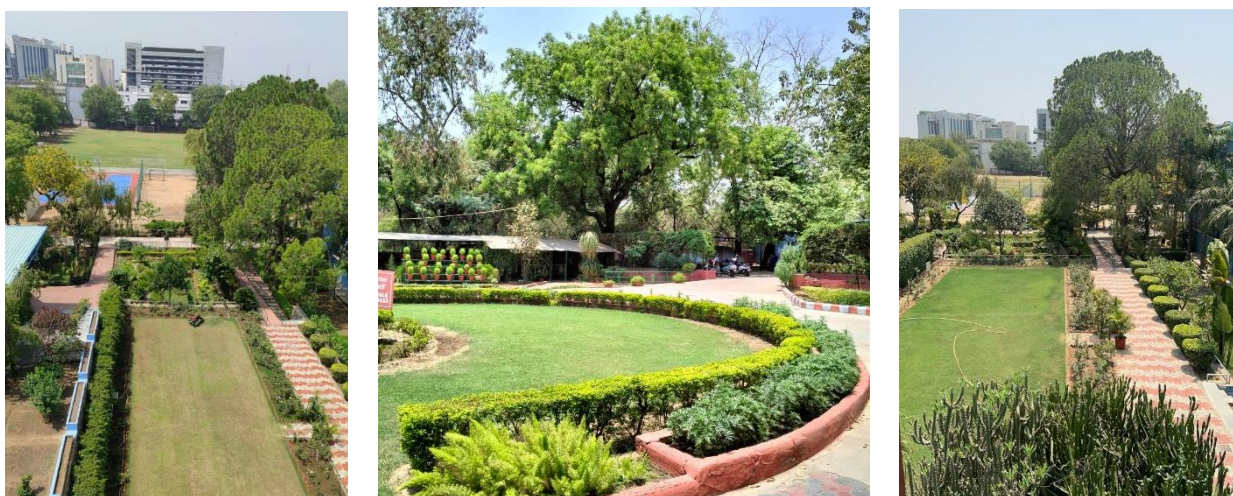


The college offers facilities and infrastructure to create a holistic atmosphere for the pursuit of academic and extracurricular activities. JDMC has recently completed its 60-year journey in pursuit of excellence. The college has provided a nurturing environment to students from all parts of India.

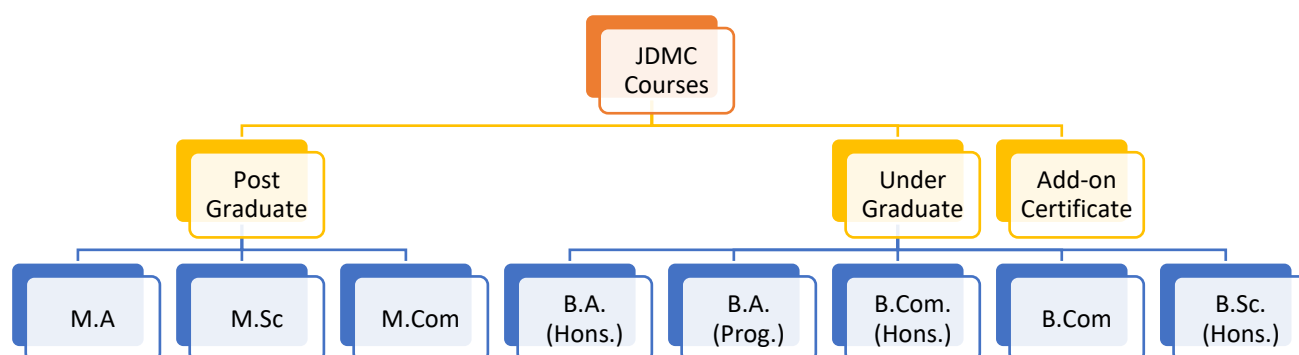


It has the distinction of having a disabled-friendly infrastructure along with a strong assistance system in place for the students and faculty with visual disability.

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).



JDMC offers wide range of under graduate, post graduate and Add-on certificate courses.





## VISION & MISSION

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

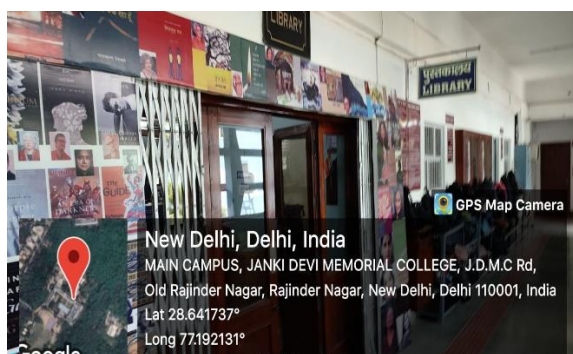
Therefore, the college creates a motivational environment to provide holistic education and personality development of the students, resulting in a synthesis of their career growth and ethical and responsible citizenship

## Facilities in the campus

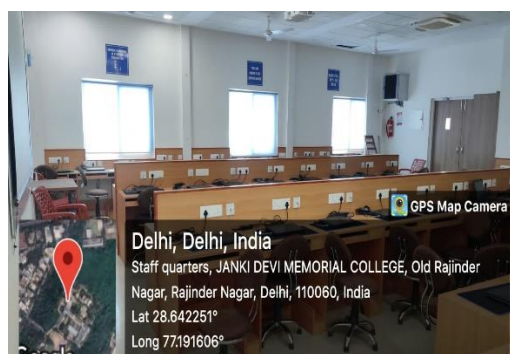
The college has an impressive building with lush green lawns, an eco-friendly campus with solar lighting and a rain-water harvesting system. The classrooms are clean, comfortable and well ventilated; the premises contain a common room and a medical room with a sanitary napkin vending machine, an open 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.

**WELL EQUIPPED 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.

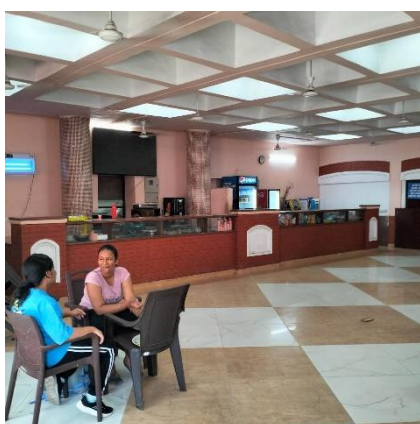


**Library**



**Computer Lab**

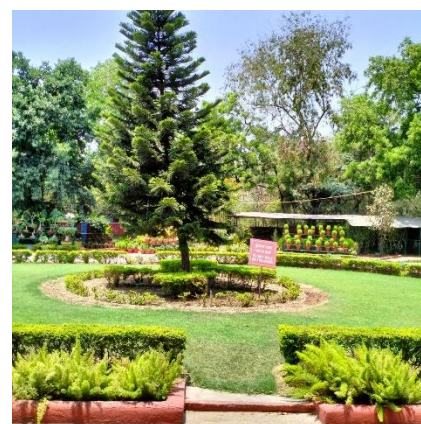
**CANTEEN:** The college has a spacious cafeteria that offers a wide variety of snacks to students and staff at reasonable rates.



**Canteen**



**Sports ground**



**Lush green campus**



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

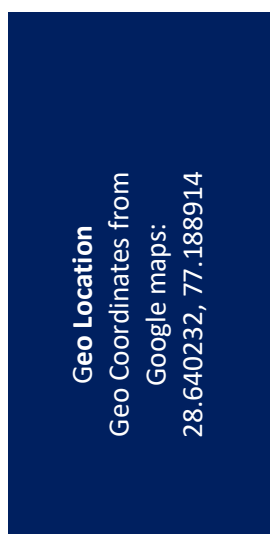
**SEMINAR ROOM:** The Seminar Room has a seating capacity of more than 200 with a state-of-the-art audio-visual system which is updated on a regular basis. The Seminar Room functions as a multi-purpose space used to hold conferences, seminars, workshops, meetings etc.



*Smart classrooms*



*Seminar room*





# AUDIT PARTICIPANTS

On behalf of Janki Devi Memorial 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 Surendra Kumar	<i>Administrative Officer, 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, PGCCC</i>

# EXECUTIVE SUMMARY

Green auditing is an essential step to identify and determine whether the institutional practices are sustainable and ecological. Traditionally, we were upright and efficient users of natural resources. But over the period, excessive usage of resources like water, electricity, petrol, etc. has become habitual for everyone especially, in urban and semi-urban areas. It is the right time to check if we (our process) are consuming more than the required resources? Whether we are using resources sensibly?

Green audit standardizes all such practices and provides an efficient way to use natural resources. In a time of climate change and resource exhaustion, it is necessary to re-check the processes and convert them in to green and sustainable. Green audit provides an approach for the same. It also increases overall awareness among the folks working in the institution towards the eco-friendly environment.

This is the third attempt to conduct a green audit of this campus for fulfilment of NAAC criteria. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity and fossil fuel, quality of soil, water usage, vegetation, waste management practices and carbon footprint of the campus. Initially, a questionnaire was shared to know about the existing resources of the campus and the resource consumption patterns of the students and staff in the campus.



# GREEN AUDIT - ANALYSIS

## 1.1 GENERAL INFORMATION

### 1. Does any Green Audit conducted earlier?

*Yes, this is the third external audit organized by the College*

### 2. What is the total strength (people count) of the Institute?

#### **Students**

Male: 0 Female: 3268 Total: 3268

#### **Teachers (including guest faculty)**

Male: 35 Female: 115 Total: 150

#### **Non-Teaching Staff**

Male: 29 Female: 8 Total: 37

#### **Total Strength**

Male: 64 Female: 3391 Total: 3455

### 3. What is the total number of working days of your campus in a year?

*There are one hundred and eighty working days in a year.*

### 4. Where is the campus located?

*The campus is located at Sir Ganga Ram Hospital Marg, Old Rajinder Nagar, Rajinder Nagar, New Delhi 110060*

### 5. Which of the following are available in your institute?

Garden area	Available
Playground	Available
Kitchen	Available
Toilets	Available
Garbage Or Waste Store Yard	Available
Laboratory	Available
Canteen	Available
Hostel Facility	Available
Guest House	Available

### 6. Which of the following are found near your institute?

Municipal dump yard	Not in the vicinity of the institute
Garbage heap	No Garbage heaps
Public convenience	Public convenience is available
Sewer line	Approximately 1.5 KM sewer line within campus



Stagnant water	No stagnant water
Open drainage	No
Industry – (Mention the type)	No
Bus / Railway Station	Karol Bagh Metro Station (Blue Line) (250 meters), Karol Bagh Bus stop (250 meters), Sarai Rohilla Railway Station (3.5 Km)
Market / Shopping complex	Available

## 1.2 WASTE MINIMIZATION AND RECYCLING

### 1. Does your institute generate any waste? If so, what are they?

Yes, the following types of waste are generated by the campus

- Biodegradable waste – Horticulture waste and food waste
- Non-biodegradable waste – Paper and plastic waste
- Biomedical waste – sanitary disposal waste
- E-waste

The college takes measures to manage the solid waste on campus by segregating it at the source, composting biodegradable waste, recycling electronic waste, and restricting single-use plastics.

The campus has color-coded waste bins for the segregation of bio-degradable (green) and non-biodegradable (blue) wastes.

Waste paper collection bins are strategically placed on campus to collect and recycle paper. The biodegradable waste is converted into compost using the composting facility in the college. The compost is used in the college nursery and college garden.

### 2. What is the approximate amount of waste generated per day? (in Kg approx.)

Biodegradable waste - 22 Kg

Non-biodegradable waste -10 Kg

Hazardous Waste - 1 Kg

Others < 1 Kg

### 3. How is the waste managed in the institute? By Composting, Recycling, Reusing, Others (specify)

- Composting is done for horticulture waste management. The college has a thermal composter and an aerobin.
- The college collaborates with ScrapUncle to recycle paper waste.
- The college also has a MoU with RLG Systems India Pvt Ltd. They collect e-waste (computers, mobile, printers, servers, printers) and send it for recycling.
- AVANI, the college's environment club, collaborates with NGOs like Goonj to upcycle waste.
- A bi-annual one-week collection drive is organized by campus.
- The college avoids the use of single-use plastic on campus.
- Two separate boxes of green and blue color for waste segregation in corridors, staffroom, and office. The college has also placed separate boxes for paper recycling.



#### 4. Do you use recycled paper in the institute?

*AVANI has organized a handmade paper-making workshop to reuse waste paper.*

#### 5. How would you spread the message of recycling to others in the community?

*Following are the ways through which the college is spreading awareness about recycling*

- Waste plastic collection drives
- Installation of Dustbins for waste plastic collection, e-waste collection and recycling
- Tie-ups with authorized e-waste collection agency
- Awareness among the Students by Webinars, seminars, Sign Boards, Posters, etc.
- Seminars and add-on courses for students and faculty
- Part of Environment Education under the AEC Environmental Science curriculum.
- MoUs with NGOs
- Reuse waste paper for poster-making

#### 6. Can you achieve zero garbage in your institute? If yes, how?

*JDMC is in the process of achieving zero garbage. The college does not encourage the use of single-use plastic. College converts the biodegradable garden and kitchen waste into compost. The dry waste is reduced by using digital media to circulate messages rather than printed paper. E-waste is segregated and recycled.*

### 1.3 GREENING THE CAMPUS

#### 1. Is there a garden in your institute?

*Yes, about 273672 Sq ft areas are developed as Gardens.*

#### 2. Do students spend time in the garden?

*Yes, students spend around 2-4 Hours during winter.*

#### 3. Total number of Plants in Campus?

<i>Plant type with approx. count</i>	
<i>Full-grown Trees</i>	<i>93</i>
<i>Small Trees</i>	<i>182</i>
<i>Hedge Plants</i>	<i>22023</i>
<i>Grass Cover sqm</i>	<i>273672 Sq ft</i>

#### 4. Is the College campus having a Horticulture Department? (If yes, give details)

*Yes, Total 10 staff (maali) were deployed in the horticulture department*

#### 5. How many Tree Plantation Drives are organized by campus per annum?

*A total of 5 plantation drives were conducted. Approximately 900 trees and hedge plants were planted by the garden committee in this Financial Year with more than an 80% survival rate.*





## 6. Is there any Plant Distribution Program for Students and Community?

*Yes, Plantation distribution drives are conducted in nearby Villages under Unnat Bharat. Moreover, the college has a practice where all guests are given a planter as a gift rather than a bouquet of flowers.*

## 8. Is there any Plant Ownership Program?

*JDMC had a designated Kitchen Garden where college students grow and sell vegetables. The college has entered into an MoU with the Edible Routes organization to create a biodiversity trail to grow native plant species on campus. The college is also planning a rewilding project on campus.*

# 1.4 WATER AND WASTEWATER MANAGEMENT

## 1. List uses of water in your institute

*Details of water usage in campus:*

**Drinking** – 99.72 KL/month

**Gardening** – 915.30 KL/month

**Kitchen and Toilets** – 656.29 KL/month

**Others** – 39.03 KL/month

**Hostel** – 283.50 KL/Month

**Total = 1993.85 KL/Month**

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

*The campus has one main tank filled twice daily from the municipal supply, distributing water to 15 small terrace tanks in the academic block. The average time required to fill the tanks is 45-60 minutes. The main tank can store up to 20,000 litres, and 15 terrace tanks of 500-1000 litres capacity.*

### **Saving Techniques**

- *JDMC ensures regular water tank maintenance and checks water quality standards on campus.*
- *The water tanks and water coolers are checked every three months, and RO systems are regularly changed.*

## 3. Locate the point of entry of water and point of exit of wastewater in your institute.

**Entry** - *The primary source of water is the Delhi Jal Board (MCD). JDMC also has 3 bore wells which are used occasionally as secondary sources.*

**Exit** - *From Canteen, Toilets, Hostel, bathrooms and Labs through covered drainage which is connected to municipal sewage*



#### 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.
- The college checks the water flow in the taps.
- The college has initiated the installation of auto-push taps to reduce water wastage.
- The campus has 60+ double-level flush systems in the academic blocks to further reduce water usage.
- College has implemented several unique and unconventional approaches to sustainability that have yielded positive results. One example is implementing a campus-wide water conservation program with RO-reject water recycling and drought-resistant landscaping.
- The college-planted adusa, scientifically known as *Justicia adhatoda*, is a versatile and medicinal plant often used in traditional remedies. Also, the college planted *Sisymbrium*, *Chamrod*, and *Vajradanti*, which require less water.
- Habitat restoration projects like the biodiversity trail are undertaken to preserve and enhance local biodiversity, creating green spaces that support native wildlife.
- The RO reject water is used in the toilets.
- The college has initiated growing plants native to the semi-arid regions, requiring less water to survive.

*These initiatives have significantly reduced water usage on campus while promoting sustainable water management practices.*

## 1.5 ANIMAL WELFARE

### 1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)

*3 Cats, 2 dogs, 25+ butterfly species, 100+ Squirrels and 30+ Bird species are found in campus. A variety of bird's species and other flora and fauna are available, so institute is putting efforts for biodiversity conservation and documentation.*

### 2. Does your institute have a Biodiversity Program or a KARUNA CLUB?

*Yes, Janki Devi Memorial College's eco club Avani actively organizes awareness through various campaigns and activities including seminars, poster competition, etc.*

## 1.6 CARBON FOOTPRINT - EMISSION & ABSORPTION

### 1. Electricity used per year - CO2 emission from electricity

*(electricity used per year in kWh/1000) x 0.84*  
*= 539023 /1000x0.84*  
*= 452.78 tons*

### 2. LPG/PNG used per year - CO2 emission from LPG/PNG

*(LPG/PNG used per year in KG) x 2.68*  
*= 5437 x 2.68*  
*= 14.57 tons*



### 3. Diesel used per year CO<sub>2</sub> emission from HDS (Diesel)

*(Diesel used per year in litres) x 2.99*  
= 215 x 2.99  
= 0.64 tons

### 4. Transportation per year (car) CO<sub>2</sub> emission from transportation (Bus and Car)

*There are 2 cars in college, one runs on petrol and other runs on CNG.*  
= 2\*4\*2\*180/100\*0.02  
= 0.58 tons

Total CO<sub>2</sub> emission per year is 468.57 tons

***After considering the carbon absorption capacity of the campus, the total carbon emission is 450.89 tons***

## CARBON ABSORPTION BY FLORA IN THE INSTITUTION

There are 93 full-grown trees and 182 semi-grown trees of different species, on the campus spread over 273672 sq ft.

Carbon absorption capacity of one full-grown tree 93 kg CO<sub>2</sub> Therefore Carbon absorption capacity of 80 full-grown trees 93 x 22 kg CO<sub>2</sub> = 2.05 tons of CO<sub>2</sub>.

The carbon absorption capacity of 182 semi-grown trees is 30% of that of full-grown trees. Hence the carbon absorption 182 x 6.8 kg of CO<sub>2</sub> = 1.24 tons of CO<sub>2</sub>

There are approximately Hedge Plants 22023 of various species being raised in the gardens and grown in the areas where no buildings are built Carbon absorption of bush plants varies widely with their species. Certain bushes absorb very high level of CO<sub>2</sub> whereas some others absorb very low levels of CO<sub>2</sub> In the absence of a detailed scientific study, 200g of CO<sub>2</sub>, absorption is taken per bush (in consultation with Environmental Science specialists). Based on this, the total carbon absorption of bushes is 22023 x 200 g = 4.40 tons of CO<sub>2</sub>

The lawns on the campus have buffalo grass, Mexican grass, and indigenous grass species and cover a total area of 273672 sq. ft. Carbon absorption capacity of a 10 sq. ft. area of lawn is 1 g per day Therefore, carbon absorption by lawn area 273672 x 365 x 0.1 g CO<sub>2</sub> = 9.99 tons CO<sub>2</sub> per year.

The total of carbon absorption capacity of the campus is 17.68 tons.



# GREEN INITIATIVES BY CAMPUS

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## ➤ **Solid Waste Management**

- College does composting for horticulture waste
- Reduce the use of paper by supporting the digitization of attendance and internal assessment records.
- Reduce the requirement of printed books by updating the e-books and e-journals collection of the college library.
- Take initiatives to spread awareness amongst students about food wastage and ways of minimizing it
- The habit of reusing and recycling non-biodegradable products
- Organizing workshops for students on solid waste management.
- There is a ban on single-use plastic and plastic crockery in the campus.
- Systematically engage with the 3Rs of environment friendliness (Reduce, Reuse and Recycle).

## ➤ **Liquid Waste Management**

- Maintain leakproof water fixtures.
- Minimize the use of water by constructing more Indian-style toilets instead of Western-style toilets.
- Continued employment of a caretaker to take immediate steps to stop any water leakage through taps, pipes, tanks, toilet flush etc.
- Reuse of wastewater generated by the Reverse Osmosis (RO) system in washrooms.

## ➤ **E-waste Management**

- The college has a separate storeroom for the safe storage of electronic waste. After a certain interval of time college disposes of the E-waste to concerned agencies through the auction process.

## ➤ **Rainwater harvesting**

- College has 3 rainwater harvesting pits for better groundwater recharge. The stored water in this tank can be used for gardening purposes

## ➤ **Renewable Energy**

- The college has installed solar PV (58.22 KW) on the rooftop of building.
- The College is using solar lights for street lights.
- Solar geysers are installed on Krishna hostel building roof.

## ➤ **Air Pollution Reduction**

- Personal Vehicles (Students) are not allowed in the campus

## ➤ **Environmental Club – Avani's Initiatives**

- The environment club of college AVANI collaborates with local community organizations like Edible Roots to develop innovative solutions to environmental





issues, such as habitat restoration projects and urban greening initiatives.

- Faculties of the Department of Environmental Studies participated in the plantation drive organised by Avani
- The faculty members of the EVS department facilitate the aerobiology walks and offer an add-on course on allergies to the students of the college.
- AVANI's Aao Bag Banao is a project where students make bags from old cloth. The bags are sold to college students and outsiders during Diwali mela.
- Project Musafir of ENACTUS JDMC aims to upcycle hazardous scrap tyres into beautiful products. College plans to initiate phase one by producing planters targeting the local plant vendor community and gradually expanding to furniture and slipper production.

➤ **Green Committee Initiatives** – Below are the highlights of their work on environment cautiousness.

- The college's NSS (National Service Scheme) unit adopted a village, Nuna Majra, Bahadurgarh, in Haryana. College organized a trip to Nuna Majra on September 23rd September 2023 on the occasion of NSS day to spread kindness through the donation of clothes, books, and stationary for the upliftment for education in the children.
- College conducted the "Cleanliness Drive- Ek Tareek, Ek Ghanta" on 1st October 2023 in the Karol Bagh market. Cadets also raised awareness about the critical role of cleanliness in maintaining a healthy and hygienic environment.
- College organized a tree plantation on Earth Day. This initiative aimed to raise awareness of the importance of trees in combating climate change.
- College conducted a "Cleanliness drive" on 31st July 2023. Around 16 cadets participated in this cleanliness drive. Cadets enthusiastically participated in this drive and raised awareness about sanitation and hygiene.
- Under the guidance of Draupadi Dream Trust, an event called Humari Yamuna - Bring Alive Yamuna was conducted at Purana Indraprastha Qila, Pragati Maidan, which designates cleaner Yamuna.
- The NSS (National Service Scheme) unit of JDMC organized a cleanliness drive under the Janbhagidari & Meri Maati Mere Desh campaign on 19th August 2023 in Rajinder Nagar Market.
- JDMC organized a cloth donation drive on March 2, 2024, at Rainbasera shelter home near Bangla Sahib.
- College took the initiative of NUKKAD NATAK on TOPIC: ENVIRONMENTAL JUSTICE Under Vasundhara-The Sustainability Campaign Series on July 5, 2023



## RECOMMENDATIONS

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- Environmental parameters shall be included in the purchase policy to achieve a cradle-to-grave approach for sustainability.
- Solar power plant capacity should be increased so that it fulfill at least 75% of the electricity requirements.
- The flow rate of taps should be checked, it should not be more than 2.5 liters/minute. Arrange training programs on environmental management systems and nature conservation for schools and local people.
- Water Meters should be installed at every building of the institute for monitoring of water consumption per capita.
- Green building guidelines for future expansion projects of the campus.
- Provide a sanitary waste disposal facility as per the CPCB guidelines for the management of sanitary waste (as per Solid Waste Management Rules, 2016). Installation of an Incinerator is recommended on campus

## CONCLUSION

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This audit involves considerable team discussions and meetings with key staff members on a variety of environmental-related topics. The eco club of Janki Devi Memorial College promotes conservation of resources.

Overall 60% of Janki Devi Memorial College is for landscaping. The college makes a significant effort to act in an environmentally responsible manner and takes into account the environmental effects of the majority of its activities. The recommendations in this report suggest some more ways in which the college can work to improve its practices and develop into a more sustainable institution.

It's important to begin a few things, such as encouraging students and staff to participate in community outreach programs related to environmental conservation.



# REFERENCE

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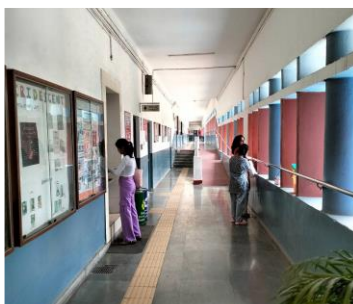
- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & 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 – PHOTOGRAPHS OF ENVIRONMENT CONSCIOUSNESS



Well maintained campus



Well ventilated building



Lush green campus



Sports Ground



Paving stone installed in campus



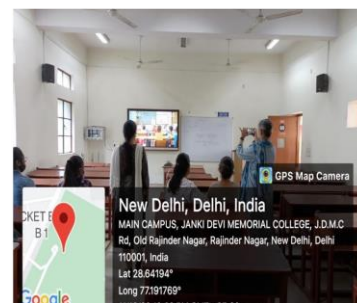
Color coded dustbins



Ornamental plants in campus



Indoor plants in campus



Smart Classrooms





Conference room



Kitchen garden



Biodiversity trail



Herbal garden display board



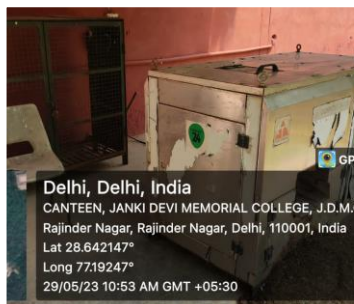
Green campus



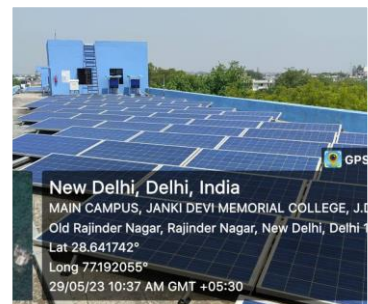
Herbal Garden



Plantation drive



Composting machine



Solar PV installed



Solar Geyeser  
installed



Solar lights installed



Rainwater  
harvesting



Rainwater drainage



Shed over DG set



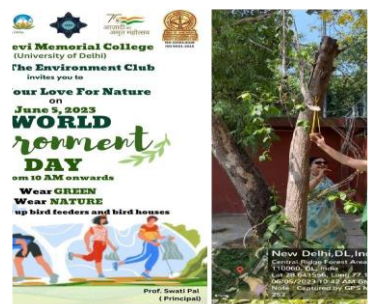
Thermo composting



Push taps for water  
conservation



Recycling of RO  
wastewater



Environment Day  
celebration

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