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### JANKI DEVI MEMORIAL COLLEGE University of Delhi, India

# **GREEN AUDIT REPORT**

Prepared by EHS ALLIANCE SERVICES







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

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

We would also like to thank *Ms Vandana Madan (Convener, AVANI- The Environment Club, JDMC)*, for her 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

Prof. Sandhya Garg (Vice-Principal, JDMC)
Dr Shilpa Chaudhary (IQAC coordinator)
Ms Karishma Ahlawat (Member, AVANI, JDMC)
Dr Kanika Kakar (Member, AVANI, JDMC)
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# 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.

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Signature







### **CONCEPT AND CONTEXT**

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/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, objectives of the audit are discussed below.







# INTRODUCTION

Now 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 College/college to determine how and where they are using the most of the energy or water or resources; the College 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 College/college including the assessment of policies, activities, documents and records.

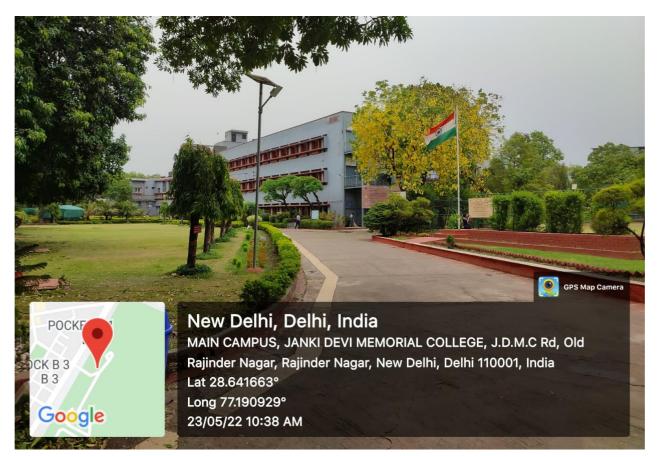
### **OVERVIEW OF THE COLLEGE**

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**

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

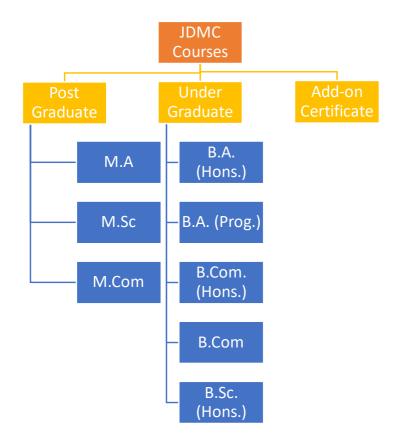
Therefore, the college creates a motivational environment to provide holistic education and personality development of the students, resulting in a synthesis of their career growth and ethical and responsible citizenship







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









# **AUDIT PARTICIPANTS**

On behalf of College

Name	Designation/Department
Prof. Swati Pal	Principal, JDMC
Prof. Sandhya Garg	Vice-Principal, JDMC
Ms Vandana Madan	Convener, AVANI- The Environment Club, JDMC
Dr Shilpa Chaudhary	IQAC coordinaotor
Ms Karishma Ahlawat	Member, AVANI, JDMC
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Dr Deepak Rawat	Department of Environmental Studies, JDMC
Ms Ifrah Rehman	Department of Environmental Studies, JDMC
Mr Avinash	Assistant Admin, JDMC
Mr Vijay Pratap	Junior Assistant Admin, JDMC

On behalf of EHS Alliance Services

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





### **EXECUTIVE SUMMARY**

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

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

This is the first attempt to conduct a green audit of this College 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 foot print of the campus. Initially a questionnaire was shared to know about the existing resources of the campus and resource consumption pattern of the students and staffs in the College.

# GREEN AUDIT – ANALYSIS

### **1.1 GENERAL INFORMATION**

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

This is first time college has gone for External Green Audit in a systematic way of monitoring their environmental eminence, however the JDMC has conducted internal audit and initiatives have been taken by College for environment protection.

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

**Students** Male: 0 Female: 3654 Total: 3654

**Teachers (including guest faculty)** Male: 31 Female: 113 Total: 144

*Non-Teaching Staff Male: 53 Female: 21 Total: 74* 

Total Strength Male: 84 Female: 3788 Total: 3872





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

There are one hundred 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	Ava
Playground	Ava
Kitchen	Avc
Toilets	Ava
Garbage Or Waste Store Yard	Avc
Laboratory	Ava
Canteen	Ava
Hostel Facility	Ava
Guest House	Ava

Available Available Available Available Available Available Available Available Available

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

Municipal dump yard
Garbage heap
Public convenience
Sewer line
Stagnant water
Open drainage
<i>Industry – (Mention the type)</i>
Bus / Railway station
Market / Shopping complex

Not in vicinity of institute No Garbage heaps Public convenience is available Approximately 1.5 KM sewer line within campus No stagnant water No No Karol Bagh Metro Station (Blue Line), Bus stop Available

### **1.2 WASTE MINIMIZATION AND RECYCLING**

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

Yes, Solid waste, Canteen waste, paper, plastic, horticulture, electronic waste, etc.

The college takes measures to manage the solid waste on the campus by the method of segregation at the source, composting of biodegradable waste, recycling of electronic waste, and restricting the use of plastics.





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

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 – 20 Kg Non-biodegradable waste - 10 Kg Hazardous Waste - 1 Kg (BMW) E-waste - 2 Kg

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

- Composting is done for horticulture waste management.
- College is in collaboration with the NGO Chintan. They collect e-waste (computers, mobile, printers, servers, printers) in the campus, and send for recycling.
- > They recycle used paper on the campus.
- AVANI, the environment Club of the college also collaborates with NGOs like Goonj and Chintan for waste recycling and upcycling.
- Bi-annual one week collection drive is organized by campus. On an average, 10 kg/ day collection was recorded in October, 2021.
- > Avoid use of Single use plastic on the campus

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

*Yes, we collaborate with Green-o-tech (NGO) and have recently recycled 59 kg of paper. We use recycled paper in return of the donated paper.* 

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

- Seminars and add-on courses for students and faculty
- > Part of Environment education
- MoUs with NGOs
- Reuse waste paper for poster makings

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

Not yet achieved. JDMC is in process to achieve zero garbage. College converts the biodegradable garden and kitchen waste into compost. The dry waste is reduced by using digital medium to circulate messages rather than printed paper.





### **1.3 GREENING THE CAMPUS**

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

Yes, about 10442 Sq mtrs areas are developed as Gardens.

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

Yes, students spend around 2-4 Hours during winters.

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

Plant type with approx. countFull grown Trees83Small Trees160Hedge Plants2000Grass Cover SQM1823 Sq meters

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

Yes, Total 10 staff deployed in horticulture

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

- 6 Plantation Drives are organized by campus in last Financial Year. (2 plantation drives with Satsang Foundation NGO, 1 with MCD and 3 were done by the Principal).
- Plantation by the distinguished guest during event.

#### 6. How many trees and plants were planted in last drive? And, what is the survival rate?

*Total 35 trees and hedge plants planted in this Financial Year with more than 80% survival rate.* 

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

The college has a practice where all guests to the college are given a planter as a gift rather than a bouquet of flowers

#### 8. Is there any Plant Ownership Program?





JDMC had a designated Eco zone where students in the past have grown vegetables and tended to their own garden. Before the lockdown, the Eco zone was relocated and work will begin on it soon. With the help of Edible Routes (NGO) they are also creating a kitchen garden for the college hostel.

### **1.4 WATER AND WASTEWATER MANAGEMENT**

1. List uses of water in your institute

*Basic use of water in campus:* 

Drinking – 111.71 KL/month

Gardening – 96.00 Kl/month

Kitchen and Toilets - 735.29 KL/month

Hostel – 283.50 KL/Month

Others – 311.19 KL/month

Total = 1537.69 KL/Month

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

JDM 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 upto 20,000 litres and 15 overhead tanks of 500-1000 litres capacity

#### Saving Techniques

- The college ensures that the faucets in the washrooms and water filtration units are checked regularly and do not have any leakages.
- Also, the 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).

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

**Entry** - Water comes from Delhi Jal Board (MCD), and they have 3 bore wells as a secondary source

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

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

#### Basic ways:

- Close the taps after usage
- Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage
- The college ensures that the faucets in the washrooms and water filtration units are checked regularly and do not have any leakages.
- > The 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).

#### **1.5 ANIMAL WELFARE**

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

Approx. 5 Dogs, 3 cats, 100+ Squirrels, 20+ species of Birds including peacock, and Butterflies are found in campus. No stray dog is visible in the vicinity of the college. A variety of bird's species and other flora and fauna available, so institute is doing their bit for bio diversity conservation.

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

Yes **JDMC eco club, Avani** and NSS actively participates in activities including feeding the birds, planting fruit based plants for birds, organizes biodiversity awareness campaigns, 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 196633 kWh/1000 x 0.84

= 196633/1000x0.84

= 165.17 tons

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

(LPG/PNG used per year in kWh/1000) x 0.84 8835.284 kWh/1000 x 0.84

=8835.284/1000x0.84 =7.42 tons

#### 3. Diesel used per year - CO2 emission from HSD (Diesel)

(electricity used per year in kWh/1000) x 0.84 7288.40 kWh/1000 x 0.84 =7288.40 /1000x0.84 =6.12 tons

#### 4. Transportation per year (car) CO2 emission from transportation (Bus and Car)

College doesn't has any owned buses. College has 2 cars out of which one runs on diesel and other on petrol. 2X4X2x180/100x0.02 = 0.58 tons

Total CO2 emission per year cumulative by electricity usage + bus and car transportation (165.17 + 7.42 + 6.12 + 0.58 = 179.29 tons)

#### Carbon absorption by flora in the institution

There are 83 full grown trees and 160 semi grown trees of different species and approximately 2000 shrubs/hedge plants.

Carbon absorption capacity of one full grown tree 22 kg CO2 Therefore Carbon absorption capacity of 83 fullgrown trees 83 x 22 kg CO<sub>2</sub> => 1826 kg of CO<sub>2</sub> =1.83 tons of CO<sub>2</sub>.





The carbon absorption capacity of 160 semi-grown trees is 50% of that of full-grown trees. Hence the carbon absorption 160 x 6.8 kg of  $CO_2 = 1088$  kg of  $CO_2 = 1.09$  tons of  $CO_2$ 

There are approximately Hedge Plants 2000 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  $CO_2$  where as some others absorb very low level of  $CO_2$ . In the absence of a detailed scientific study, 200g of  $CO_2$ , absorption is taken per bush (in consultation with Environmental Science specialists). Based on this, total carbon absorption of bushes is 2000 x 200 g = 400 kg = 0.4 tons of  $CO_2$ 

The lawns on the campus have buffalo grass, Mexican grass and indigenous grass species and cover a total area of 479160 sq. ft. Carbon absorption capacity of a 10 sq. ft. area of lawn is 1 g per day Therefore, carbon absorption by lawn area 479160 x 365 x  $0.1 \text{ g CO}_2 = 17489.34 \text{ kg CO}_2$  per year, Total carbon absorption per year is 17.49 tons of CO<sub>2</sub>

Grand total of carbon absorption capacity of the campus is 20.80 tons.

### **GREEN INITIATIVES BY CAMPUS**

- **Renewable Energy** Solar power plant of capacity 58.22 KW is installed on building roof that will supply approx. 20 % of total power in campus. Also, the college is using solar lights for street lights.
- **Tree Plantation Drives** six plantation drives were carried out in the current year in the Campus.
- Air Pollution Reduction Personal Vehicles (Students) are not allowed in the campus
- Solid Waste Management Waste management is done by composting. There is ban on single plastic use and plastic crockery in the campus.
- Environment Club Initiatives JDMC has an environment club 'Avani'. Below are the highlights of their work on environment consciousness.
  - On April 19, 2022 Avani, the Environment Club of JDMC organised an offline inter-college competition the Create from Waste. The theme for the competition in keeping with the Earth Day 2022 was "Invest in Our Planet"
  - On the 22<sup>nd</sup> of April, 2022, Avani- The environment club of Janki Devi Memorial College conducted Green Matters- an online bilingual annual debate. The topic for the discussion was "PROFIT, PEOPLE AND PLANET CANNOT GO TOGETHER"
  - On 19 April 2022, a workshop on Nature Photography was held online to celebrate the environment fest, EKATVAM 2022, organized by Avani The Environment Club





- Avani, the Environment Club inaugurated its annual environment festival, EKATVAM on April 18, 2022.
- As part of EKATVAM 2022, AVANI organized screening of documentary "Nature in Mukteshwar" on April 21, 2022 from 2:30PM onwards via Zoom. The documentary evolves around the natural habitat and flora and fauna of Mukteshwar
- On September 13, 2021 Avani conducted a poster making and slogan writing competition as a part of celebration of SWACHHATA PAKHWADA 2021. The theme for the competition, the objective of cleaning is not to just clean but to feel happy living in a clean environment
- On September 6, 2021 Avani organised an intra college quiz competition for spreading awareness about the SWACHHATA PAKHWADA 2021.
- The offline quiz competition (Green Date) was organised on April 20, 2022 as a part of EKATVAM the environment fest 2022.
- On September 15, 2021 Avani in collaboration with IQAC, organised an event, Taste Your Waste: Composting.
- Celebrated International Tiger Day by making face masks
- Avani, the Environment Club of JDMC on October 6, 2021 successfully organized a virtual tour of the Yamuna Biodiversity Park in coordination with the Yamuna Biodiversity Park to celebrate the Wildlife Week, October 2-8, 2021
- Avani, the environment club of JDMC on May 22, 2022 successfully organized a webinar on World Biodiversity Day with Prof. Sreepathi L K (Retired Vice Principal, JNN College of Engineering, Shimoga)
- The Environment Club, Avani along with Centre for Universal Values and Ethics, Janki Devi Memorial College, University of Delhi successfully conducted a webinar on EcoSwaraj: Pathways to Sustainability and Justice on November 10, 2021 as a part of its annual event LENS: Living Ethically with Nature Series

### RECOMMENDATIONS

- Water Meter should be installed at every building of institute for monitoring of water consumption per capita.
- We recommend college to build sewage treatment plant (STP) of required capacity and treated water used be used in toilet and gardening purposes.





- Solar power plant capacity should be increased so that it fulfil at least 70% of the electricity requirements.
- Plant distribution program in nearby villages and societies should be initiated periodically.
- Eco-friendly parameters should be included in the purchase of articles and goods for the College campus.
- College should start drip irrigation to save water in campus
- College should increase the use of Sprinklers gardening purpose
- Flow rate of taps should be checked, it should not be more than 2.5 litres/minute.

# CONCLUSION

This audit involved extensive consultation with all the teams, interactions with key personnel on wide range of issues related to Environmental aspects. Janki Devi Memorial College has Avani club for sustainable use of resources. Overall 60% of College campus is for landscaping. The audit has identified a few observations for making the campus premise more environment friendly. The recommendations are mentioned with observations for College campus team to initiate actions. The audit team opines that the overall site is well-maintained from the environmental perspective. Few things that are important to initiate urgently includes initiation of drip irrigation and checking of water flow of taps. We also highly recommend for installation of water meters at each building/block and water balancing report.

### **REFERENECE:**

- 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

### Transparency of Green Audit Report

Green audit report is one of the useful means of demonstrating an organization's commitment to openness and transparency. If an Organisation believes it has nothing to hide from its stakeholders, then it should feel confident enough to make its green audit reports freely available to those who request them. As a basic rule, green audit reports should be made available to all stakeholders.

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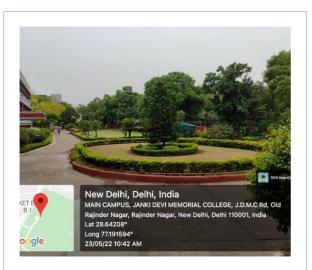




### ANNEXURE I – PHOTOGRAPHS OF ENVIRONMENT CONSCIOUSNESS



Well ventilated building structure



# Well maintained College campus



Lush green campus



### Green Campus







Plantation drive in JDMC



Plantation drive in the campus



Active participation by students and staff in plantation drive



Active participation in plantation drive



Plant ownership programme



Plant distribution programme







Spacious and well equiped computer labs

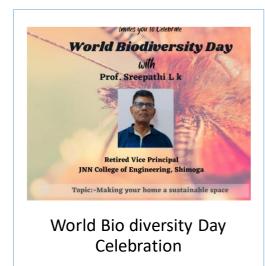


Classrooms as per NBC

guidelines with more than

40% window ratio

Swachhta Pakhwada Campaign on Composting



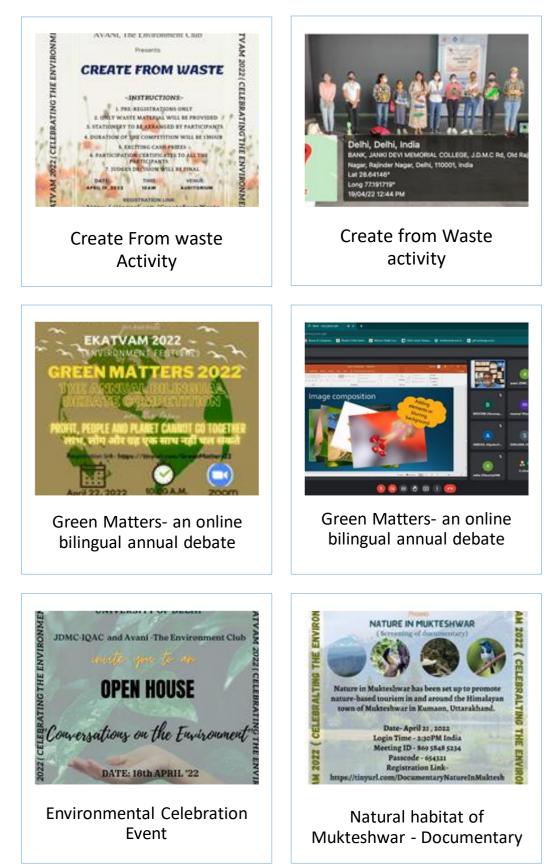




Online Session on 'How to live a zero waste life'









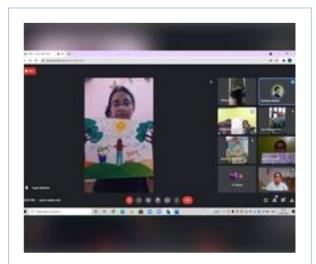




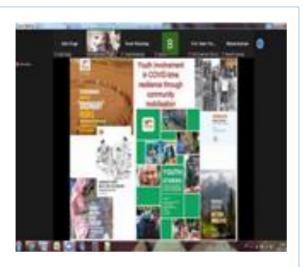
Striking a balance: Environment and Society - add-on course



### Swachhta Pakhwada Week Celebration



Poster making and slogan writing activity



Webinar on EcoSwaraj: Pathways to Sustainability and Justice

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